

**The syntax and prosody of
interrogatives:
Evidence from varieties spoken in
northern Italy**



Franziska Maria Hack

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University of Oxford

A thesis submitted for the degree of
Doctor of Philosophy
in General Linguistics & Comparative Philology

Michaelmas Term 2012

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Abstract

The vast majority of work on question formation examines interrogatives from the perspective of just one single component of grammar, usually the syntax or the prosody. The present dissertation offers a comprehensive account of question formation addressing both the syntax and the prosody of interrogatives and the interaction between these two components of grammar in signalling the question meaning of an utterance.

The present work examines question formation on the basis of four genealogically related and geographically closely located Romance varieties spoken in northern Italy: Gherdëina, Badiot, Fascian and Nònes. Given that these varieties differ only with respect to certain microparametric values whereas others remain constant, they constitute an ideal research area to study the interaction between the syntax and the prosody in question formation. The syntactic and prosodic analyses proposed are based on new empirical data. The syntactic analysis is couched within the cartographic approach and the prosodic analysis is based on Autosegmental-Metrical Phonology.

This dissertation is motivated by five main research goals:

- (i) to provide a detailed description of the syntactic variation found in interrogatives in the four varieties Gherdëina, Badiot, Fascian and Nònes based on data collected by the author;
- (ii) to propose a unified syntactic analysis of the interrogatives;
- (iii) to offer a prosodic analysis of statements and questions providing new data from varieties not studied up to now in the literature;
- (iv) to establish the relation between the syntax and the prosody in question formation;
- (v) to determine how the syntax and the prosody interact in providing clues to interrogative force for the listener as well as the speaker.

The main conclusions are as follows: The syntactic structure and the intonational tune are autonomous in question formation. Three aspects matter for interrogative clause typing: (i) syntactic marking, (ii) prosodic marking and (iii) tune-text-alignment.

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To Remo

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Preface

In linguistics, question formation has been studied with respect to a variety of languages and within a variety of frameworks. However, the vast majority of these studies examine interrogatives from the perspective of one single component of grammar without considering the other ones or the interaction between several components in question formation. An apt description of this situation is given by Mycock (2007:195), who offers an analysis of Japanese and Hungarian *wh*-questions regarding both the syntax and the intonation.

Previous analyses of constituent questions and typological variation in constituent question formation strategies have focused overwhelmingly on the syntax of constituent questions. These studies have therefore provided only partial coverage of the relevant data, largely ignoring crucial aspects of constituent question formation such as intonation.

In the light of this situation, the present dissertation seeks to provide a more comprehensive account of question formation investigating both the syntactic and the prosodic properties of interrogatives as well as how (prosodic) phonology and syntax interact in signalling the question meaning of an utterance.

The present dissertation sets out to examine question formation on the basis of four genealogically related and geographically closely located Romance varieties: the varieties Gherdëina, Badiot, Fascian and Nònes spoken in four alpine valleys in the Trentino-Alto Adige region in the far north of Italy. Given that these varieties differ only with respect to certain microparametric values whereas others remain constant, they constitute an ideal research area to study the interaction between the syntax and the prosody in question formation. These Dolomitic Ladin varieties have received relatively little attention in the syntax literature and their prosody has not been studied at all up to now. The most striking

one of their common properties in question formation is that they all use the particle *pa/po*, but to different extents and in different syntactic positions.

This dissertation is motivated by five main research goals, (i) to provide a detailed description of the syntactic variation found in Dolomitic Ladin interrogatives making a contribution to dialect syntax; (ii) to propose a unified syntactic analysis of these constructions; (iii) to offer a prosodic analysis of statements and questions providing new data from varieties not studied up to now in the literature; (iv) to establish the relation between the syntax and the prosody in question formation and (v) to determine which (morpho)syntactic and prosodic factors signal that a given utterance is a question ('interrogative clause typing').

The thesis is organised in three parts:

Part I introduces the object of research and provides an overview of question formation cross-linguistically (chapter 1) before presenting the varieties under consideration and the methodology used for data collection (chapter 2).

Part II examines question formation from a syntactic perspective. First, I discuss the meaning and function of the particle *pa/po*, a common trait of questions in all varieties under consideration in the present work (chapter 3). After that, the syntactic framework is introduced tracing the most important developments regarding the analysis of interrogative clauses within the cartographic approach (chapter 4). I describe the question formation strategies observed in the Dolomitic Ladin varieties under scrutiny and propose a unified analysis of the syntactic variation in Dolomitic Ladin question formation (chapters 5–6) within the cartographic approach. In this way, I seek to make a contribution to the field of dialect syntax in general and to the syntactic description and analysis of Dolomitic Ladin in

particular. Given the scarcity of work on the syntax of Rhaeto-Romance in general and Dolomitic Ladin in particular this is an important research desideratum.

Part III investigates question formation in Dolomitic Ladin from the perspective of prosody in order to shed light on how the question meaning and the statement-question contrast is signalled prosodically. I compare the characteristics of pitch contours or intonational tunes in statements (chapter 8), yes/no-questions (chapter 9) and wh-questions (chapter 10) within the framework of Autosegmental-Metrical Phonology and establish how the syntax and the prosody interact in question formation.

Chapter 11 concludes with a summary of the main findings of this dissertation, a conclusion on the prosody-syntax interface and a perspective on further lines of research.

A glossed version of the questionnaire used for data collection and an overview of the informants can be found in the appendix.

Part I

Chapter 1

Questions

and the prosody-syntax interface

Chapter 1 gives an introduction to the object of research of the present dissertation addressing the classification of interrogative clauses (section 1.1) and providing an overview of the strategies used for question formation cross-linguistically (1.2). After this typological overview, section 1.3 discusses current approaches to the prosody-syntax interface and introduces the model assumed in the present work.

1.1 The classification of questions

Questions are a “universal property of natural languages” whose communicative function it is to elicit information (Siemund 2001:1010). Interrogative clauses can be classified according to various parameters such as the type of information sought (section 1.1.1), the clause type (1.1.2) or their semantic/pragmatic interpretation (1.1.3).

1.1.1 Type of information sought

In the literature, usually a tripartite classification of interrogatives is made depending on the kind of information asked for by the question.

The first type of questions inquires about the truth value of the proposition expressed by the interrogative and is usually referred to as a ‘polar question’, ‘closed question’ or ‘yes/no-question’ given that the answer can either be ‘yes’ or ‘no’.

(1) Is a golden delicious an apple cultivar?

Depending on the communicative status of the proposition, yes/no-questions can be further divided into two groups (cf. Grice & Savino 1997, Carletta et al. 1995). ‘Information-seeking yes/no-questions’, also termed ‘queries’ ask for totally new information which (according to the speaker) cannot be recovered from the dialogue context (2a). If, in contrast, yes/no-questions refer to old information which (according to the speaker) has already been covered, we are dealing with ‘confirmation-seeking’ yes/no-questions or ‘checks’ (2b).¹

(2) a. Do you have a rockfall? (Grice & Savino 1997:29)
b. So you want me to go down two inches?

The second type of questions, usually labelled ‘constituent question’, ‘open question’, ‘partial question’, ‘information question’ (Ultan 1978) or ‘wh-question’ – because most interrogative words in English begin with *wh-* – is used to “request the information which is required to fill an information gap (Mycock 2007:193), to “complete the interpretation of a proposition” (Siemund 2001:1018) or to find out “which values (if any) instantiate the variables of an open proposition” (*ibid.*:1010). In this case, the *wh*-expression represents the missing information, which the addressee of the question is expected to provide (cf. Haegemann 2006:82, Truckenbrodt 2004, Siemund 2001:1012).

(3) What is an apple?

The third type of interrogatives, called ‘alternative interrogatives’ or ‘nexus questions’, finally, is used “to query which element of a set of alternatives makes an open sentence true” (Siemund 2001:1010).

¹ The terms ‘query’ and ‘check’ originate from the coding scheme for conversational games used to describe the (English) HCRC Map Task corpus (Kowtko et al. 1992, Carletta et al. 1995).

(4) Is an apple a fruit or a milk product?

Alternative questions are sometimes treated as a subclass of yes/no-questions and analysed as coordinated reduced yes/no-questions. However, they cannot be answered by ‘yes’ or ‘no’ but instead require one of the given conjuncts as an answer (cf. Siemund 2001:1012). In this work, I shall be concerned only with the first two types of questions, to which I will refer as ‘yes/no-questions’ and ‘wh-questions’, leaving aside alternative questions.

1.1.2 Clause type

Another fundamental distinction is drawn between direct questions, also called ‘main questions’ or ‘matrix questions’ such as (5a) and indirect questions introduced by an introductory verb, also referred to as ‘embedded questions’ (5b).

- (5) a. Where do you want to go?
b. I asked you where you wanted to go.

In this work, I concentrate on main questions, though occasional reference to embedded questions will be made where necessary.

1.1.3 Semantic interpretation

A further aspect to take into consideration is the semantic/pragmatic interpretation of a question. In the syntax literature a distinction is usually made between ‘true requests for information’ on the one hand and ‘special questions’ (cf. Obenauer & Poletto 2000, Poletto 2000; Obenauer 2004, 2006) on the other. True requests for information are information-seeking questions and are often simply referred to as ‘standard questions’. They can be asked ‘out-of-the-blue’, i.e. without reference to a previous discourse situation.

(6) What’s your name?

‘Special questions’, in contrast, exhibit some special semantic interpretation or function and can be further classified into ‘echo-questions’ (7), rhetorical questions (8), ‘surprise-disapproval’ questions (SDQs) (9) and ‘Can’t-find-the-value’ questions (CFVQs) (10) (cf. Obenauer 2004). Erteschik-Shir (1986:146, Note 6) distinguishes between two types of echo-questions: The first type asks for further clarification because the previous utterance was not heard or understood well (7a). These clarification questions usually involve primary stress on the wh-expression. Her second type, in contrast, which conveys astonishment or indignation regarding a previous utterance (cf. 7b), seems to correspond to Obenauer’s (2004, 2006) SDQ type (cf. 9).

- (7) a. WHEN are you going to Rome?
b. A: I’ll be 100 next year. – B: You’ll be 100 next year? (Siemund 2001:1026)

Rhetorical questions (8) can be defined as “interrogatives uttered in a context in which the answer to them is given” (Siemund 2001:1026) and are therefore often referred to as “questions which expect no answer”.

- (8) Who can you trust, nowadays? (Obenauer & Poletto 2000:121)

In SDQs (9), the speaker already knows the answer and the question conveys a sense of surprise and reproach.

- (9) Why do you laugh so stupidly?! (Bayer & Obenauer 2011:468)
(You should not laugh so stupidly!)

CFVQs (10), finally, indicate that the speaker has already tried to find the answer to the question, but in vain.

- (10) Where on earth did I put my glasses? (Bayer & Obenauer 2011:468)
(I have already looked everywhere.)

Table 1.1 summarises the distinction between standard questions and special questions. Of course, the types of questions shown here are just broad categories.

| Standard interpretation | Special interpretation |
|-------------------------------|---|
| True requests for information | Echo-questions: (i) clarification; (ii) astonishment / indignation (SDQs) |
| | Rhetorical questions |
| | Can't find the value questions |

Table 1.1: The semantic/pragmatic interpretation of questions

In the present work, we will mainly be concerned with standard wh-questions, but reference to other question types will be made where necessary.

The next section addresses the issue of how interrogatives are marked or coded cross-linguistically.

1.2 Interrogative clause typing

The term ‘interrogative clause typing’ is used throughout the present work to refer to the process which leads to the interpretation or identification of a clause as a question. This term follows Cheng’s (1991/1997) Clausal Typing Hypothesis according to which every clause needs to be typed (cf. section 4.1.2). Various approaches and principles have been proposed in the theoretical literature, trying to formally account for how interrogative clause typing is achieved or ‘interrogative force’ is expressed. I discuss these theoretical approaches in detail in chapter 4. In the present section, though, I start out addressing the issue of interrogative clause typing on a descriptive level by providing an overview of the strategies used for question formation cross-linguistically.

Siemund (2001:1011) distinguishes between seven basic coding strategies for questions, some of which can occur in combination whereas others are mutually exclusive.

| Coding strategies in questions | |
|--------------------------------|---------------------------|
| a | intonation |
| b | interrogative particles |
| c | interrogatives tags |
| d | disjunctive constructions |
| e | the order of constituents |
| f | verbal inflection |
| g | interrogative words |

Table 1.2: Coding strategies in questions (Siemund 2001:1011)

In the present work, particular attention will be placed on the strategies a, b, e, f and g; interrogative tags (c) and disjunctive constructions (d) will not be addressed.

In the following, I first look at yes/no-questions (section 1.2.1) and after that at wh-questions (1.2.2). On the basis of this overview, I then outline my basic assumptions on interrogative clause typing (1.2.3) and introduce the concept of ‘focus’ (1.2.4), an important aspect regarding both the syntactic and the prosodic analysis of interrogatives in the present work.

1.2.1 The coding of yes/no-questions

Dryer (2011c) examines the coding strategies for yes/no-questions in more than 950 languages based on the data collected for the *World Atlas of Language Structures* (henceforth *WALS*) (Dryer & Haspelmath 2011).²

| Coding strategy | Number of languages |
|---|---------------------|
| Question particles | 584 |
| Interrogative verb morphology | 164 |
| Question particle and interrogative verb morphology | 15 |
| Interrogative word order (subject-verb-inversion) | 13 |
| Absence of declarative morphemes | 4 |
| Interrogative intonation only | 173 |
| No interrogative-declarative distinction | 1 |
| total | 954 |

Table 1.3: Coding strategies in yes/no-questions (Dryer 2011c)

² The first version of the *WALS* has been published as a book with CD-ROM (Haspelmath et al. 2005). Throughout the present work, I refer to the current online version of the *WALS* (Dryer & Haspelmath 2011).

Strikingly, a high proportion of the languages examined for the *WALS* exhibit question particles whereas only very few languages use the inversion of the subject and the verb we know from Romance and Germanic languages. Figure 1.1 displays the geographical distribution of these two yes/no-question coding strategies.



Figure 1.1: The geographical distribution of question particles and subject-verb-inversion (cf. Dryer 2011c)

1.2.1.1 Question particles

In many languages of the world, question particles are added to a statement marking that the sentence is a question. As noted by Dryer (2011a), it is often difficult to determine whether a given element appearing in yes/no-questions is an interrogative affix or a separate interrogative particle. A crucial criterion used to distinguish between these two categories concerns the distributional properties of the element: interrogative elements that can attach to words of different categories are considered as question particles. Out of the 883 languages investigated for the *WALS* with respect to yes/no-questions, about 60% of languages make use of a question particle.

| Symbol | Position of the question particle | Number of languages |
|--------------|-----------------------------------|---------------------|
| ● | Initial | 130 |
| ● | Final | 313 |
| ● | Second position | 52 |
| ● | Other position | 8 |
| ● | Either of two positions | 25 |
| ○ | No question particle | 355 |
| total | | 883 |

Table 1.4: The use and the position of question particles in yes/no-questions (cf. Dryer 2011a)

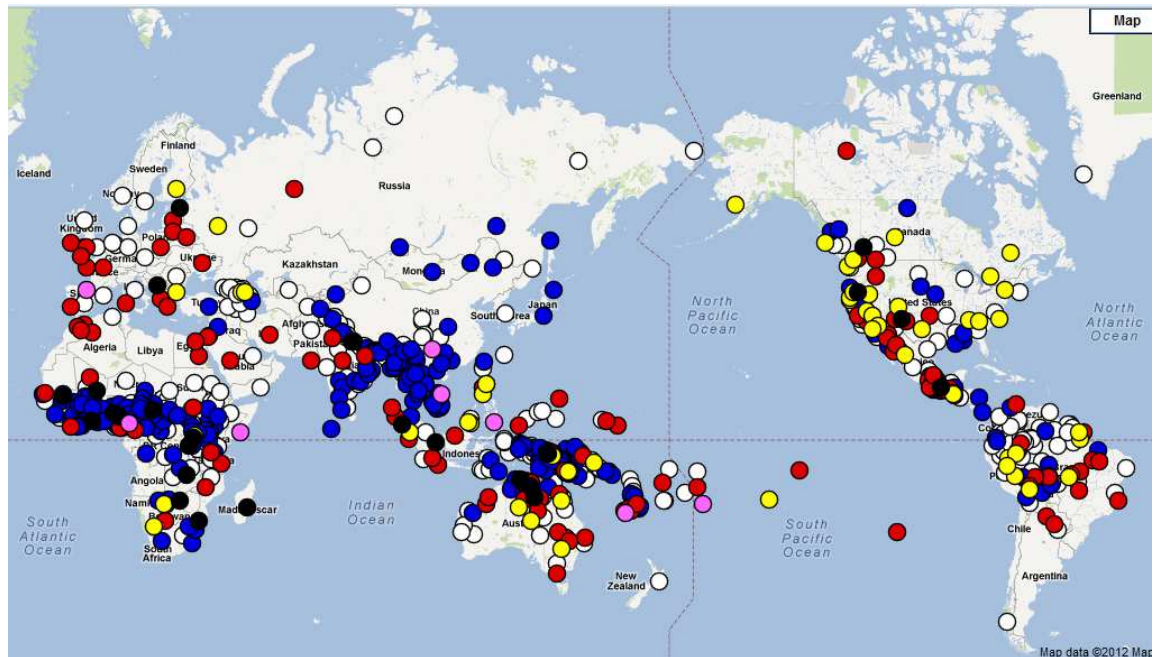


Figure 1.2: The use and the position of question particles in yes/no-questions (Dryer 2011a)

In the languages that use them, question particles have been observed to appear in three main positions: (i) clause-initially (●), (ii) in second position (●), i.e. after the first constituent of the clause and (iii) clause-finally (●); with the clause-final position being by far the most frequent position (cf. Dryer 2011a).

According to Dryer, initial particles as illustrated in (11) with an example from French taken from Harris (1988:237) are most common in Europe and North Africa but also in North America, including Mesoamerica while second position particles as in Yurok (Robins 1958:139) (12a) are most frequently used in North America. Second position particles have been found to encliticise very often onto the first constituent as exemplified

in (12b) on the basis of the Uto-Aztecan languages Mono (Norris 1986:44). Final particles such as *i* in the West Papuan language Hatam (Reesink 1999:69) (13) appear everywhere excluding Europe and North Africa.

- (11) Clause-initial question particles
Est-ce que le président vient? (French)
 Q the president come-3SG
 ‘Is the president coming?’
- (12) Second position question particles
 a. kic **hes** nesk^wec-ok^w ku wɪʔy.ɪs (Yurok)
 PST Q come-3SG DEF girl
 ‘Has the girl come back?’
 b. Charley=**w̃aʔ** mia-pi (Mono)
 Charley=Q go-PERF
 ‘Has Charley left?’
- (13) Final question particles
 a-yai bi-dani mem di-ngat **i** (Hatam, West Papuan)
 2SG-get to-me for 2SG-see Q
 ‘Would you give it to me so that I can see it?’

An interesting case for our current research purposes is represented by languages in which the position of question particles is variable. According to Dryer (2011a), the position of the particle in these languages often depends on where the focus of the sentence is. He reports that in languages such as Imbabura Quechua (Cole 1982:15) (14), an interrogative clitic occurs on the verb when the sentence is a neutral question without any specific constituent in focus, i.e. “where the truth of the entire sentence is being questioned” (14a). If, however, a specific constituent is focused, e.g. *wasi-man* (‘to the house’) (14b), then the interrogative clitic attaches to the focus constituent.

- (14) a. wasi-man ri-ju-ngui=**chu** (Imbabura Quechua)
 house-to go-PROG-2=Q
 ‘Are you going to the house?’
 b. wasi-man=**chu** ri-ju-ngui
 house-to=Q go-PROG-2

Examples like these suggest that there is a tight relation between focus and interrogativity which we will explore more in detail in chapters 5 and 10 with respect to the particle *pa/po* in the four varieties under consideration in the present work.

1.2.1.2 The order of constituents

Marking of yes/no-questions by reordering the basic constituents, i.e. subject-verb-inversion, is rather rare among the languages of the world (Siemund 2001:1017; Dryer 2011c, cf. table 1.3 and figure 1.1). In Ultan's (1978) sample, there are in fact only seven languages that use inversion in yes/no-questions, six of them belonging to the Indo-European (English, French, Hungarian, Rumanian, Russian) or the Finno-Ugric language families (Finnish) and one (Malay) being part of the Indonesian branch of the Austronesian family. Moreover, we have seen in table 1.3 that out of the 954 languages examined for the *WALS* with respect to yes/no-question formation, only 13 exhibit subject-verb-inversion. Interestingly, Greenberg (1963:83) states in his universal 11, that inversion in yes/no-questions is observed only in those languages that use it also in wh-questions.

1.2.1.3 Verbal inflection

According to Siemund (2001:1017), special verbal morphology restricted to interrogatives is a relatively rare strategy for marking yes/no-questions among the languages of the world. The *WALS*, however, documents that at least 164 languages out of 954 exhibit interrogative verb morphology (cf. table 1.3). West Greenlandic (Kalaallisut) (15) (Sadock 1984:190), certain Eskimo languages (Inuit) and Blackfoot, for instance, are reported to exhibit a dedicated interrogative mood.

- (15) a. nerivutit (West Greenlandic)
 'you ate'
 b. nerivit
 'Did you eat?'

Interestingly, these languages show distributional gaps with respect to their interrogative morphology.

The concept of ‘verbal inflection’ matters for the discussion in the present work given that subject clitic-verb-inversion (henceforth SCI) in Northern Italian dialects as illustrated below for the dialect of Venice (Salvi 2003:211) (16a–a’), Friulian of Cordenons (Pordenone) (*ASIt*; Salvi 2003:211) (16b–b’) and Rocca Pietore (*ASIt*, Salvi 2003:211) (16c–c’) is considered by some researchers as a purely morphological process of ‘interrogative inflection’ or ‘interrogative mood’ (cf. Renzi & Vanelli 1983, Plangg 1989, Fava 1993, Salvi 2003). This view assumes that the sequence V + SCL is created in the lexicon (rather than in the syntax) and part of proper interrogative verb paradigms (16a’–c’) which exist besides the assertive paradigms (16a–c).³

- (16) a. i magna (Venice)
 they eat-3PL
 a’.magne -i
 eat they
- b. te parlis (Cordenons, Pordenone)
 you speak-2SG
 b’.parli -tu
 speak-2SG you
- c. i magna (Rocca Pietore, Belluno)
 they eat-3PL
 c’.magn -i -e
 eat-3PL they

Hence, Romance SCI could be considered as a special verbal morphology in interrogatives on a par with West Greenlandic (15).

³ In (16c’), the enclitic subject pronoun *-i* is incorporated in the verb form.

1.2.1.4 Intonation

According to Greenberg's (1963:80) universal 8, intonation marking of yes/no-interrogatives occurs in clause-final position. In English, for instance, yes/no-questions are differentiated from statements by "a rise in pitch in the last stressed syllable of the sentence" whereas the corresponding statement involves falling pitch. Ultan (1978) notes that such a rising intonation contour in yes/no-questions (and in interrogatives in general) is observed in about 95% of the languages of the world. The research question is then, where exactly the intonational marking is placed and of what nature it is. Ultan (1978) reports on a final rise which may come in at least four different shapes:

| Shape of the final rise | Language |
|-------------------------------------|------------|
| Higher ultima | Vietnamese |
| Higher penult | Chontal |
| Higher pitch on last stressed vowel | Bashkir |
| Rising toward last stressed vowel | Hebrew |

Table 1.5: The shape of the final rise in yes/no-questions (Siemund 2001:1013, on the basis of Ultan 1978)

In contrast to this, yes/no-questions in other languages have been reported to exhibit higher pitch at the beginning of the contour.

| Shape of the initial rise | Language |
|---------------------------|----------------|
| Higher initial syllable | Western Desert |
| Higher stressed vowels | Finnish |

Table 1.6: The shape of the initial rise in interrogatives (Siemund 2001:1013)

Finally, there are also languages such as Chitimacha, Fanti (Kwa) and Grebo (Niger-Cogo) showing the opposite coding, i.e. rising intonation in statements and falling intonation in interrogatives (Siemund 2001:1013). In chapter 9, I provide a detailed analysis of the intonation marking in Dolomitic Ladin yes/no-questions.

For our present research purposes concerning interrogative clause typing and the prosody-syntax interface, the situation in (Standard) Italian is most interesting: due to the fact that

(Standard) Italian is a null-subject language, statements such as (17a) exhibit exactly the same syntactic structure as yes/no-questions (17b). Given the absence of any (morpho)syntactic marking of interrogation, interrogative clause typing in this case is usually attributed to the rising intonation in yes/no-questions, the unique indication which allows to distinguish between the question and the corresponding statement (cf. Fava 1995:94).⁴

- | | |
|---|-------------------------------|
| (17) Statement (a) vs. yes/no-question (b) and intonation | (Standard Italian) |
| a. Piove. | (constant/falling intonation) |
| rain-3SG | |
| ‘It rains.’ | |
| b. Piove? | (rising intonation) |
| rain-3SG | |
| ‘Is it raining?’ | |

Apart from Standard Italian, this situation has been observed in further 172 languages investigated by the *WALS* (Dryer 2011c) (cf. table 1.3).

1.2.1.5 Combination of two or more question formation strategies in yes/no-questions

The combinatorial restrictions on the use of the coding strategies have given rise to much discussion in the literature (cf. Baker 1970, Waşık 1982, Cheng 1997, Siemund 2001). In French, for instance, inversion and the interrogative particle *est-ce-que* cannot occur simultaneously (cf. Siemund 2001:1017).

- | | |
|--|----------|
| (18) Inversion and the question particle <i>est-ce que</i> | (French) |
| a. Allez=vous à Paris? | |
| go-2PL=SCL to Paris | |
| ‘Are you going to Paris?’ | |
| b. Est-ce que vous allez à Paris? | |
| EST-CE QUE you go-2PL to Paris | |
| c. *Est-ce qu’ allez=vous à Paris? | |
| EST-CE QUE go-2PL=SCL to Paris | |

⁴ Furthermore, also the presence of a lexical subject in the sentence might not be a reliable diagnostic for the type of word order present, as in Italian, lexical subjects canonically occur in postverbal position.

In Russian (cf. Siemund 2001:1019) and, as we shall see in chapter 3, in the varieties of Dolomitic Ladin, in contrast, we observe both SCI and the simultaneous presence of a question particle in yes/no-questions.

Let us now turn to wh-questions.

1.2.2 The coding of wh-questions

Most of the strategies discussed before for marking yes/no-questions can also be observed in wh-questions, although here, they play a less important role and are often reported to be optional.

1.2.2.1 Intonation

In most languages of Ultan's (1978) sample, intonational marking of wh-questions is either not used at all – so that there is no difference in intonation between statements and questions – (33.3%, e.g. Fula, Japanese, Tagalog) or only optionally (33.3%, e.g. Amharic, English, Turkish). Out of the 36 languages that use intonation, i.e. a rising pitch contour or higher pitch, for yes/no-question marking, only one third (12) exhibit the same or a similar intonational pattern also in wh-questions. Hence, intonation seems to be much less important for the marking of wh-questions than it is for marking yes/no-questions (cf. Siemund 2001:1018).

1.2.2.2 Reordering of constituents

Wh-fronting, i.e. the movement of the wh-expressions to the clause-initial position, is very common among the languages of the world (cf. Siemund 2001:1019), whereas subject-verb-inversion is much less common and probably restricted to some Indo-European, mainly Germanic languages. As we will see in chapter 5, subject-verb-inversion is the traditional and most widespread question formation strategy in the varieties spoken in

northern Italy. However, it has also been observed that some of these varieties are losing inversion in questions and instead resort to other strategies to code interrogatives (Benincà & Poletto 1999). In the varieties considered in the present work, subject-verb-inversion is used to different extents: in Gherdëina and Badiot wh-questions, it is compulsory, whereas Nònes and even more Fascian, exhibit now also wh-questions involving direct word order instead of subject-verb-inversion.

1.2.2.3 Wh-expressions

Wh-expressions are usually classified into two types depending on their grammatical function. The first group of wh-expressions such as English *who* or *what* ask or substitute for the core arguments of a predication and are hence syntactically speaking arguments. Certain languages exhibit a highly differentiated set of wh-expressions in this respect, distinguishing between wh-expressions for human vs. non-human referents (e.g. English *who* vs. *what*), for animate vs. non-animate referents (e.g. Ute), for singular vs. plural referents (e.g. West Greenlandic), for masculine vs. feminine vs. neuter referents (e.g. Icelandic) or between different cases (e.g. Finnish) (cf. Siemund 2001:1021f.). The second group of wh-expressions, in contrast, replace or ask for circumstantial information such as the location of a situation (*where*), its temporal setting (*when*), the manner of carrying it through (*how*) or the reason for it (*why*) (cf. Siemund 2001:1022f.) and are hence adjuncts.

Another distinction usually made as regards wh-expressions concerns their grammatical use which can be pronominal or determiner-like. When used as a pronoun, the wh-expression stands alone (19a), whereas in its adjectival use, it is followed by a noun (19b).

- (19) a. [Che] vuel=ela contar=te **po?** (Nònes)
 what want-3SG=SCL.F tell-INF=to-you PO
 ‘What does she want to tell you?’

- b. [Che storia] vuel=ela contar=te *po?*
 what story want-3SG=SCL.F tell-INF=to-you PO
 ‘What story does she want to tell you?’

The languages of the world can be classified into three types depending on the position of the wh-expression in the clause. In the so-called ‘wh-fronting’-languages such as English (20), Finnish, or German, wh-expressions must be placed obligatorily in clause-initial position. In wh-*in-situ*-languages such as Indonesian or Mandarin (21), in contrast, the wh-expression remains in the thematic or argument position of the constituent queried. Third, there are optional wh-fronting languages such as Egyptian Arabic, Bahasa Indonesia, Palauan (Cheng 1997), Swahili (Haiman 1985) or Bellunese (Munaro 2003:138) (22) (at least regarding some wh-expressions) (22), which allow both positions for the wh-expression.

(20) English

- a. John likes apples.
 b. What does John like?’

(21) Mandarin

(Cheng 1997:5)

- a. Hufei mǎi-le yī-běn-shū.
 Hufei buy-ASP one-CL-book
 ‘Hufei bought a book.’
 b. Hufei mǎi-le shénme?
 Hufei buy-ASP what
 ‘What did Hufei buy?’

(22) Bellunese

(Munaro 2003:138)

- a. Qual avé=o ciot?
 which-one have-2PL=SCL taken
 ‘Which one have you taken?’
 b. Avé=o ciot qual?
 have-2PL=SCL taken which-one

Table 1.7 provides an overview of the three types of languages depending on the position of the wh-expression in wh-questions.

| wh-fronting languages | optional wh-fronting | wh- <i>in-situ</i> |
|-----------------------|----------------------|--------------------|
| English | Bahasa Indonesia | Indonesian |
| Finnish | Bellunese | Lezgian |
| German | Egyptian Arabic | Mandarin |
| Hebrew | Kannada | Japanese |
| Supyire | Korean | |
| Yoruba | Palauan | |
| Zapotec | Swahili | |

Table 1.7: Tripartite classification of languages depending on the position of the wh-expression in wh-questions (cf. Siemund 2001:1019f.)

Ultan (1978:229) reports that in his sample, almost 75% of languages belong to the fraction of wh-fronting and optional wh-fronting languages, whereas 25% are wh-*in-situ*-languages. The four varieties under consideration in the present work are strict wh-fronting-languages.⁵

1.2.2.4 Combination of two or more question formation strategies in wh-questions

On a par with yes/no-questions, also wh-questions may exhibit more than one interrogative coding strategy. In about half of the languages of the world, question particles co-occur with wh-expressions, as exemplified below for Japanese (Siemund 2001:1018).

- (23) Japanese (Kuno 1978:93)
- a. Taroo wa kita *ka*?
 Taroo TOP came KA
 ‘Did Taroo come?’
- b. Taroo wa sono okane o dare ni *ka*?
 Taroo TOP the money OBJ who to KA
 ‘Who did Taroo give the money to?’

Siemund (2001:1019) suggests that if a language uses a particle to mark wh-questions, it will also allow the use of this particle in yes/no-questions. In the light of the facts regarding the use of the particle *pa/po* in Dolomitic Ladin, we will see in chapter 3 that this assumption has to be treated with caution. Diachronically, the particle *pa/po* was first used in wh-questions before occurring in yes/no-questions as well. Moreover, while the particle

⁵ Wh-*in-situ* may occur, however, in ‘special questions’, e.g. in echo-questions.

is used in neutral focus *wh*-questions, its use in yes/no-questions may trigger a special interpretation.

Another generalisation regarding the combination of several coding strategies in *wh*-questions was put forward by Cheng (1991/1997) in the so-called ‘Clausal Typing Hypothesis’, according to which a *wh*-question is typed either by a question particle or by *wh*-fronting but not by both (cf. section 4.1.2 for a more detailed discussion). The Dolomitic Ladin varieties Gherdëina and Badiot constitute counterexamples to this generalisation given that they exhibit both *wh*-fronting and the obligatory question particle *pa* in *wh*-questions.

1.2.3 Basic assumptions on interrogative clause typing

Given the various coding strategies discussed in Siemund (2001) and Dryer (2011a–c) and in light of the fact that more than one strategy can be observed in interrogatives, I shall assume that the various components of grammar – the syntax, the morphology, the (prosodic) phonology and the lexicon – are involved in interrogative clause typing and that these components interact. In the present work, I investigate interrogative clause typing from the perspective of syntax and of (prosodic) phonology and I shall also be concerned with the relation between these two components of grammar. Gherdëina, Badiot, Fascian and Nònes exhibit several of the coding strategies seen in sections 1.2.1 and 1.2.2. In the present work, I shall examine the role of the following strategies for interrogative clause typing:

| Component of grammar | Coding strategies |
|----------------------|--|
| Syntax | <ul style="list-style-type: none"> • subject-verb-inversion • <i>wh</i>-fronting • question particles |
| (Prosodic) Phonology | <ul style="list-style-type: none"> • pitch contour |
| Lexicon | <ul style="list-style-type: none"> • <i>wh</i>-expression |

Table 1.8: Coding strategies under consideration in the present work

In the following section, I discuss current approaches to the syntax-phonology interface and present the model assumed in the present work.

1.3 The phonology-syntax interface

The relationship between syntactic/semantic and phonological/prosodic structure has been a major area of research for several decades (Halliday (1967b), Langendoen (1975), Nespor & Vogel (1982, 1983, 1986), Selkirk (1984, 1986, 1995), Ladd (1986), Chen (1987), Kubozono (1987), Steedman (1991, 2000), Lambrecht (1994), Croft (1995), Truckenbrodt (1999), Wagner (2005)). The main concern of this work has been to identify and define prosodic units and how they relate to syntactic units. As regards the issue as to how syntax and phonology relate to each other, several kinds of approaches have been proposed in the literature.

1.3.1 Models for the phonology-syntax interface

According to the current Minimalist T/Y-model of grammar (Chomsky 1995 and subsequent work) (figure 1.3), it is assumed that the prosodic structure is constructed after the syntactic one.

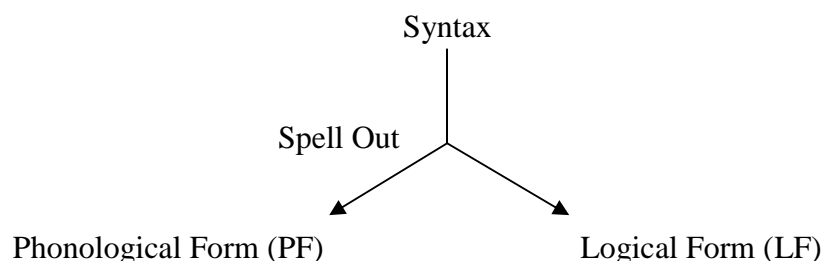


Figure 1.3: The T/Y-model of grammar (Chomsky 1995)

Many researchers agree that syntax forms the basis for generating phonological phrase structures and that the interactions between syntax and phonology are mediated by prosodic structure (Selkirk (1982, 1984), Nespor & Vogel (1986), Hayes (1989) and subsequent work). The phonological interpretation of an utterance takes place at PF, where the relative prominence among the constituents is assigned. An intonational phrase is made up of several phonological phrases one of which is defined as the designated terminal element and consequently, receives main prominence. Main prominence at PF corresponds to (new information) focus at LF.

With regard to the details of the syntax-phonology mapping, two different approaches have been put forward: the direct and the indirect approach (cf. the summary in Zec & Inkelas 1990; Féry 2001). According to the direct approach, phonetic indicators of phrasing such as tones, duration and intensity directly refer to the syntactic structure. In the second approach, in contrast, the mapping between phonology and syntax is indirect in the sense that the prosodic structure serves as an intermediary between the two levels: the phonetic indicators of phrasing are assumed to apply on the prosodic structure, which is constructed on the basis of the syntactic structure. The prosodic structure involves a specific hierarchy of prosodic constituents. While Nespor & Vogel (1986), among others, assume that this hierarchy of prosodic units also includes constituents below the word level such as the metrical units foot and syllable, other work such as Selkirk (1986), Zec (1988), Inkelas (1990) etc. consider metrical units on the one hand and units representing rule domains on the other as part of two different hierarchies. Inkelas (2006:419) departs from the following prosodic hierarchy:

- (24) The prosodic hierarchy
 Phonological word
 Phonological phrase
 Intonational phrase
 Utterance

(Inkelas 2006:419)

Within the indirect approach, two models have been proposed in order to derive the phonological structure from the syntactic one: end-based mappings and configuration-based mappings. In end-based mappings (cf. Chen 1987, Selkirk 1986), the edges of prosodic constituents are aligned with the edges of syntactic constituents, the direction – on the left or on the right – depending on the language. Configuration-based mappings (cf. Nespor & Vogel 1986), in contrast, refer to the syntactic constituent structure of phonological words, i.e. “words in a sentence are assigned to phonological phrases on the basis of their syntactic configurational relationships to one another” (Inkelas 2006:420), which can be sisterhood, c-command or branchingness. In contrast to end-based mappings, hence, what matters here is the hierarchical structure of a sentence rather than the location of the constituent edges. Note that in both mapping models, syntax comes first and phonology is derived.

While many researchers assume that syntax feeds into phonology, a much discussed issue is whether the phonology may influence the syntax as well. According to the phonology-free syntax hypothesis (Zwicky & Pullum (1986), Pullum & Zwicky (1988), Vogel & Kenesei (1990), Guasti & Nespor (1995), Miller et al. (1997)), the relation between the syntax and the phonology is unidirectional: the phonology takes (some aspects of) the syntax as input, but the syntax is completely phonology-free, i.e. syntactic operations are not motivated by phonological rules at all.

However, evidence has been found suggesting that the phonology indeed has an impact on the syntax. As argued by Inkelas (2006:421), “particular syntactic configurations are allowed only if they would be phonologically well formed”. Examples include cases showing phonological influence on word order such as Serbo-Croatian topicalization or the placement of second position clitics (cf. Zec & Inkelas 1990, Halpern 1992). The standard assumption being that second position clitics must follow the first word in some syntactic domain it has been shown that in many cases, it is in fact not the first syntactic element in

that domain that clitics must follow but rather the first phonological word. In Serbo-Croatian, second position clitics appear either after the first syntactic constituent ('that man') (25a) or after the first syntactic word ('that') (25a'). If, however, the first syntactic element is not a phonological word, the clitic does not follow that element (25b) but the next, so that the clitic occurs after the first phonological word (25b').

- (25) Second position clitics in Serbo-Croatian (Inkelas 2006:421)
- a. taj čkovek=joj=ga=**je** poklonio
 that man=her=it=AUX presented
 'That man presented her with it.'
- a'. taj=joj=ga=**je** čkovek poklonio
 that=her=it=AUX man presented
- b. *u=**je** ovoj sobi klavir
 in=is this room piano
- b'. u=ovoj sobi=**je** klavir
 in=this room=is piano
 'The piano is in the room.'

Hence, as shown by Zec & Inkelas (1990) and Inkelas (2006), the syntactic position of clitics depends on phonological word structure.

Finally, in their optimality-theoretic Alignment Theory based on Selkirk's (1986) end-based mapping theory, McCarthy & Prince (1993) develop an approach which accounts for the insight that not only the prosodic structure should correspond to the syntax but also the syntactic structure to the prosody. This framework allows a simultaneous mapping of syntactic and prosodic structures and an evaluation of both kinds of structures relatively to each other. Output structures are compared in parallel and the candidate that corresponds best to the grammar of a given language, conceived as a constraint hierarchy, is selected as the optimal and grammatical structure.

In the following, I present the model assumed in the present work.

1.3.2 The prosody-syntax interface model assumed in the present work

In the present dissertation, I argue for a grammar model in compliance with the T-model, in which after Spell Out, the prosodic component maps the syntactic representation onto a prosodic representation. According to Selkirk (2008), this is achieved by two kinds of interacting mapping rules: default mapping rules and marked feature-sensitive mapping rules. The first type of rules derives the default phrasing and prominence assignment. As far as the prosodic system of (Standard) Italian is concerned, the usual assumption is that prominences are assigned by default to the rightmost element at all levels of the prosodic hierarchy above the word level (cf. Nespor & Vogel 1986). It has been shown that in Italian, this default prominence assignment does not directly refer to the syntactic representation and syntactic embedding but rather to the prosodic constituency (cf. Zubizarreta & Vergnaud 2005; Bocci 2008:18; Bocci 2009).

The second type of rules is sensitive to discourse properties such as topic or focus. As we shall see in chapter 4, it is assumed within the cartographic approach that such discourse properties are encoded as features in dedicated functional projections and that they drive syntactic derivation.⁶ Hence, in the representations the syntax hands over to its interfaces with LF and PF, the relevant discourse properties are transparently mapped (cf. Rizzi 2004:7) and can be read off and interpreted by LF and the feature-sensitive mapping rules in PF. In this view, thus, discourse properties do not only drive the syntactic derivation, but also the construction of the phonological representation.

Further evidence for the assumption of mapping rules sensitive to discourse features derives from the observation that different types of foci are characterised by different intonational properties. It has been reported with regard to Florentine Italian (Avesani &

⁶ Note, that in contrast to this view, Szendrői (2001, 2002) argues on the basis of Hungarian against the existence of a focus feature in the syntax and proposes instead that focus is encoded in the prosody via main prominence. In her approach, which rejects the T-model of grammar (cf. section 1.3.1), the relation between prominence and focus is mapped by a direct link between PF and LF and focus does not play any role for the syntactic computation.

Vayra 2003) and Siena Tuscan Italian (Bocci & Avesani 2008) (cf. section 1.3.3.1), that new information focus and contrastive focus are associated with different nuclear pitch accents – an observation which cannot be accounted for by the default mapping rules.⁷

We will see in chapters 8–10, that feature-sensitive mapping rules are crucial for pitch accent association. As proposed by Pierrehumbert & Hirschberg (1990), pitch accent association directly relates pragmatic properties to intonational morphemes. In other words, it is assumed that discourse features such as topic or focus govern the association of tonal events.

In the prosodic phonology literature, it is generally acknowledged that prosodic structure and syntactic structure are not isomorphic (cf. Nespor & Vogel 1986). In Hirschberg & Pierrehumbert's (1990) model, pitch accent association is governed by the informational properties of the element that gets associated with a pitch accent. An element with a certain pragmatic property is always realised with the pitch accent corresponding to that property. Hence, in this approach, the intonational representation is isomorphic to the pragmatic/informational properties.

In chapters 8–10, I show on the basis of question formation and the statement-question contrast in Dolomitic Ladin, that this is, however, not necessarily the case.

In the present work, we will consider just focus and shall not be concerned with topic. In the following, I introduce the concept of 'focus' and different types of foci (section 1.3.3.1), an important aspect both for the syntactic and the prosodic analyses of interrogatives in the present work as well as the issue as to the influence of focus on phonological phrasing (1.3.3.2).

⁷ Consequently, the different types of foci should also receive different feature specifications. Selkirk (2008), for instance, proposes regarding English that contrastive focus is marked with a feature +F(ocus), whereas new information focus lacks any feature specifications. In a different approach, Bocci (2008) assumes that both contrastive and new information focus are encoded as features. Nespor & Guasti (2002) also assume a contrastive focus feature.

1.3.3 Focus

1.3.3.1 Typology of foci

The notion of ‘focus’ has been widely discussed in the phonology, syntax, semantics/pragmatics and information structure literature but its precise definition is still subject to debate. Focus is often defined as the new or contrastive element of a sentence, but it has been shown that a definition on the basis of the old/new dichotomy is problematic (cf. Rochemont & Culicover 1990; Zubizarreta 1994; Erteschik-Shir 2007 for an overview). Many linguists agree on a definition of focus as ‘the non-presupposed information in the sentence’ (cf. Jackendoff 1972; Lambrecht 1994), where ‘presupposition’ is considered as “the information in the sentence that is assumed by the speaker to be shared by him and the hearer” (Jackendoff 1972:16).

Nespor & Guasti (2002) distinguish between three notions of focus: broad, narrow and contrastive. In cases of ‘broad focus’, the whole utterance is “informationally new”. Broad focus utterances are used in out-of-the-blue contexts, i.e. in contexts in which nothing is presupposed. A typical case of broad focus is exemplified by the statement in (26b), an answer to the wh-question in (26a), in which all information is new to the discourse situation (cf. Nespor & Guasti 2002:81).

- (26) a. A: What happened? (cf. Nespor & Guasti 2002:81)
b. B: Jacob gave a book to Thomas.

In cases of ‘narrow focus’, in contrast, only a certain constituent of the utterance is informationally new whereas the rest of the utterance is presupposed (cf. Nespor & Guasti 2002:81).

- (27) a. A: To whom did Jacob give a book? (cf. Nespor & Guasti 2002:81f.)
b. B: Jacob gave the book to [TO THOMAS].

The function of ‘contrastive focus’, finally, is to make a correction or to deny a presupposition of a previous utterance (28) (Nespor & Guasti 2002:81). According to Erteschik-Shir (2007:29), “contrastive focus focuses one element of the contrast set and eliminates the other alternatives” (29).

(28) Jacob gave the book to [THOMAS] (not to Stephen). (Nespor & Guasti 2002:82)

(29) a. A: Which laundry did John wash, the white or the coloured?
b. B: He washed the WHITE laundry. (cf. Erteschik-Shir 2007:29)

Note that Nespor & Guasti’s (2002) distinction between narrow focus and contrastive focus may be misleading given that in the information structure literature, contrastive focus is often referred to as ‘narrow’, whereas non-contrastive focus is referred to as ‘(new) informational focus’ (cf. Erteschik-Shir (2007:29); Belletti (2004b); cf. also Benincà & Poletto (2004) in section 4.2.6). I shall follow the latter terminology. Hence, what Nespor & Guasti (2002) refer to as ‘narrow focus’ (27) is considered as ‘new information focus’, whereas cases of contrastive focus (28–29) reflect ‘narrow focus’.

Another terminological clarification in order concerns the term ‘broad focus’. Originally, ‘broad focus’ was used to refer to ‘focus on the whole utterance’ (also referred to as ‘normal stress’) (cf. Ladd 1980: ch. 4) in contrast to ‘narrow focus’ on a single word in an utterance. In later work, however, the difference between broad and narrow focus was often treated as a matter of degree in the sense that focus can apply to constituents of any size from individual morphemes to whole sentences (Ladd 2008:215). The term ‘broad focus’ seems to indicate that the whole utterance is in focus, while in fact in ‘out-of-the-blue’-utterances, there need not be any focus at all, and rather, all constituents are new to the discourse situation. Therefore, in what follows, I will use the term ‘neutral focus’ instead of ‘broad focus’ (cf. also Hayes & Lahiri 1991).

The classification of focus into various subtypes is relevant to the discussion in the present work given that the various focus types have been found to be encoded differently in the syntax as well as in the prosody.

As far as syntax is concerned, it has been claimed that contrastive focus and new information focus occupy different syntactic positions (Belletti 2004b). Regarding prosody, Avesani & Vayra (2003) show that in Florentine Italian, contrastive focus and new information focus associate with different nuclear pitch accents. While new information focus and broad focus are reported to be associated with a falling H+L* nuclear pitch accent, contrastive focus involves either a rising bitonal L+H* nuclear pitch accent or an H+H* plateau. Moreover, Bocci & Avesani (2008) find the same prosodic difference between the two focus types in Siena Tuscan Italian: new information focus is found to be associated with H+L*, whereas contrastive focus is with L+H*. Table 1.9 summarises the typology of foci as assumed in the present work.

| Focus type | Definition |
|-----------------------|--|
| Neutral focus | Focus on the whole utterance |
| Narrow focus | Contrastive focus: focus on one element of a given set |
| New information focus | New and relevant information which is non-contrastive |

Table 1.9: Typology of foci

1.3.3.2 Focus and phonological phrasing

Much phonological work has addressed the relation between focus and prosodic phonology and it has been shown that focus can determine phonological phrasing in many languages such as Japanese (Poser 1984), English (Selkirk 1986, 1995; Kenesei & Vogel 1990), Hungarian (Kenesei & Vogel 1990; Vogel & Kenesei 1987, 1990), Chinese (Chen 1990; Selkirk & Shen 1990), Chichewa (Kanerva 1990), Hausa (Inkelas 1988; Zec & Inkelas 1990), Korean (Cho 1990; Jun 1996), Modern Greek (Condoravdi 1990), Bengali (Hayes

& Lahiri 1991), Portuguese (Frota 1997) and Italian (Frascarelli 1997; Nespor & Guasti 2002).

An interface condition due to Jackendoff (1972) and Chomsky (1971) and referred to as ‘Focus to Stress Alignment’ (Nespor & Guasti 2002) requires semantic focus and phonological main prominence to be aligned.

- (30) Focus to Stress Alignment (FSA) (Jackendoff 1972:237)
If a phonological phrase is chosen as the focus of a sentence S, the highest stress in S will be on the syllable of the phonological phrase that is assigned highest stress by the regular stress rule.

Hence, ‘Focus to Stress Alignment’ requires the constituent marked with the feature [+Focus] in the syntactic tree to be aligned with the constituent bearing main prominence in the prosodic tree.

Kenesei & Vogel (1990:44f.) propose a ‘Generalized Focus Restructuring Rule’ for English and Hungarian according to which (a) a focus-marked element ([+F]) is followed by a phonological phrase boundary on its (syntactic) recursive side and (b) it is incorporated into a single phonological phrase (Φ) with any constituent(s) on its non-recursive side (‘restructuring’). Hayes & Lahiri (1991) make similar assumptions regarding Bengali. They observe that a focused constituent is always followed by an H_P phonological phrase boundary tone (which they consider as a focus marker) and propose the Focus marking rule in (31).

- (31) A focused constituent must be followed by]_P. (Hayes & Lahiri 1991:89)

Frascarelli (1997), who studies the influence of focus on phonological phrasing in Italian, a right recursive language, observes that focus restructuring takes place only in narrow focus but not in broad focus (in our terms ‘neutral focus’) contexts. As regards narrow focus, she proposes the focus restructuring rule in (32a) which can be schematised as in (32b).

(32) a. Focus Restructuring Rule I (Frascarelli 1997:234)
 If a constituent in a sentence bears [+F], it restructures into the Φ on its left (that is non-recursive) side.⁸

b. $[Y_1, Y_2]_{\Phi} [X_{[+F]} \dots]_{\Phi} \rightarrow [Y_1, Y_2, X_{[+F]} \dots]_{\Phi}$ (Frascarelli 1997:232, 235)

$[Marilù]_{\Phi} [BACERÀ]_{\Phi} [Paolo]_{\Phi} \rightarrow [Marilù BACERÀ]_{\Phi} [Paolo]_{\Phi}$
 Marilù kiss-FUT.3SG Paolo
 ‘Marilù will kiss Paolo.’

Moreover, on a par with Kenesei & Vogel (1990) and Hayes & Lahiri (1991) etc., Frascarelli (1997:245) shows that a focus-marked constituent is always followed by a phonological phrase boundary (Φ).

(33) Focus Restructuring Rule II (Frascarelli 1997:237)
 If a constituent in a sentence is [+F], keep the Φ -boundary on the recursive (that is right) side of the Φ -head, and place an I-boundary after it.

In fact, following Antinucci & Cinque (1977), Frascarelli (1997:236) proposes that what follows a focus is subject to a “marginalization process”, constitutes thus an extraposed constituent and is mapped onto an intonational phrase. Therefore, as Frascarelli argues, a focus constituent does not only have a phonological phrase boundary on its right side, but also an intonational phrase boundary (I) separating the sentence with the focus element in final position from the following intonational phrase with postfocal material.

(34) $[[Marilù BACERÀ]_{\Phi}]_I [[Paolo]_{\Phi}]_I$ (Frascarelli 1997:236)
 Marilù kiss-FUT.3SG Paolo
 ‘Marilù will kiss Paolo.’

Nespor & Guasti (2002:87), as well, argue for an insertion of an intonational phrase boundary tone to the right of the contrastive focus constituent. The evidence they provide for this claim is based on the observation that the so-called ‘Gorgia Toscana’, an intonational-phrase-internal lenition phenomenon (Nespor & Vogel 1986) applies in (35a),

⁸ Φ : phonological phrase boundary

but not in (35b). The initial stop of *con* ('with') is pronounced as [h] in (35a), where it is not preceded by an intonational phrase boundary. The fact that this lenition process is not observed in (35b), where *con* is pronounced with a regular [k], is interpreted by Nespor & Guasti as evidence for the existence of an intonational phrase boundary which destroys the context for the 'Gorgia Toscana'.

- (35) a. [[Mangerà]_P [tre biscotti]_P [con il caffelatte]_P]_I (Nespor & Guasti 2002:87)
 eat-FUT.3SG three biscuits with the milky-coffee
 'She will eat three biscuits with milky coffee.'
 b. [[Mangerà]_P [tre BISCOTTI]_P]_I [[con il caffelatte]_P]_I

We shall see in chapters 8–10, that focus determines phonological phrasing in similar terms in the four varieties under scrutiny in the present work.

Chapter 2

Methodology and research aims

The way we collect data is at least as important as how we analyze it.
(a truth as old as science)

The data on which the syntactic and the prosodic analysis offered in the present work is based has been elicited by means of a carefully elaborated research methodology. In this chapter, I present the methodology used for data collection and point out the research aims of this dissertation. The chapter is organised as follows: section 2.1 presents the four Romance varieties under consideration in this work providing essential information on their geographical location and linguistic classification. After that, section 2.2 explains the motivation to choose these particular varieties in the light of the research purposes of the present work discussing their relevant syntactic and morphosyntactic properties and in what way these relate to the present research aims. Section 2.3 introduces the questionnaire commenting on the principles underlying its design and explaining the individual tasks used for data collection. Finally, section 2.4 gives an overview of the data collection process from the recruitment of informants to the actual interviews. One version of the questionnaire as well as an overview of informants can be found in the appendix.

2.1 Geographical position and linguistic classification

The language varieties taken under consideration in this work are Gherdëina, Badiot, Fascian and Nònes. The first three varieties belong to the Dolomitic Ladin group within Rhaeto-Romance, whereas the linguistic classification of Nònes is subject to debate as we shall see below in more detail.

Since Theodor Gartner (1883), the term “Raetoromanisch” (engl. ‘Rhaeto-Romance’) is commonly used as an umbrella term for three groups of Romance varieties, Swiss Romansh, Dolomitic Ladin and Friulian (cf. figure 2.1).

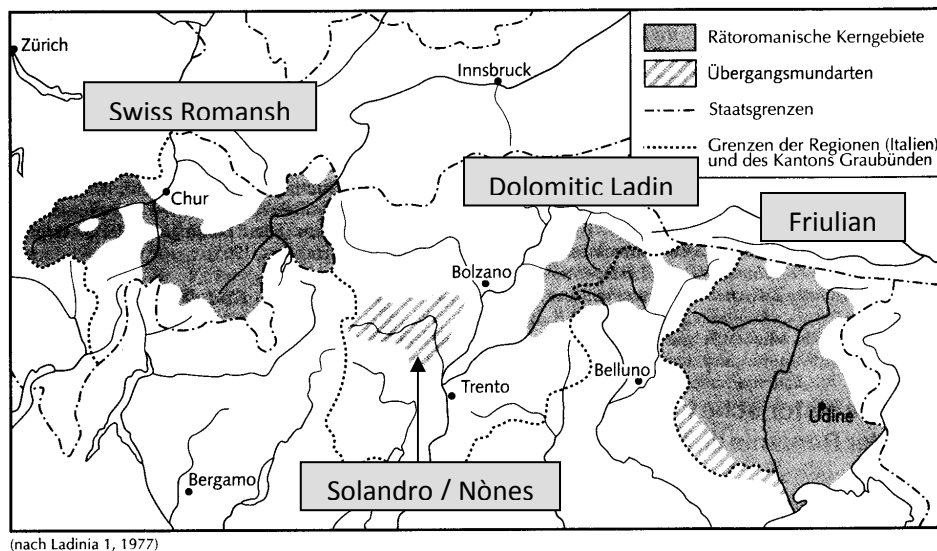


Figure 2.1: The language areas of Rhaeto-Romance (adapted from Kristol 1998:938)

‘Dolomitic Ladin’ is the term used to refer to five varieties spoken in the valleys around mount Sella in northern Italy:

- Gherdëina in Val Gardena,
- Badiot in Val Badia and Marè in Marebbe, a tributary valley of Val Badia
- Fodom in Livinallongo del Col di Lana and Colle Santa Lucia,
- Fascian in Val di Fassa,
- Anpezo in Cortina d’Ampezzo.

Given the recognition of Rhaeto-Romance as a separate language group within the Romance language family and the absence of a common standard language, I will use the term ‘(language) variety’ rather than ‘dialect’ when referring to Gherdëina, Badiot etc.

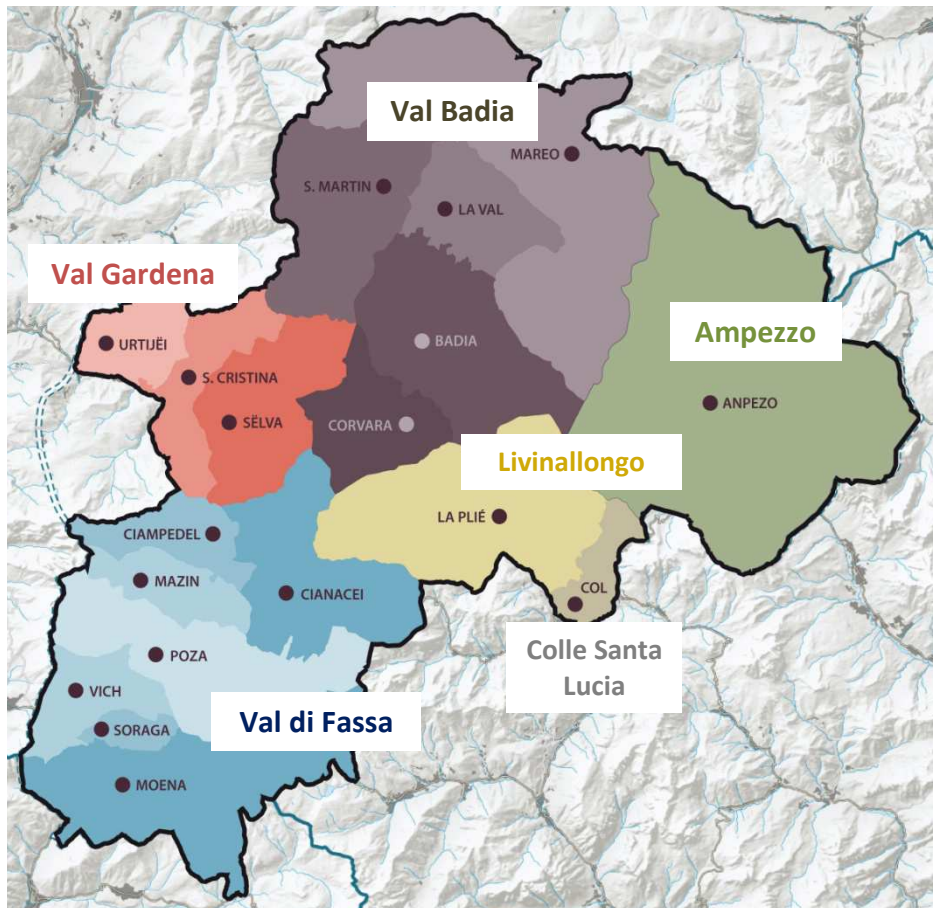


Figure 2.2: The language areas of Dolomitic Ladin
(© Istitut Ladin “Micurà de Rù”)

The question as to whether Swiss Romansh, Dolomitic Ladin and Friulian can in fact be conceived as one linguistic unit with a common origin as proposed by Schneller (1870), Ascoli (1873) and Gartner (1883) is discussed controversially in Romance linguistics (Liver 1999:15–28) and referred to as the so-called ‘Questione Ladina’. In its broader sense, the term ‘Questione Ladina’ also refers to the issue as to whether the varieties of Val di Non, Nònes, and Val di Sole, Solandro, in the northwesternmost part of the Province of Trento in northern Italy (cf. figure 2.1) should be considered as part of the Dolomitic Ladin group or rather as Northern Italian dialects. While scholars like Schneller (1870:10), Ascoli

(1873), Gartner (1883), Ettmayer (1909) or Haiman & Benincà (1992) classify Nònes and Solandro among the Rhaeto-Romance varieties, other scholars following Battisti (1931) consider them rather as Northern Italian dialects.

In this dissertation, which does not intend to take a position in this issue, I make a purely geographical distinction and refer to the Dolomitic Ladin varieties spoken in the valleys around mount Sella as ‘Dolomitic Ladin’ whereas I treat Nònes as a distinct variety. For practical reasons, however, I will sometimes refer to all four varieties, including Nònes, as ‘Dolomitic Ladin’.

Gherdëina is a fairly homogeneous variety, whereas the variety of Val Badia can be further divided into three subareas: (i) the upper part (Badiot), (ii) the middle part which is traditionally considered as the most conservative area (Ladin) and (iii) the lower part (Marè), the variety spoken in Marè/Marebbe/Enneberg, a tributary valley to Val Badia. These subareas exhibit some minor morphosyntactic differences, especially concerning the use of subject pronouns (cf. section 2.2.3.2) but do not differ in any crucial way with regard to question formation. For practical reasons, I will refer to the subvarieties in Val Badia and Marè/Marebbe/Enneberg together as Badiot.⁹

As we shall see in chapters 3 and 5, the Dolomitic Ladin variety of Val di Fassa, in contrast, exhibits significant variation in question formation between the three subvarieties of Fascian, Cazet, Brach and Moenat. Cazet in the highest part of the valley comprising the dialectal area from Penìa to Ciampestrin is considered the most conservative subvariety of Fascian (cf. Ascoli 1873:339). Brach is the subvariety of the central part of Val di Fassa between Pera and Soraga and Moenat is spoken in Moena, in the lowest part of Val di Fassa (cf. Chiocchetti & Iori 2002:9) (cf. figure 2.2).

⁹ The term ‘Badiot’ for the subvarieties in Val Badia has become established in work by Cecilia Poletto (Poletto 2000, 2002).

As far as Nònes is concerned, Quaresima (1964:VIII) observes that the number of subvarieties in Val di Non is not only vast and astonishing but, within such little space, unequalled by any other region in Italy (on the huge phonological diversity in Val di Non cf. also Politzer 1967:26). On the basis of phonological characteristics scholars like Battisti (1908, 1911), Tomasini (1960), Quaresima (1964), Politzer (1967), Mastrelli Anzilotti (1997) have proposed (slightly) different subclassifications of Nònes, distinguishing two or three different dialect areas (for an overview see Sandri 2003). However, given that these dialect areas differ in phonological traits rather than in (morpho)syntactic structure (cf. Sandri 2003; Bertagnolli 2008), for our current research purposes we can take Nònes as one homogeneous variety.

2.2 The choice of varieties

The northern Italian area constitutes a particularly promising area of investigation because of its enormous syntactic variation and its huge inventory of question formation strategies. Poletto & Vanelli (1997) and Poletto (2000) provide an extensive overview of question formation strategies used in the northern Italian area. The traditional and most widespread question formation strategy in all of these varieties involves subject (clitic)-verb inversion (henceforth: SCI) but, as observed by Poletto & Vanelli (1997) and Poletto (2000:42), these varieties are giving up traditional SCI and instead resort to other question formation strategies involving cleft constructions, question particles etc. and which mostly exhibit direct word order. Hence, we observe considerable variation as to the syntactic structure of interrogative clauses and might expect to find concomitant variation with regard to the prosody of interrogatives in these varieties.

Instead of considering the variation in question formation in the whole area of northern Italy in general as work by Cecilia Poletto or Paola Benincà has done, I focus on a specific area, namely the language area of the varieties Gherdëina, Badiot, Fascian and Nònes in the Trentino-Alto Adige region.

The choice of these four varieties is motivated by three main factors, (i) their close genealogical relatedness (section 2.2.1), (ii) their geographical position in the contact area between Germanic and Romance (2.2.2) and (iii) the presence of several striking (morpho)syntactic properties (2.2.3) on the basis of which we can study what the crucial strategies are to express interrogative force.

2.2.1 Genealogical relatedness

To begin with, the varieties Gherdëina, Badiot and Fascian belong to the Dolomitic Ladin subgroup of Rhaeto-Romance (cf. section 2.1) and also Nònes exhibits many traits suggesting a close relation to the aforementioned varieties. The close relationship between these varieties is particularly favourable for the study of microsyntactic phenomena – a line of research that has become very popular in recent years (cf. work by Paola Benincà, Leonie Cornips, Cecilia Poletto, Guido Seiler etc.). Given that these varieties often differ only with respect to certain microparametric values whereas others remain constant, we have an ideal experimental setting to study the impact of one factor on the rest of the grammatical system and what consequences this has for question formation and interrogative clause typing.

2.2.2 Language contact

As shown in figure 2.3, the four varieties are situated in a particular geographical position in an area of opposing linguistic influences. Gherdëina, Badiot and Fascian are spoken in three neighbouring valleys around mount Sella. Gherdëina and Badiot are in close

language contact with Bavarian – all speakers of Gherdëina and Badiot are at least bilingual with German, i.e. the Bavarian variety of German spoken in Alto Adige and Standard German, some also with Italian. Fascian, in contrast, is in contact with northern Italian varieties and its speakers are bilingual with Italian. As we will see below, there is reason to assume that these opposing linguistic influences manifest themselves or at least contribute to the variation observed in the syntactic structure of interrogatives between the four varieties under consideration.

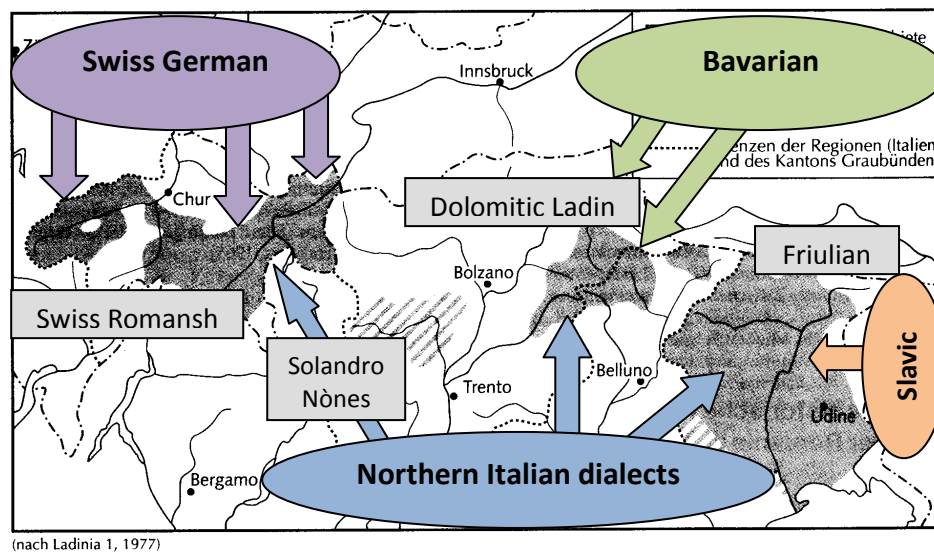


Figure 2.3: Linguistic contact and influences on Rhaeto-Romance varieties (adapted from Kristol 1998:938 and Craffonara 1999:7)

2.2.3 (Morpho)Syntactic properties and research aims

The third and most important aspect motivating the choice of these varieties for the present work concerns the fact that they differ with respect to the presence vs. absence of certain (morpho)syntactic traits which might be able to inform us about what the crucial elements of interrogative force are, i.e. which clues have to be present in an utterance so that it is understood as a question. These (morpho)syntactic properties include particular word order properties (section 2.2.3.1), i.e. the verb-second (V2) property and subject-verb-inversion

in questions, particular properties of their subject pronoun paradigms (2.2.3.2) and the use of the particle *pa/po* (2.2.3.3).

2.2.3.1 Word order properties

Like Romance languages in general, the four varieties under consideration are characterised by Subject-Verb-Object (SVO) basic word order. However, Gherdëina and Badiot differ from Fascian and Nònes in featuring the verb-second property. In the so-called V2-languages, the finite verb must always appear in the second position of the sentence. A strong piece of evidence for the V2-property is the avoidance of V3-structures. If a constituent that is not the subject of the sentence appears in first position (1c), in SVO-languages, the finite verb would end up in third position. V2-languages such as Gherdëina or Badiot, however, exhibit the so-called ‘V2-effect’, an inversion of subject and verb which creates an XVS-word order with the verb appearing in second position (1b, 2b) avoiding ungrammatical V3 (1c, 2c).¹⁰ In generative grammar, subject-verb-inversion triggered in V2-contexts is generally analysed in terms of verb-movement to C° (cf. den Besten 1983).

(1) V2 in Gherdëina

a. Nëus maion da marënda.
 we eat-1PL PREP lunch
 ‘We are having lunch.’

b. Duman maion=s da marënda. (V2)
 tomorrow eat-1PL=SCL PREP lunch
 ‘Tomorrow we will have lunch.’

c. *Duman nëus maion da marënda. (V3)
 tomorrow we eat-1PL PREP lunch

(2) V2 in Badiot (S. Leonardo)

(Poletto 2000:89f.)

a. T vas gonoot a ciasa sua.
 you go-2SG often at home his
 ‘You often visit him.’

¹⁰ Note that there is variation across the subvarieties of Badiot as far as the V2-property is concerned: in the subvariety spoken in San Lînhêrt/San Leonardo, younger speakers do not accept any more subject-verb inversion with full DP subjects, but only with subject clitics (Poletto 2000:104).

- b. Gonoot vas=t a ciasa sua.
 often go-2SG=SCL at home his
- c. *Gonoot t vas a ciasa sua.
 often you go-2SG at home his

In contrast to Gherdëina and Badiot, Fascian and Nònes do not display the V2-property but instead allow V3- and V4-orders and thus behave like the southern Dolomitic Ladin varieties Fodom and Anpezo and Northern Italian dialects (cf. Elwert 1943:137; Haiman & Benincà 1992:173).¹¹

- (3) V3/V4 in Fascian (3a) (Haiman & Benincà 1992:173) and Nònes (3b) (De Biasi 2005:150f.)
- a. Dapo da sera la vaces ju n stala i se *pèrla*.
 afterwards at evening the cows down in stable they REFL talk-3PL
 ‘Afterwards, in the evening, the cows in the stable talk among themselves.’
- b. A mèz dì, can che mi sèn aruà a la màlgia l’ ors
 at mid day when that I be-3SG arrived at the alp the bear
 l’ *era* amò iu [...] he be-IPFV.3SG still there
 ‘At midday when I arrived at the alp, the bear was still there.’

The V2-property is relevant for our current research purposes in the following way: in contrast to V2-languages, which show inversion of subject and verb both in V2-contexts and in questions (4), Fascian and Nonès display inversion exclusively in questions (5). This is what Rizzi (1991/1996) refers to as the “residual V2”-property. Rizzi assumes a parallelism between the syntactic structure of wh-questions in the modern Romance languages and the syntactic structure of V2-statements in V2-languages. He assumes that subject-verb-inversion in wh-questions in the Romance languages is a residue of an originally general V2-property in these languages. In the following, I illustrate this idea on the basis of examples from the V2-variety Gherdëina (4) and from the ‘residual’ V2-variety Fascian (5).

¹¹ In the examples in (3), the constituents preceding the finite verb are underlined and the finite verb is marked in *italics*.

- (4) Gherdëina
- a. Duman mai=el pulënta. (V2-statement)
 tomorrow eat-3SG=SCL polenta
 ‘Tomorrow he will eat polenta.’
 - b. Ulà maion=s=a da marënda? (wh-question)
 where eat-1SG=SCL=PA PREP lunch
 ‘Where are we having lunch?’
- (5) Fascian
- a. Doman l magna polenta. (no V2 in statements)
 tomorrow he eat-3SG polenta
 ‘Tomorrow he will eat polenta.’
 - b. Olà magn=el (pa) polenta? (wh-question)
 where eat-3SG=SCL PA polenta
 ‘Where does he eat polenta?’

In the V2-varieties Gherdëina and Badiot, subject-verb-inversion is polyfunctional (cf. Siller-Runggaldier 1993:293) in that it occurs in several contexts. In these two varieties, V2-statements and wh-questions show the same syntactic structure involving an XVS-word order. It seems, hence, that in these varieties, subject-verb-inversion cannot be the crucial element signalling interrogative force. Instead, the occurrence of inversion in both (V2-)statements and wh-questions gives rise to a clause-type ambiguity. In chapter 5, I exploit this ambiguity in order to account for the fact that the particle *pa/po* has become obligatory in Gherdëina and Badiot but not in Fascian and Nònes.

Note that although the two clause types in (4) exhibit the same word order properties, they differ (i) in the nature of the constituent in the sentence-initial position: a temporal adverb (4a) and a wh-expression (4b) and in the presence of the particle *pa* (4b). These facts give rise to the following research questions:

- (6) Research questions
- a. Does the wh-expression have an interrogative force, i.e. can the question meaning of wh-questions be signalled by the wh-expression alone?
 - b. What is the role of the particle *pa/po* for ‘interrogative clause-typing’?
 - c. Does subject-verb-inversion signal interrogative force in the non-V2-varieties Fascian and Nònes?

2.2.3.2 Subject pronouns and the statement-question contrast

As far as the use of subject pronouns is concerned, the Romance languages can be classified into three categories. Most Romance languages like (Standard) Italian (7a) or (Standard) Spanish have retained from Latin the property to omit subject pronouns and to use them only to mark contrastiveness or to avoid ambiguity. These languages are so-called ‘null-subject languages’ or ‘pro-drop languages’. Modern French, most Rhaeto-Romance varieties and some Northern Italian dialects, in contrast, are ‘non-null-subject languages’ as they obligatorily require the use of subject pronouns in all grammatical persons (7b).

- (7) ‘She sleeps.’
- a. (Lei) dorme. (Italian)
 she sleep-3SG
 ‘She sleeps.’
- b. *(Elle) dort. (French)
 she sleep-3SG

The third category of languages, typologically in between the two other ones, is characterised by a ‘partial null-subject property’. The subject pronoun paradigms of these ‘split-*pro*-drop languages’ exhibit forms of subject clitics for some grammatical persons only, whereas for other grammatical persons, there is no form at all in the paradigm. This is frequently the case in Northern Italian dialects such as Cazzano di Tramigna (Verona) (Manzini & Savoia 2005:84) (8).

- (8) Split-*pro*-drop languages: (Cazzano di Tramigna)

| | | |
|-----|---------|---------|
| 1SG | Ø | dɔrmo |
| 2SG | te | dɔrmi |
| 3SG | el / la | dɔrme |
| 1PL | Ø | dormemo |
| 2PL | Ø | dormi |
| 3PL | i / le | dɔrme |

As can be seen from tables 2.1–2.4, the four varieties under consideration here are part of the third group, i.e. the ‘split-*pro*-drop languages’, given that their subject pronoun/clitic paradigms exhibit gaps in some grammatical persons. In these four varieties, usually the clitic subject pronouns are used, whereas the free pronouns are only used to indicate contrastiveness or in otherwise ambiguous contexts.

In Gherdëina (table 2.1) and Nònes (2.4), the use of subject clitics is homogeneous in all parts of the respective valley, whereas the subareas of Val Badia show differences as to subject pronoun use. In general, the subject clitic paradigm is complete in Val Badia; however, the subvariety of the upper part of the valley (Badiot) lacks the first and second person plural preverbal subject clitics (table 2.2). In Val di Fassa, the subvarieties Cazet, Brach and Moenat may differ only minimally with respect to the phonological form of certain subject clitics (table 2.3).

| Gherdëina subject pronoun paradigm | | | |
|------------------------------------|-------|-----------|--------------|
| Person | Free | Proclitic | Enclitic |
| 1SG | ie | | -i |
| 2SG | tu | te | |
| 3SG M | ël | l | -(e)l |
| 3SG F | ëila | la / l' | -(e)la |
| 1PL | nëus | | -s |
| 2PL | vo | | |
| 3PL M | ëi | i | -i |
| 3PL F | ëiles | les | -(e)les / -i |

Table 2.1: The subject pronoun paradigm in Gherdëina
(cf. Anderlan-Obletter 1991:38; Bernardi 1999:42, 73; Hack & Gaglia 2009:162)

| Badiot subject pronoun paradigm | | | |
|---------------------------------|------|-----------|----------|
| Person | Free | Proclitic | Enclitic |
| 1SG | iö | i | -i |
| 2SG | te | te | -te |
| 3SG M | ël | al | -el |
| 3SG F | ëra | ara | -era |
| 1PL | nos | i * | -se |
| 2PL | os | i * | -e |
| 3PL M | ëi | ai | -i |
| 3PL F | ëres | ares | -eres |

* dropped in
Alta Badia

Table 2.2: The subject pronoun paradigm in Badiot
(cf. Thiele 2001:51f.; Hack & Gaglia 2009:162)

| Fascian subject pronoun paradigm | | | |
|----------------------------------|-----------------|------------------|---------------------|
| Person | Free | Proclitic | Enclitic |
| 1SG | gé | | -(e) ¹² |
| 2SG | tu | te ¹³ | -te ¹⁴ |
| 3SG M | rl | l | -(e)l ¹⁵ |
| 3SG F | ela | la | -(e)la |
| 1PL | nos / nos etres | | -e ¹⁶ |
| 2PL | vo / voetres | | |
| 3PL M | ic | i | -(e)i |
| 3PL F | ele(s) | le(s) | -(e)le(s) |

Table 2.3: The subject pronoun paradigm in Fascian (Elwert 1943:132; Chiocchetti 1992:210; Chiocchetti & Iori 2002:81; Cors Ladin Fascian 1)

| Nònes subject pronoun paradigm | | | |
|--------------------------------|----------------|-----------|----------|
| Person | Free | Proclitic | Enclitic |
| 1SG | mi | | -te |
| 2SG | ti | | |
| 3SG M | el | el | -l |
| 3SG F | ela | la | -la |
| 1PL | noi / noiautri | | -te |
| 2PL | voi / voiautri | | |
| 3PL M | ei | i | -i |
| 3PL F | ele | le | -le |

Table 2.4: The subject pronoun paradigm in Nònes (cf. De Biasi 2005:87; Adami 2008:50; Bertagnolli 2008)

The use of subject pronouns matters for the statement-question contrast and hence the signalling of the question meaning given that the relative position of a subject clitic with respect to the finite verb can be taken as an indicator of the word order – and, at least in the non-V2-varieties – also of the clause type present. The basic assumption I adopt in this respect is that a preverbal subject pronoun indicates direct word order (SV) (as in statements) (9a) whereas a postverbal subject pronoun signals inverted word order, i.e.

¹² The 1SG enclitic subject pronoun *-e* is restricted to the verb *esser* ('to be').

¹³ The form in the Brach subvariety of Fascian is *-tu* (cf. Chiocchetti 1992:210).

¹⁴ In Brach, the form of the 2SG enclitic subject pronoun seems to depend on the length of the verb: whereas *-te* appears in particular with monosyllabic verbs, *-to* is used with polysyllabic verbs (cf. Chiocchetti 1992:210f.).

¹⁵ *-(e)lo* in Moena.

¹⁶ The 1PL enclitic subject pronoun *-e* may be omitted in Soraga, Vigo and Pozza (verbs: *poder* ('can'), *aer* ('have')). This seems to be due to apocope.

subject clitic-verb inversion (SCI) (in yes/no- and wh-questions and in Gherdëina and Badiot V2-statements) (9b).¹⁷

- (9) Nònes
- a. **L** magna la polenta. (SV → statement)
 he eat-3SG the polenta
 ‘He is eating the polenta.’
- b. Magn=**el** la polenta? (SCI → question)
 eat-3SG=SCL the polenta
 ‘Is he eating polenta?’

The crucial point for our research purposes is the following: as can be seen from tables 2.1–2.4, the varieties under consideration lack subject clitics for some grammatical persons in their paradigms so that neither proclitic nor enclitic subject pronouns are used. As a consequence, word order ambiguities arise and, at least in the non-V2-varieties Fascian and Nònes, these give also rise to clause type ambiguities.

Consider the two Nònes sentences in (10). Due to the lack of both the proclitic and the enclitic subject pronoun of the second person singular, the statement in (10a) and the yes/no-question in (10b) do not exhibit any morphosyntactic differences and are hence ambiguous as far as clause type is concerned.

- (10) a. As magna l formai (Nònes)
 have-2SG eaten the cheese
 ‘You have eaten the cheese.’
- b. As magna l formai
 have-2SG eaten the cheese
 ‘Have you eaten the cheese?’

In fact, this is the situation found for all grammatical persons in Standard Italian, a ‘*pro-drop-language*’ which, in unmarked contexts, does not express any subject pronouns at all.

¹⁷ A caveat applies to the V2-varieties Gherdëina and Badiot: Given that in these varieties, inversion occurs in both V2-statements and interrogatives, we can equate the occurrence of a postverbal subject with subject-verb-inversion, but we cannot equate subject-verb-inversion with the presence of an interrogative clause.

The string ‘Andiamo a Roma domani’ can be used in Italian both as a statement (11a) and as a yes/no-question (11b).

- (11) a. Andiamo a Roma domani. (Standard Italian)
go-1PL to Rome tomorrow
‘We go to Rome tomorrow.’
b. Andiamo a Roma domani?
go-1PL to Rome tomorrow
‘Will we go to Rome tomorrow?’

Given the absence of any (morpho)syntactic marking of clause type in (10) and (11), the issue arises as to how the statement-question contrast and hence interrogative force is expressed. We might expect the differentiation between statements and questions in these cases to be a pure matter of prosody, i.e. intonation, as has been claimed for Standard Italian (cf. section 9.4).

In sum, due to their split-*pro*-drop paradigms, the four varieties under consideration here represent an ideal experimental setting for an investigation into the relation between (morpho)syntactic and prosodic marking of interrogatives. We can distinguish between two different experimental conditions: first, in grammatical persons featuring subject clitics in the paradigm, the statement-question contrast is expected to be signalled by the (morpho)syntax (cf. 9). In the other grammatical persons, which are lacking subject clitics in the paradigm, in contrast, the statement-question contrast is expected to be disambiguated by intonation, i.e. different prosodic properties of the two clause types. The research question in this respect is then the following:

- (12) What is the contribution made by (morpho)syntax and prosody to ‘interrogative clause typing’ and what is the relation between the two components of grammar in interrogatives?

The statement-question contrast will be discussed in detail in chapter 9.

2.2.3.3 The particle *pa/po*

A common trait of interrogative clauses in the varieties under consideration is the use of a particle which occurs as *pa* in Gherdëina, Badiot and Fascian Cazet and as *po* in Fascian Brach and Moenat and in Nònes (henceforth *pa/po*). Previous work on this particle has shown that its use and syntactic properties differ from variety to variety (Poletto 2000; Poletto & Zanuttini 2003; Hack 2009). The loci of variation between the varieties with regard to the particle *pa/po* are the following:

- the semantic contribution / function of the particle
- the use of the particle in wh-questions
- the use of the particle in yes/no-questions
- the syntactic positions of the particle
- the semantic interpretation of questions featuring the particle

The syntactic and semantic properties of the particle in the individual varieties will be addressed in detail in chapter 3. It will be shown that the particle has undergone a grammaticalization process and that the varieties differ with respect to the stage reached by the particle in this process.

Anticipating some issues to be treated in chapter 3, the crucial point for our research purposes is that nowadays, the particle *pa/po* is obligatory in Gherdëina and Badiot wh-questions whereas it is not in Fascian and Nònes. Moreover, Gherdëina obligatorily requires the particle in yes/no-questions whereas the other varieties don't. The variation related to the particle *pa/po* between the varieties raises a couple of further research questions which we will discuss in detail in chapters 3 and 5.

Table 2.5 summarises the relevant properties of the varieties under consideration.

| Property / Variety | Gherdëina | Badiot | Fascian | Nònes |
|---|------------|------------|------------|------------|
| Language contact with Germanic varieties (Bavarian) | √ | √ | – | – |
| Language contact with northern Italian varieties | – | – | √ | √ |
| V2-property | √ | √ | – | – |
| “residual V2”-property | – | – | √ | √ |
| Organization of the subject-clitic paradigm | incomplete | incomplete | incomplete | incomplete |
| Obligatoriness of the particle <i>pa/po</i> in wh-questions | √ | √ | – | – |
| Obligatoriness of the particle <i>pa/po</i> in yes/no-questions | √ | – | – | – |

Table 2.5: Relevant properties of the varieties under consideration

We will see in the following chapters that all of these properties influence question formation in the individual varieties in a crucial way.

2.3 The questionnaire

2.3.1 Preliminary considerations

Interrogatives are a delicate object of research. First of all, question formation may be, regarding both its syntax and its prosody, dependent on the context of the utterance. Therefore, collecting spontaneous speech data in natural conversations would undoubtedly produce the most natural data and in this way one would also be able to capture the specific communicative properties of utterances in their natural setting.

However, research on natural speech entails a lot of disadvantages. First, the phenomena to investigate may appear only very rarely or, in the worst case, not at all. In this way, due to scarce evidence, one might not be able to draw licit conclusions on a certain phenomenon or make claims about the use of a certain construction. Another problem pertains to the

context, which in naturally-occurring speech is uncontrolled and may not exhibit all the variables one would like to control for or might not produce data featuring all the relevant variables. In this respect, hence, research on the basis of pre-designed material proves more favourable as it allows to apply controlled conditions, to elicit specific constructions and to meet particular research requirements.

The research questions of the present work require an elicitation technique allowing for various variables both as to the syntax and the prosody of question formation. As far as the syntax is concerned, to give just one example, it is indispensable to elicit wh-questions featuring different kinds of wh-expressions and asking for different grammatical functions. Only if these conditions are controlled for and the various contexts are taken into consideration can we draw reliable conclusions about the use of one or another question formation strategy or the use of the particle *pa/po* in questions.

As for the prosody, various phonological and prosodic variables such as utterance length, syllable type (open vs. closed), location of the main stressed syllable (penultimate vs. final) or focus properties of the utterance (neutral vs. narrow focus, early vs. late narrow focus) have to be taken into consideration in order to determine the intonational tune used in statements and questions. A corpus of naturally occurring speech – be it as large as it may – will never contain all the relevant contexts and will never allow to study utterances that feature all the conditions required for a comprehensive analysis. Moreover, another point to take into consideration regarding the prosodic analysis is the fact that obstruents, due to the closure of the vocal cords, represent a problem for the reading of pitch tracks as they may perturb pitch by affecting F_0 in adjacent pitch stretches. Hence, utterances not featuring obstruents will produce more legible and interpretable pitch tracks. Obviously, a corpus of natural speech data will only contain few utterances without obstruents. For this reason, an elicitation technique had to be designed to ensure that the utterances obtained contained only few, or ideally, no obstruents at all. In the light of these considerations, a

questionnaire including several tasks seemed to be the best elicitation technique. In this way, informants were provided with the words they had to use in the individual elicitation tasks.

2.3.2 The design of the questionnaire

For each of the four varieties under scrutiny, a questionnaire was designed. A version of the questionnaire can be found in the appendix. The main characteristics of this questionnaire are the following:

| | |
|--|---|
| Questionnaire versions | 4 (one for each variety under scrutiny) |
| Tasks | Two categories: (i) general set of tasks for all varieties to enable inter-variety comparison (ii) specific tasks to investigate particular phenomena in individual varieties |
| Language of the task | The respective variety under consideration (Gherdëina, Badiot, Fascian, Nònes) |
| Metalanguage of the questionnaire and language used during interviews | The language speakers of the varieties are bilingual with: - German in the case of Gherdëina and Badiot - Italian in the case of Fascian and Nònes |
| Means of presentation | PowerPoint slides Advantages: (i) Informants can focus on the individual task and don't get distracted by other data or tasks. (ii) The presentation is controllable. The interviewer can switch between slides and go back and forth according to the informants' requirements. |
| Instructions for the individual questionnaire tasks | - situational frame providing information about the relevant discourse situation to make sure that informants anchor their utterance in context and that this context is always the same for all speakers - example item illustrating how the task works |

Table 2.6: The main characteristics of the questionnaire

In what follows, I provide an overview of the general tasks for all varieties (table 2.7) as well as of the variety-specific tasks (table 2.8) and point out their individual purposes.

| | Task | Research purpose |
|---|---------------------------|---|
| 1 | Conversation with Franca | Basic pitch pattern in neutral and narrow focus statements |
| 2 | Statements and questions | Syntactic and prosodic differences between statements and yes/no-questions |
| 3 | Yes/no-questions | Basic pitch pattern in yes/no-questions |
| 4 | Question formation task | Question formation strategies |
| 5 | Questions in context task | Question formation strategies, influence of information structure on question formation |
| 6 | <i>pa/po</i> -task | Question formation strategies, syntactic positions of the particle <i>pa/po</i> and word order properties of wh-questions |

Table 2.7: Questionnaire tasks for all varieties

| | Task | Research purpose | Varieties |
|----|---|---|-----------------------------------|
| 7 | V2-statements and questions | Prosodic differences between V2-statements and wh-questions | Gherdëina, Badiot |
| 8 | <i>ce/cie</i> -questions | Possibility to omit <i>pa/po</i> in questions, variation in prosody | Gherdëina, Badiot |
| 9 | Questions with and without <i>pa/po</i> | Possibility to omit <i>pa/po</i> in questions, variation in prosody | Gherdëina, Badiot |
| 10 | Word order | Question formation strategies, relative ordering of topic and focus elements and wh-expressions | Gherdëina, Nònes, Fascian, Badiot |
| 11 | Translation | Question formation strategies, relative position of <i>pa/po</i> and quantified expressions | Gherdëina, Nònes, Fascian |

Table 2.8: Special questionnaire tasks for individual varieties

Let us now take a closer look at the individual tasks. In what follows, each task is illustrated by an example slide taken from the original questionnaire on the right and an English version of this slide on the left.

2.3.3 The tasks

2.3.3.1 General tasks

(1) Conversation with Franca

The aim of this task was to elicit neutral and narrow focus statements (for a definition of ‘neutral’ and ‘narrow focus’ see section 1.3.3.1) in order to determine the basic pitch patterns in statements. In this task, the informants had to imagine that they were talking to an imaginary person called Franca whose picture they saw on the screen. This situational

frame should make the informants feel in a natural discourse situation. Neutral focus statements were elicited by means of this task in the following way:

Franca, whose role was taken by the investigator, “asked” the informant what Mario had told them and the informant had to give an answer using the words in their local variety already provided on the screen (as to the motivations for prompting the words see section 2.3.1). The words were given in the sequence in which they were expected to appear in the utterance produced by the informant. However, it was explicitly pointed out to the informants that if they felt uncomfortable about certain expressions or if they would not use the provided words at all they could vary the sequence or make changes to the words. In this way they were given the opportunity to produce an utterance which sounded natural to them and they were not forced to pronounce a sentence they would not normally use in everyday speech. In sum, this procedure permitted for control of the utterances produced by the informants without imposing structures on them which they would not normally use.



Figure 2.4: Elicitation of neutral focus statements in task 1 (Badiot)

Narrow (contrastive) focus statements were elicited in the following way: as exemplified by the slide in figure 2.5, the imaginary person Franca makes a statement about a third person, in this case Carmen, about whom it is said that she goes to work. The word *Carmen* is underlined to signal that this was the constituent the informant had to place focus on when answering to Franca. In their reply, the informants had to contradict Franca

with respect to this particular piece of information, stating that it is in fact Mara (and not Carmen) who goes to work and placing stress on the word *Mara*.



| | |
|--|--|
| <p>1) Gespräch mit Franca</p> | <p>1) Conversation with Franca</p> |
| <p>(2)</p> <p>Franca: Mario hat mir erzählt, dass <u>Carmen</u> zur Arbeit geht.</p> <p>You: Nein, ich sage dir die Wahrheit: _____.</p> <p>MARA – ji – a laurè</p> | <p>(2)</p> <p>Franca: Mario told me that <u>Carmen</u> goes to work.</p> <p>You: No, that's not true: _____.</p> <p>MARA – go – to work</p> |
|  <small>Franca</small> |  <small>Franca</small> |

Figure 2.5: Elicitation of narrow focus statements in task 1 (Badiot)

This procedure was then repeated for other parts of the sentence in order to make the informant stress different constituents. In total, this task included four different situational frames involving different verb types (transitive and ditransitive) to vary utterance length. In total, the informants had to produce four neutral focus statements and twelve narrow focus statements.

(2) Statements and questions

The ‘statements and questions’ task investigated the (morpho)syntactic and prosodic differences between statements and yes/no-questions. We have seen before in section 2.2.3.2 that the four varieties exhibit gaps in their subject clitic paradigms and that consequently, for some grammatical persons, there is no (morpho)syntactic marking at all to differentiate between statements and yes/no-questions. In this task, informants were given a situational frame on the basis of which they then had to phrase a statement and a yes/no-question using the words in their local variety already provided on the screen. In total, informants had to produce fourteen statement/yes/no-question-pairs.

2) Aussagen und Fragen

(9) Sie sprechen mit einigen Bekannten über den Beruf einer gemeinsamen Freundin.

a. Sie erzählen ihnen:

 laurè – a Roma

b. Sie fragen sie:
 _____?
 laurè – a Roma

2) Statements and questions

(9) You are talking with some friends about the job of a mutual friend of yours.

a. You tell them:

 work – in Roma

b. You ask them:
 _____?
 work – in Roma

Figure 2.6: Extract from questionnaire task 2 (Badiot)

(3) Yes/no-questions


The ‘yes/no-questions’ task was designed to investigate the pitch patterns in yes/no-questions. Like in the ‘conversation with Franca’ task, informants were asked to imagine that they were talking with Franca. The speech parts of both Franca and the informant were presented on the screen, however, Franca’s part always contained an information gap. In the example given below in figure 2.7, for instance, Franca says that she is eating something but the informant does not understand what exactly she is eating (indicated by [...]). The words provided for the informant contain the supposition that Franca might eat polenta so their task is to ask Franca whether she is eating polenta putting the main sentence stress on the word *polenta*.

3) ja/nein-Fragen

(3)
Franca: I mangì na buna [...]!

You: I n’ à nia capi. Cì aste dit?
 _____?
 mangé – na bona **POLÈNTA**

Franca: Ma no! I mangi na buna PIZZA!




Franca

3) yes/no-questions

(3)
Franca: I am eating a good [...]!

You: I did not understand. What did you say?
 _____?
 eat – a good **POLÈNTA**

Franca: No! I am eating a good PIZZA!



Franca

Figure 2.7: Extract from the yes/no-questions task (Badiot)

This procedure was then repeated for other parts of the sentence in order to make the informant stress different constituents. In total, the task contained three different situational contexts involving different verb types (transitive and ditransitive) to vary utterance length. In this way, the informants had to produce three neutral focus yes/no-questions (on the basis of statements which did not exhibit information gaps) and six narrow focus yes/no-questions.

(4) Phrase questions

The aim of the ‘phrase questions’ task was to investigate which strategies are used for question formation in the varieties under scrutiny. Informants were given three sets of statements in their local variety. The first sentence of each set was just a normal statement and informants were asked to pronounce it as they would do in everyday speech. Then the same sentence was presented again, this time, however, with one constituent highlighted in bold-face and red characters as exemplified below by the statement in figure 2.8. The task of the informant was to ask a question in their variety on the basis of this sentence in such a way that the highlighted element represented the answer to this question.

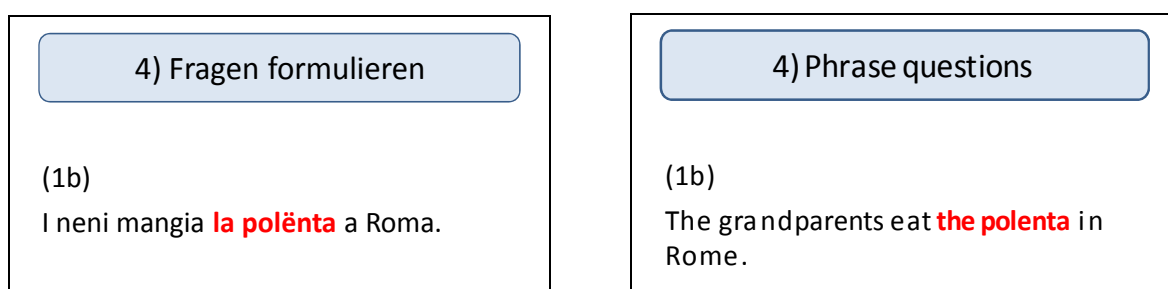


Figure 2.8: Extract from the question formation task (Badiot)

Each statement was displayed in several versions differing only with respect to the highlighted constituent which could be the subject of the sentence, the verb, the direct object (cf. figure 2.8), adverbial phrases of time or place (cf. figure 2.9), the whole verb phrase or even the whole sentence.

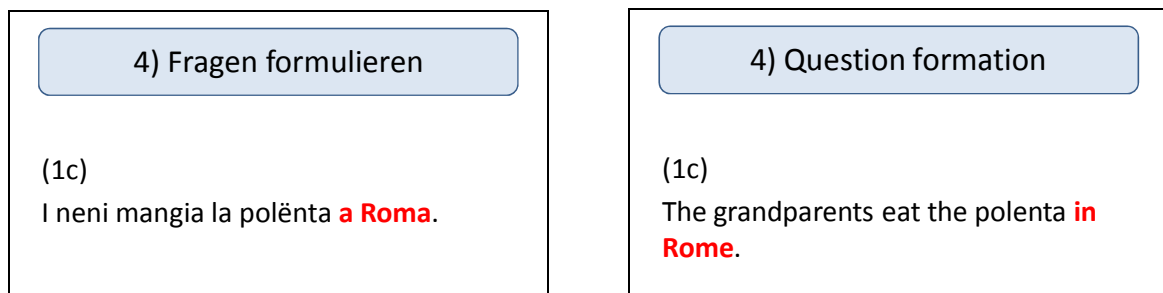


Figure 2.9: Extract from the question formation task (Badiot)

In total, informants got three different sets of statements and had to ask sixteen questions. This elicitation technique was explicitly designed to study the variation in question formation strategies. It proved to be very useful as all sorts of grammatical conditions could be taken into account. By highlighting different constituents it was possible to (a) elicit questions asking for constituents representing different grammatical functions (subject, object, predicate etc.) and consequently (b) elicit and control for questions involving different wh-expressions. Another advantage of this task consisted of the fact that informants were completely unconditioned regarding the question formation strategy to use in their questions.

(5) Questions in context

The purpose of the ‘questions in context’ task was to examine variation in question formation strategies by taking into account information structure. Informants were presented with a short situational frame in the metalanguage in order to set up a small universe of discourse. These contexts were designed in such a way that they involved an information gap which should incite informants to ask a question in their local variety. This task involved three or six different contexts, depending on the variety.

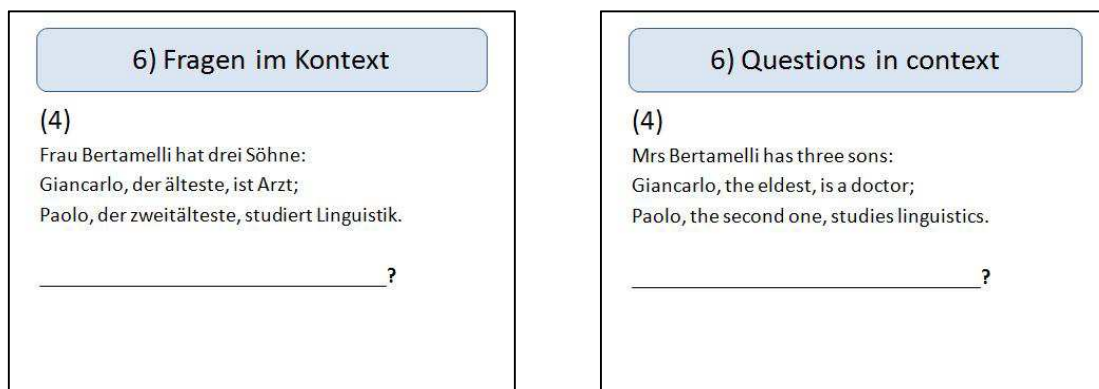


Figure 2.10: Extract from the 'questions in context' task

(6) *pa/po* – judgements for the contextual naturalness of sentences

The aim of this task was to examine possible question formation strategies, the syntactic positions of the particle *pa/po* in the sentence structure and possible word order properties as well as the conditions governing the use of one or another question formation strategy. Functionalists have often criticized the methodology of formalists who ask informants for grammaticality judgements on sentences outside of context and/or do not take the intonation patterns into consideration.¹⁸ In order to eliminate this criticism from the start, contexts were provided for each set of sentences to judge by the informants. The sentences within one set differed in syntactic structure (word order, question formation strategy), in the presence vs. absence of the particle *pa/po* and in the syntactic position of this particle in the sentence structure. Informants were asked to give their judgements for the contextual naturalness of these sentences, to pronounce the sentence(s) they would actually use in the situation described in the provided context and to comment on the use of the chosen variant and the remaining structures. In total, informants were asked to judge sixteen sets of wh-questions.

The task proved to be very useful in various respects. First, it provided negative evidence which is indispensable especially as regards theory building. Moreover, the task helped to

¹⁸ More on the debate about the use of native speaker judgements for grammatical theory in Wasow & Arnold (2005) and in Featherston (2007).

gain valuable insights into the metalinguistic observations, reflections and intuitions of native speakers.


6) *pa*

(10)
Mauro hat sich in Maria verliebt.
Verwundert fragen Sie Franca:

a. Ćiodì ô pa Mauro bun a Maria?

b. Ćiodì pa ô Mauro bun a Maria?

c. Ćiodì pa Mauro ô bun a Maria?



Franca

100

6) *pa*


(10)
Mauro has fallen in love with Maria.
(Completely astonished) You ask Franca:

a. Why WANT-3SG pa Mauro good to Maria?

b. Why pa WANT-3SG Mauro good to Maria?

c. Why pa Mauro WANT-3G good to Maria?

'Why does Mauro love Maria?'



Franca

100

Figure 2.11: Extract from the *pa/po*-task (Badiot)

2.3.3.2 Variety-specific tasks

(7) V2-statement vs. wh-questions task

Given that in the V2-varieties Gherdëina and Badiot, V2-statements and wh-questions exhibit the same syntactic structure and differ only as regards the sentence-initial constituent, the purpose of this task was to study whether, and if so, in what way V2-statements and wh-questions differ in prosody.

(13) Gherdëina

- | | | | | | |
|----|--------------------------------|-------------|------|----------|----------------|
| a. | Duman | maion=s | da | marënda. | (V2-statement) |
| | tomorrow | eat-1PL=SCL | PREP | lunch | |
| | ‘Tomorrow we will have lunch.’ | | | | |
| b. | Ulà | maion=s | da | marënda. | (wh-question) |
| | where | eat-1PL=SCL | PREP | lunch | |
| | ‘Where will we have lunch?’ | | | | |

Informants had to give a V2-statement and a corresponding wh-question in such a way that the two utterances involved the same words and syntactic structure and differed only with respect to the sentence-initial constituent which was usually an adverb in the case of the V2-statement and a wh-expression in the case of a wh-question. In total, informants were asked to provide nine V2-statement/wh-question-pairs.

| | |
|---|--|
| <p>4) Aussagen und Fragen</p> <p>(7) Zusammen mit einer Freundin haben Sie Äpfel geerntet.</p> <p>a. Sie sagen zu Ihrer Freundin: _____ duman – maië – i mëiles</p> <p>b. Sie fragen Ihre Freundin: _____ ? ulà – maië – i mëiles</p> <p style="text-align: right;"><small>110</small></p> | <p>4) Statements and questions</p> <p>(7) You have picked apples together with a friend.</p> <p>a. You tell your friend: _____ tomorrow – eat – the apples</p> <p>b. You ask your friend: _____ ? where – eat – the apples</p> <p style="text-align: right;"><small>111</small></p> |
|---|--|

Figure 2.12: Extract from the V2-statement vs. wh-questions task (Gherdëina)


(8) *Ce/cie*-questions

In Gherdëina and Badiot, the particle *pa* is said to be obligatory in wh-questions. According to Anderlan-Obletter (1991:102), however, the particle can be omitted in questions featuring the wh-expression *cie* with pronominal function (‘which one’), as opposed to questions involving the wh-expression *ce* (‘what’) from which the particle cannot be omitted. Omission of the particle in *cie*-questions, according to Anderlan-Obletter (1991), involves a change in the stress pattern of the question. In the light of these observations, the aim of this task was twofold: (i) to investigate the difference in stress pattern between wh-questions featuring the particle and those lacking it and (ii) to determine the conditions governing the use of the wh-question involving *pa* as opposed to the wh-question lacking *pa*.

Informants were given a short description of a discourse situation and a wh-question in several variants. These variants differed with respect to the presence vs. absence of the particle *pa*, the syntactic position of the particle and word order (direct vs. inverted word order). Informants were asked to comment on these variants regarding their conditions of use and to indicate which one they would use in the context provided.

8) Fragen mit *ce* und *cie*


(1)
 Francas Bruder, der drei Autos besitzt, macht gerade einen Besuch bei ihr.
 Sie fragen Franca:


Franca

a. Cun ce auto iel pa uni?
 b. Cun ce auto pa l ie uni?
 c. Cun ce auto pa iel uni?
 d. Cun ce pa auto iel uni?

8) Questions with *ce* and *cie*

(1)
 Franca's brother, who owns three cars, has come to visit her.
 You ask Franca:


Franca

a. With which car be-3SG=SCL pa come?
 b. With which car pa he BE-3SG come?
 c. With which car pa be-3SG=SCL come?
 d. With which pa car be-3SG=SCL come?

Figure 2.13: Extract from the ‘*ce/cie*-questions’-task (Gherdëina)


(9) Questions with and without *pa*

Given the possibility to omit the particle *pa* in wh-questions involving the wh-expression *cie* in Gherdëina, the question arises as to whether this is possible also in the case of other wh-expressions. Hence, the aim of this task was to investigate whether it is possible to omit the particle in Gherdëina wh- and yes/no-questions and whether this involves a change in the sentence stress pattern.

Informants were presented with a short context and asked to phrase a question using the words provided on the screen. In fact, informants had to ask two questions, one featuring the particle *pa* and, if possible, one without it. Informants were also asked to comment on the contextual difference between the question involving *pa* and the question without it. In total, informants had to phrase questions for fifteen different contexts.

9) Fragen mit und ohne *pa*

(1)
 Sie fragen Franca, wo sie zu Mittag isst:



Franca

a. _____? pa
 ulà – maië – la marènda

b. _____? ~~pa~~
 ulà – maië – la marènda

9) Questions with and without *pa*

(1)
 You ask Franca where she is going to have lunch:


Franca

a. _____? pa
 where – eat – the lunch

b. _____? ~~pa~~
 where – eat – the lunch

Figure 2.14: Extract from the ‘questions with and without *pa*’ task (Gherdëina)

(10) Word order

The ‘word-order’ task was designed to examine (i) which question formation strategies are used in a given variety and (ii) what the relative ordering of information structural elements like topic/focus-constituents and wh-expressions in wh-questions is. The results of this task feed directly into the analysis of the left periphery of Dolomitic Ladin wh-questions (cf. chapters 5, 6).

Informants were presented with a short context and the same wh-question in several variants differing in the relative ordering of a topic- or a focus-constituent and the wh-expression and also involving different word orders. The task of the informants was to rate the variants provided on the screen and to indicate which one(s) they would use in a day-to-day situation. They were also asked to point out discourse functional differences between the variants and were urged to give alternative structures if none of the structures provided corresponded to the one they would use. In total, the informants had to judge about sixteen sets of questions with three variants each.

| | |
|--|--|
| <p>(10) Ordine delle parole</p> <p>(8) Lei chiede a Franca come i ragazzi vanno a scuola. Ma Franca non ha capito bene e Le racconta invece come le ragazze vanno a scuola. Ma Lei vuole chiedere dei ragazzi...</p> <p>a. Come po I PUTI i va a scuela (no le pute)? b. I PUTI come po i va a scuela (no le pute)? c. I PUTI come vai po a scuela (no le pute)?</p> | <p>(10) Word order</p> <p>(8) You ask Franca how the boys go to school. But Franca has not understood your question and tells you how the girls go to school. But you want to know about the boys...</p> <p>a. How po THE BOYS they go to school (not the girls)? b. THE BOYS how po they go to school (not the girls)? c. THE BOYS how go-3PL=SCL po to school (not the girls)?</p> |
|--|--|

Figure 2.15: Extract from the word order task (Nònes)

(11) Translation task

The translation task was designed for two purposes: (i) to provide data on the question formation strategies used and (ii) to help to determine the syntactic position of the particle *pa/po* relative to quantified expressions in wh-questions involving compound tenses.

Informants were presented with German or Italian (depending on the metalanguage of the questionnaire) wh-questions containing a quantified expression and were asked to give the question in their local variety. The task was set only in those varieties which were known to place the particle after the participle in compound tenses (Nònes). For more details see section 5.4.

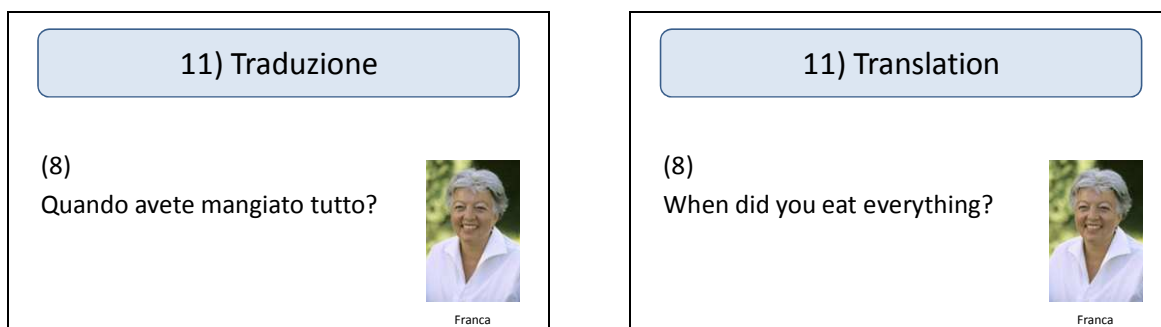


Figure 2.16: Extract from the translation task (Nònes)

The questionnaire contains three tasks, namely tasks 6, 8 and 10, that involve native speakers' judgements on the contextual well-formedness of certain constructions. The following section discusses the motivation for including this kind of task into the questionnaire.

2.4 Data collection

This section provides an overview of the data collection procedure from the recruitment of informants to the actual interviews.

2.4.1 The recruitment of informants

Female speakers were preferred over male speakers as informants given that female voices are characterised by a larger frequency range than male voices and for this reason, pitch movements are better visible.

As regards the varieties Gherdëin, Badiot and Fascian, most informants were recruited with the help of the local cultural institutions *Istitut Ladin “Micurà de Rü”* (Val Gardena / Val Badia) and the *Istitut Cultural Ladin “majon de Fascegn”* (Val di Fassa) or by means of contacts established on previous fieldwork trips. As to Nònes, informants were recruited privately. Table 2.9 lists the number of informants interviewed for the individual varieties; a more detailed overview can be found in the appendix.

| Variety | Number of speakers |
|--------------|--------------------|
| Gherdëina | 6 |
| Badiot | 11 |
| Fascian | 12 |
| Nònes | 8 |
| total | 37 |

Table 2.9: Number of informants interviewed per variety

2.4.2 The interviews

In general, the interviews took place in the homes of the informants as the recordings required a calm environment. In those cases where this was not possible, interviews were held in the libraries or reading rooms of local cultural institutions. The recording equipment comprised an M-Audio MicroTrack 2-Channel Mobile Digital Recorder and a microphone. The interviews consisted of four parts. In the beginning, the speakers were provided with some basic information on the study and asked for their consent to make recordings. After that, informants were asked to present themselves in their local variety, talking about their occupation and hobbies. This second step, which was already recorded, was conceived to obtain some free conversation from the speakers. The third part consisted of an introduction and detailed explanation of the questionnaire to the informants and the actual presentation of the tasks to the informants as well as the recordings. The work with the questionnaire was then often followed by a more informal (and not recorded)

discussion of the linguistic situation of the variety or of the informant's observations on certain linguistic phenomena.

2.4.3 Data analysis

After data collection, the recordings were cut into individual utterances using the software *Audacity*, and subsequently edited and archived as individual sound files. At the same time, the utterances were transcribed and inserted in an overview list comprising all utterances collected per task. After that, diagrams showing oscillogram, spectrogram and fundamental frequency (F_0) were created using *Praat* (Boersma & Weenink 2007). The sound was then segmented into syllables with the aid of the spectrogram (which, however, was later omitted to improve legibility of the diagrams). To each *Praat* diagram, a text grid was added containing two different tiers, one for the individual syllables and another one for the glosses. Figure 2.17 shows a sample *Praat* diagram.

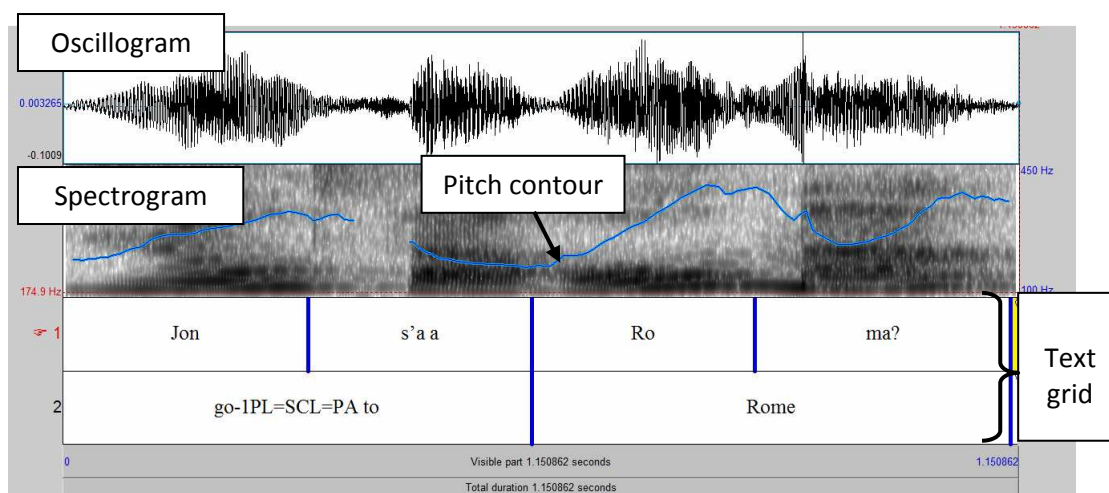


Figure 2.17: Sample *Praat* diagram

Part II

The syntax of questions

The goal of the syntactic part of this dissertation is to shed light on the syntactic properties of questions and to determine which (morpho)syntactic markings are required to express interrogative force. The four varieties under consideration constitute an ideal research area for a microsyntactic study with such purposes given that they are genealogically related, situated geographically closely together, and differ with respect to individual (morpho)syntactic properties such as word order, subject pronoun paradigms and the use of the particle *pa/po* in questions while other parameters remain constant.

In what follows, I investigate the syntactic variation in question formation between the four varieties by (i) describing the parameters of variation, (ii) relating the variation in questions to other (morpho)syntactic properties of the varieties, (iii) studying the relation between the syntactic structure and the semantic interpretation of the individual question types and, finally, by (iv) providing a unified syntactic analysis of the various question formation strategies.

Chapter 3 is concerned with the particle *pa/po*, a distinctive trait in questions in many Northern Italian dialects and in the four varieties under consideration. I discuss the etymology of the particle, its uses and functions and the interpretative contributions it makes in assertive and interrogative contexts. I argue that the particle has undergone a grammaticalization process and that varieties differ with respect to the stage the particle has reached in this process. What is more, I address the issue of why the use of the particle has grammaticalized further in some varieties than in others and sketch a functional account relating the obligatory use of the particle in Gherdëina and Badiot to independent (morpho)syntactic properties of these varieties.

Apart from the use of the particle, the varieties under consideration differ also as regards to the syntactic positions in which the particle occurs in *wh*-questions. I provide an overview of the positions available to the particle in the individual varieties and show that the syntactic position of the particle may influence the semantic interpretation of the question.

Chapter 4 presents the syntactic framework in which the account of the variation in question formation proposed in chapter 5 is couched. After discussing the general principles regarding the analysis of interrogative clauses in generative grammar, I trace the most important developments within the so-called ‘cartographic approach’ beginning with Rizzi’s split-CP-proposal until recent split-CP-analyses put forward by Cecilia Poletto and Paola Benincà for Northern Italian dialects. I also sketch Roberts & Roussou’s formal approach to cross-linguistic parametric variation, on which the formal account of the grammaticalization of the particle *pa/po* is built.

In chapter 5, I account for the fact that the particle *pa/po* has become obligatory in some of the varieties and develop a split-CP-analysis of wh-questions involving the particle *pa/po* based on evidence from the syntactic position of the particle, word order properties, the relative orderings with respect to left dislocation or focus constituents and the semantic interpretation related to these questions. I argue that the variation as to the syntactic position of the particle *pa/po* cannot be accounted for completely in syntactic terms; rather, there is reason to assume that the prosody is involved as well.

Chapter 6 is then concerned with an innovative question formation strategy limited to the variety Fascian, which excludes the particle *pa/po* but involves the complementizer *che* followed by direct word order instead of subject-verb-inversion. I point out the geographical distribution of this innovative question formation strategy in northern Italy, review some previous accounts of this construction in other varieties and propose an account of its emergence in main wh-questions in Fascian. I also discuss the relation between this innovative construction and the traditional question formation strategy from both a diachronic and a synchronic perspective. Finally, I provide a syntactic analysis of the wh-*che*-construction unifying it with the split-CP analysis of *pa/po*-questions proposed in chapter 5.

Chapter 3

The particle *pa/po*

This chapter is concerned with the particle *pa/po* which is a distinctive trait in questions in many varieties spoken in northern Italy, in particular in the Dolomitic Ladin varieties.¹

The chapter is organised as follows: section 3.1 presents the geographical distribution of the particle in the varieties of the northern Italian area and section 3.2 discusses the etymology of the particle. After that, I examine the uses and functions of the particle in the individual varieties in assertive contexts (section 3.3) and in questions (section 3.4). I show that the particle *pa/po* has undergone a grammaticalization process evolving from a temporal adverb via various stages into a question marker and that the varieties under consideration differ with respect to the stage they have reached in this grammaticalization process. Section 3.5 explores whether the fact that the particle has become obligatory in Gherdëina and Badiot can be accounted for from a functional perspective. After that, section 3.6 compares the particle *pa/po* with the German modal particle *denn* and section 3.7 discusses the syntactic properties of the particle. In section 3.8, I examine wh-questions featuring the particle *pa/po* showing that the semantic interpretation of the question depends on the use and the syntactic position of the particle. Section 3.9 concludes the chapter summarising the main results.

¹ When not otherwise indicated, the data derive from fieldwork of my own.

3.1 Geographical distribution

The particle *pa/po* occurs widely in the varieties spoken in northern Italy. On the basis of a systematic analysis of *ALD-II* sample maps involving interrogative clauses as well as research based on dialect descriptions, grammars and dictionaries, two main distribution areas can be observed:² the Dolomitic Ladin valleys around Mount Sella (Val Gardena, Val Badia, Val di Fassa, Livinalongo/Col di Lana and Ampezzo) on the one side and the Noce valleys, i.e. Val di Non and Val di Sole, on the other. Furthermore, there are occurrences in Valtellina, Val Camonica, Val Giudicarie, Val di Cembra, Valsugana, Val di Fiemme, Val Primiero and Val Tagliamento. In addition, we know from work by Munaro & Poletto (2002, 2003, 2005) and from other fieldwork studies that the particle also occurs in Pagotto, the Bellunese variety of the Alpi area. Figure 3.1 shows the distribution areas of the particle *pa/po* in interrogatives in varieties spoken in northern Italy.

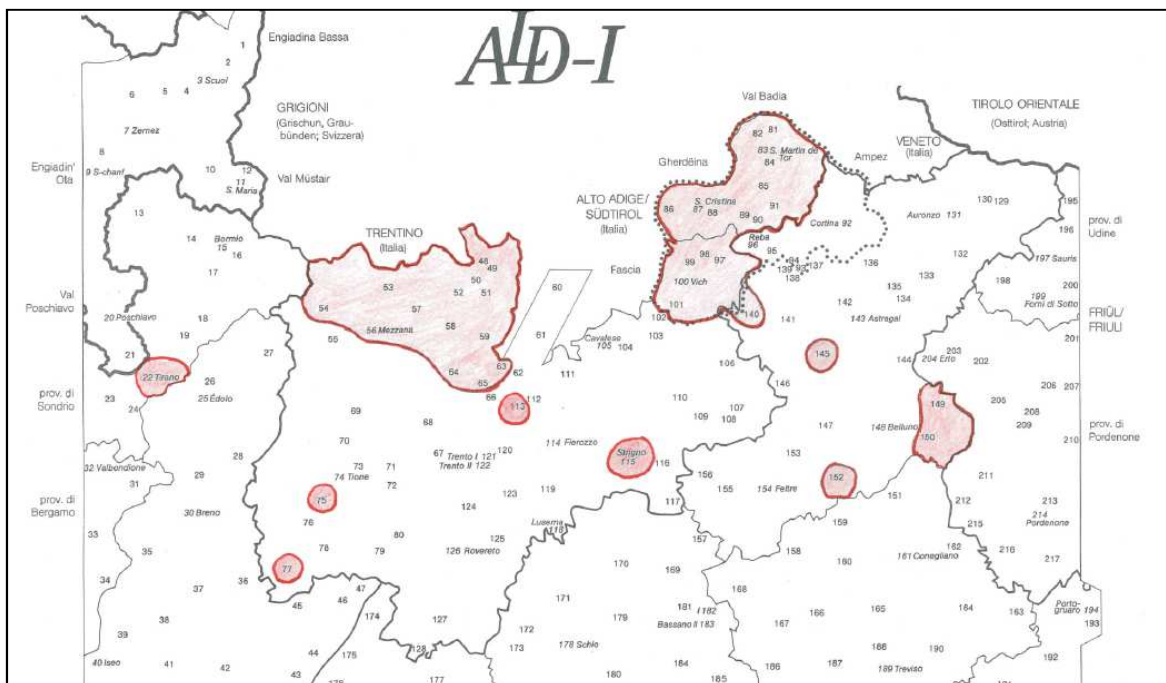


Figure 3.1: The geographical distribution of the particle *pa/po* in interrogatives in varieties spoken in northern Italy

² I owe many thanks to Hans Goebel for making available to me numerous sample maps prior to the publication of the *ALD-II*.

3.2 Etymology

In the varieties spoken in northern Italy, the particle *pa/po* appears in two different phonological forms: *pa* in the Dolomitic Ladin varieties Gherdëina, Badiot, Fodom, Anpezan and in the Cazet subvariety of Fascian spoken in the highest portion of Val di Fassa. In the Brach and Moenat subvarieties of Fascian, in Nònes, Solandro, Pagotto and in the other varieties exhibiting it, the particle occurs as *po*. In what follows, I use the notation ‘*pa/po*’ to refer to the particle in general, whereas I use *pa* or *po* in cases where only those varieties are concerned which share the phonological form of the particle.

The particle *po* derives from the Latin adverb POST (cf. Quaresima 1964; Pellegrini 1972; *EWD*), which has both a local meaning ‘behind’, and a temporal meaning ‘last, later, after, afterwards’. The etymology of the particle and the relation between the two forms *pa* and *po*, in contrast, have caused much debate in the philological literature. Some scholars have attributed *pa* to Latin POST, on a par with *po*, while others have argued against such an analysis given that the Latin short vowel *o* as in POST resulted in Modern Romance /ɔ/ and hence the open front rounded vowel /a/ in *pa* does not obey the laws of sound change in the transition from Latin to Modern Romance. Among the supporters of the latter view are, among others, the philologists Karl von Etmayer, Johann Baptist Alton and Theodor Gartner. Etmayer (1909:29) – differentiating between *po* (which he derives from POST) on the one hand and *pa* on the other – points out that *pa* might be related to Tyrolean *epa* (German ‘etwa’). Moreover, Alton (1879) and Gartner (1879) (but not Bacher 1833, from whom the examples in (1) are taken) assume that *pa* might be etymologically related to the French negation adverb *pas* (< Lat. PASSUS ‘step’) given that *pa* occurs in negation in the

position directly after the finite verb, forming a bipartite negation structure with the negative element *ne* (1a) similar to *ne...pas* in French (1b).³

- (1) Bacher (1833:158) (Badiot)
 a. Jeu ne sa *pa*.
 I NEG know-1SG PA
 ‘I don’t know.’
 b. Je ne sais pas. (French)
 I NEG know-1SG NEG
 ‘I don’t know.’

However, a relation of Dolomitic Ladin *pa* with French *pas* can be excluded on the basis of several grounds. First, there is a substantial prosodic contrast between the two elements: while French *pas* bears stress, Dolomitic Ladin *pa* cannot be stressed (Gsell 2002-2003:287).⁴ Second, *pa* alone does not convey a negative meaning, as it appears in affirmative contexts as well (Craffonara 1995b:158, FN 282).

- (2) *pa* in affirmative contexts (Badiot) (Craffonara 1995:158)
 a. Le saste *pa* teu?
 it know-2SG=SCL PA you
 ‘Do you know it?’
 b. Jeu le sa *pa* bëin.
 I it know PA well
 ‘To be sure I know it!’

Furthermore, in French, *pas* is in fact the head of the bipartite negation *ne...pas* – and thus the licensing element of negation – as shown by the fact that *ne* can be omitted in spoken language. Dolomitic Ladin *pa*, in contrast, does not bear negative semantics but serves as a

³ Negation in Italian varieties often involves reinforcing particles such as *mica/miga/minga* (< Lat. MICA ‘crumb’), *brisa* (cf. Italian *briciola*, ‘crumb’) or *punto* (< Lat. PUNCTUM ‘a point, a small spot; a small portion of something’) (Rohlf 1969:305f.). In contrast to French (*pas*), Italian varieties do not seem to show reflexes of Latin PASSUM, except for *pa* in Piedmontese, which, however, is due to language contact with French.

(i) Piedmontese (Rohlf 1969:305)
 N’ e=lo *pa* una vergogna?
 not be-3SG=SCL PA a shame
 ‘Isn’t it a shame?’

⁴ The fact that *pa/po* is unstressed might be due to its (advanced) degree of grammaticalization (cf. sections 3.4, 3.7.1).

reinforcing or modifying element (c.f. Ettmayer 1920; Alton 1968; Gsell 1990) – on a par with *po*. A convincing piece of evidence suggesting the relatedness between *po* and *pa* derives from the Dolomitic Ladin variety Fascian spoken in Val di Fassa. In the subvariety of Fascian spoken in the highest part of the valley (Cazet), the particle is realised with an open front unrounded vowel ([pa]) (3a). Southwards, down the valley, the vowel gradually rises, moves further back and rounds in such a way that the particle is realised with an open-mid back rounded vowel ([pɔ]) in Moenat, the subvariety spoken in the lowest part of the valley (3b).

- (3) *pa* and *po* in Val di Fassa (ALD-II 659/1-2 ‘Che tempo fa?’ / ‘How is the weather?’)
- a. *ke tɛmp ɛl pa* (Fascian Cazet, Campitello)
 Che temp é=l *pa*?
 what weather be-3SG=SCL PA
 ‘How is the weather?’
- b. *ke tɛmp ɛlo pɔ* (Fascian Moenat, Moena)
 Che temp é=lo *po*?
 what weather be-3SG=SCL PO

In conclusion, I assume that *pa* and *po* are related and phonological variants of the same lexeme, the outcome of Latin POST. Given the two phonological variants, I shall in the following refer to the particle as ‘*pa/po*’.

3.3 Uses and functions of the particle in assertive contexts

The particle *pa/po* appears in different clause types, in assertions, imperatives and in questions. It has various uses and interpretations in the individual varieties. The present section considers in detail the different uses and interpretations of the particle and its lexical and functional values. In the following sections, I show that the diachronic development of the particle from a temporal adverb into a question marker can be

reconstructed on the basis of the synchronic diatopic variation observed in the varieties spoken in northern Italy.

In assertions, the particle is observed to make three main semantic contributions: (i) temporal (section 3.3.1), (ii) modal/discourse-functional (3.3.2) and (iii) emphasis (3.3.3).

3.3.1 Temporal use

The purely temporal use of the particle in its original lexical meaning ‘afterwards, then’ corresponding to its etymon POST and Italian *poi* as exemplified in (4) can still be observed in all varieties.

- (4) Temporal meaning of *pa/po*
- | | | | | | |
|----------------------------------|-----------|-----------|------|--------|------------------------------|
| a. Amor ... se | fesh | <i>pa</i> | na | berta. | (Badiot from 1925) |
| Amor ... himself | make-3SG | PA | a | trick | (Plangg 1989:659) |
| ‘Then Amor plays a trick on us.’ | | | | | |
| b. Kan | k | <i>pò</i> | i | é | rvadi. |
| when | that | PO | they | be-3PL | arrived |
| ‘When they have then arrived.’ | | | | | |
| | | | | | (Upper Comelico) |
| | | | | | (De Lorenzo Tobolo 1977:283) |
| c. E | <i>pò</i> | sén | nadi | a | ciafa. |
| and | PO | be-1SG | gone | to | home |
| ‘And then I went home.’ | | | | | |
| | | | | | (Nònes) |
| | | | | | (Quaresima 1964:332) |

As far as the temporal meaning of *pa/po* is concerned, the varieties spoken in northern Italy exhibit two different developments: on the one hand, in varieties such as Badiot (5), the temporal use of the particle got strengthened as indicated by the fact that *pa/po* can replace verbal future morphology suggesting that futurity is expressed only by the particle.⁵

⁵ Munaro & Poletto (2005:258) make similar observations with respect to the particle *po* in the Piedmontese dialect of Canavese which has also developed into a marker of future tense.

- (i) The particle *po* in Canavese (Piedmont) (Munaro & Poletto 2005:258)
- | | | | |
|--------------------|---|------|-------------|
| Duman | e | vu | <i>po</i> . |
| tomorrow | I | come | PO |
| ‘Tomorrow I come.’ | | | |

The grammaticalization of ‘then’ into a marker of future tense seems to be a cross-linguistic phenomenon. Heine & Reh (1984:120), for instance, report an example from the Nilotic language Bari, where the temporal adverb ‘then’ has become a future marker as well.

- (5) Futurity (Badiot) (Pizzinini 1966:111)
- a. Al vëgn.
 he come-3SG
 ‘He comes.’
- b. Al vëgn *pa*.
 he come-3SG PA
 ‘He will come. / He comes then.’

The use of the particle as a marker of future tense is in line with the more general observation made by Keller (1938:539ff.), Rohlf's (1949:387, 473), Müller (1964:60) or Tekavčić (1972:305), that the construction type “present tense + adverb POST” is used to denote futurity in various Italian dialects such as Calabrese, in Alpine-Lombard varieties, Piedmontese or in the Provençal dialect of Occitan as well as in Francoprovençal Valdôtain.

In other varieties, however, the fact that the temporal adverb *dopo* (‘afterwards, then’) is used in addition to *po* suggests that the particle is losing its temporal meaning and not able to express futurity any more.

- (6) Nònes (Bertagnolli 1912:289)
- [...] e *po* dopo 'l Contìn el s=ha metù su sora [...].
 and PO then the count he REFL=have-3SG put-PTCP up above
 ‘[...] and then the count lied himself down on it above [...].’

3.3.2 Modal interpretation

In some varieties, the particle contributes a modal value to the interpretation of the utterance. In Anpezo, the particle is reported to denote astonishment or impatience (Croatto 1986:145).

- (7) Astonishment / impatience (Anpezo) (Croatto 1986:145)
- Pó** te digo!
 PO to-you say-1SG
 ‘But I’m telling you, ...’

Moreover, as regards Badiot, Poletto & Zanuttini (2003) characterise the semantic contribution of the particle with the notion of ‘point of view’. They suggest that apart from its function to indicate that the entire sentence is focused (cf. section 3.4.3), the use of the particle in imperatives signals that the order is given from the point of view of the speaker (8a). Further evidence for this assumption derives from the observation that *pa* is incompatible in contexts in which the order is for the benefit of the hearer (8b).

- (8) ‘Point of view’ (Badiot) (Poletto & Zanuttini 2003:183f.)
- a. Fà=l *pa* ch’ al é na buna idea!
do-IMP=it PA that it be-3SG a good idea
‘Do it, it’s a god idea.’
- b. *Màng=el *pa* che spo crëscete.
eat-IMP=it PA that then gow-2SG
‘Eat it and you’ll grow.’

3.3.3 Emphasis

With regard to many varieties, *pa/po* is referred to as an emphasis particle or focus marker (cf. Mazzel (1995) on Fascian Cazet; Dell’Antonio (1972) on Fascian Moenat; De Lorenzo Tobolo (1977) on Comelico; Plangg 1989, Poletto 2000, Poletto & Zanuttini 2003 on Badiot) appearing in different clause types such as affirmative and negative statements (9), positive (10) and negative imperatives (11) or wh-exclamatives (12).

- (9) *pa* in affirmative (a) and negative (b) statements (Badiot)
(Poletto & Zanuttini 2003:183)
- a. Al é *pa* bun!
it be-3SG PA good
‘It IS good!’
- b. Al n’ é *pa* bun.
it NEG be-3SG PA good
‘It ISN’T good.’
- (10) Positive imperatives in Badiot (a) and Fodom (b)
(Poletto & Zanuttini 2003:183)
- a. Fajé=l *pa* dessigÿ!
do-IMP=it PA definitely (2PL)
‘Definitely do it!’
- b. Fè *pa* polito!
do-IMP PA clean
‘Behave yourself!’ (Pellegrini 1974:66)

- (11) Negative imperatives in Badiot (Pizzinini 1966:111)
- a. No *mintí!*
 NEG lie-IMP (2SG)
 ‘Don’t lie!’
- b. No *pa mintí!*
 NEG PA lie-IMP (2SG)
 ‘You’d better not lie (or else something will happen to you)!’
- (12) Wh-exclamatives in Badiot (Poletto 2000:66)
- Ci bel ca l’ e pa!*
 how nice that it be-3SG PA
 ‘How nice it is!’

In the following section, we turn to the uses and functions of the particle in interrogatives.

3.4 The uses and functions of the particle in questions

As far as the occurrence of the particle in questions is concerned, the varieties spoken in northern Italy differ in three main respects: (i) in whether or not the particle is obligatory in standard questions (true requests for information); (ii) in the syntactic positions in which the particle can occur, and (iii) in the kind of semantic contribution the particle makes to the interpretation of the question.

The default syntactic position of the particle in *wh*-questions is after the finite verb and the enclitic subject pronoun – if present (13b). We will see in section 3.8.2 below that the particle can also occur in other syntactic positions, but we shall be concerned only with the default one here.

In the following, I give an overview of the functions and semantic contributions of the particle in *wh*-questions in the varieties spoken in northern Italy. The main point I want to make in this discussion is that these varieties can be classified into three categories with respect to the function of the particle in *wh*-questions. In the varieties of the first category, the particle contributes a special modal value to the interpretation of the question (section

3.4.1), while these special interpretational values are only very weak or absent in the varieties of the second category, in which the use of the particle in wh-questions has become conventionalised (3.4.2). In the varieties of the third category, finally, the particle has become obligatory for a standard interpretation of wh-questions (3.4.3).⁶

| Category | Use of the particle <i>pa/po</i> in wh-questions | Varieties |
|----------|---|--------------------------|
| 1 | Contribution to the semantic interpretation of the question | Roncone, Ampezzan etc. |
| 2 | Conventionalised use | Fascian, Nònes, Solandro |
| 3 | Obligatory use | Gherdëina, Badiot |

Table 3.1: The use of the particle *pa/po* in wh-questions

I address these three categories in turn and argue that the particle *pa/po* has undergone a grammaticalization process from a lexical element into a functional element. I show that the dialect variation observed in synchrony as regards the use and the function of the particle mirrors its diachronic development.

Let us first consider those varieties, in which the particle makes some kind of “special” semantic contribution to the interpretation of the wh-question.

3.4.1 “Special” semantic contribution

In Fodom, the use of the particle in wh-questions relates the utterance to the preceding context indicating in some way the consequence of a preceding event whereby it maintains a residue of its original temporal meaning (cf. 4). The question in (13a) is the generic question uttered in out-of-the-blue contexts, whereas the question involving *pa* (13b) can

⁶ We will also notice that the particle *pa/po* can appear in different syntactic positions in wh-questions. A detailed analysis of the interpretational differences of wh-questions related to the distinct syntactic positions of the particle in the varieties Gherdëina, Badiot, Fascian and Nònes follows in section 3.8.

only be used when the speaker and the addressee share a common ground to which the question can be linked.⁷

- (13) Connecting function (Fodom, Pieve di Livinallongo)
 a. Olà vas=to? (generic question)
 where go-2SG=SCL
 ‘Where are you going?’
 b. Olà vas=to *pa*? (consequence, connection)
 where go-2SG=SCL PA
 ‘Where are you going now (given that x has happened)?’

In other varieties, the particle can only be used in emotive questions, where it contributes to express the speaker’s astonishment or indignation. *ALD-II* sample maps show that in the varieties of Valtellina, Val Camonica, Val Giudicarie, Anpezzo and Valsugana, the particle *po* does not appear in standard wh-questions but it does in response to *ALD-II* stimulus 1016 *Ma cosa vuoi...?* (‘What the hell do you want?’) which was intended by the *ALD-II* questionnaire as a question with a particular degree of indignation.

- (14) *ALD-II* 1016: *Ma cosa vuoi...?*
 a. Ma ko ö=t *pø*? (Roncone, Val Giudicarie)
 but what want-2SG=SCL PO
 ‘What the hell do you want?’
 b. Ma ce vøʃ=to *pø*? (Cortina d’Ampezzo)
 but what want-2SG=SCL PO

According to Poletto (2000:65f.), the particle *pa/po* marks the value of a rhetorical question in Fascian. This means that in (15b), “the speaker knows that the hearer has no intention to go anywhere, and intends to stay where he or she is, or that there is no place to go” (Poletto 2000:65).

⁷ Similar observations have been made with respect to the use of the particle *denn* in wh-questions in German (cf. Thurmayer 1989; Wegener 2012; Bayer 2012).

- (15) Out-of-the-blue interpretation (a) vs. rhetorical interpretation in Fascian of Pera di Fassa (Poletto 2000:66)
- a. Olà vas=to?
 where go-2SG=SCL
 ‘Where are you going?’
- b. Olà vas=to *pa*?
 where go-2SG=SCL PA

My fieldwork data, however, do not confirm this observation. As will be discussed in detail below, I rather observe that the particle *pa/po* has become conventionalised in Fascian wh-questions and is considered as a characteristic trait of Fascian standard wh-questions (cf. section 3.4.2).

Table 3.2 summarises the function of the particle *pa/po* in the varieties considered in this section.

| Semantic contribution / function | Varieties |
|----------------------------------|--|
| Connection to context | Fodom |
| Astonishment / indignation | Valtellina, Val Camonica, Val Giudicarie, Anpezzo, Valsugana |

Table 3.2: ‘Special’ semantic contributions of the particle *pa/po* in wh-questions

3.4.2 Conventionalised use

In the varieties of the second category, the use of the particle *pa/po* in wh-questions does not imply any kind of the “special” interpretations seen in section 3.4.1 above. This category embraces two types of varieties: in the first type of varieties, the use of the particle is restricted to wh-questions featuring one particular wh-expression, whereas in the second type, the particle occurs with all wh-expressions across the board.

The first type is instantiated by the varieties of Valle Agordina (16), Falcade (17) and Mellame d’Arsiè (near Feltre), where the particle *po* appears only in wh-questions featuring the question word *parké* (‘why’) and only in the position directly after the wh-

expression (henceforth *wh-po*-position).⁸ These *wh*-expressions do not exhibit any special interpretation; the presence of the particle after the *wh*-expression *parké* rather seems to be a requirement of the question word.

(16) *po* restricted to *why*-questions (Valle Agordina) (ALD-II)

- a. Parké *po* ridéo?
why PO laugh-2PL
'Why are you laughing?'
- b. Ke tẽmp fá=lo?
what time do-3SG=SCL
'How is the weather?'
- c. Kóme te cáme=tu?
how REFL call-2SG=SCL
'What's your name?'

(17) *po* restricted to *why*-questions (Falcade) (ASIt)

- a. Parché *po*' core=to così?
why PO rush-2SCL=SG like-that
'Why are you rushing like that?'
- b. Onde va=li?
where go-3PL=SCL
'Where are they going?'
- c. Quanti ghe nas=to vist?
how-many of-them have-2SG=SCL seen
'How many of seem have you seen?'

The exclusive occurrence of the particle *po* in *why*-questions in these latter varieties is in line with the more general cross-linguistic observation that *why*-questions often show a special marking or behave differently from *wh*-questions featuring other *wh*-expressions. We will come back to this observation in chapter 4.

In the second type of varieties, such as Fascian (18) or Nònes (19), the particle appears with all *wh*-expressions. According to native speakers, a *wh*-question sounds “complete” and “native” only if the particle is used.⁹ Although in these varieties, the particle is not obligatory, its use in *wh*-questions is highly preferred. According to informants, the use of

⁸ Falcade is a partial *wh*-fronting variety: in *wh*-questions, most *wh*-expression stay *in-situ*, whereas the *wh*-expressions *parché* ('why'), *onde* ('where'), *quanti* ('how many' (PL)) and complex *wh*-expressions including the *wh*-expression in adjectival function such as *cal x* ('which x') front.

⁹ Adami (2008:56) reaches the same conclusion on the basis of her study on the use of the particle *po* in Nònes.

the particle establishes a tighter relation with the addressee and signals confidence with them or engagement in the topic discussed. When using the particle in a question, the speaker seems to be more interested and involved. It can be assumed that at some point, it just became the standard practice for speakers to use the particle in questions. I shall refer to this regular use of the particle in wh-questions in these varieties as ‘conventionalised’, where ‘conventionalised’ means that the speaker community has unconsciously “agreed” to use the particle in standard information-seeking wh-questions. Hence, in (18) and (19), the versions in (a) are wholly grammatical standard wh-questions, but the versions in (b) involving the particle are much more frequently used. They signal that the speaker is really involved and interested to know what his interlocutor has done (18b) or what the boys are doing (19b) and does not ask these questions out of mere politeness but because he really seeks information. This goes slightly in the direction of what Poletto & Zanuttini (2003) observe on the semantic contribution of the particle *pa* in Badiot imperatives, where the particle expresses that an order is given from the point of view of the speaker (cf. section 3.3.2). In Fascian and Nònes wh-questions (18b, 19b), the particle expresses the strong desire of the speaker to seek the answer to his question (‘I want to know’).

- (18) Conventionalised use of the particle in wh-questions (Fascian Cazet)
- a. Che as=te fat?
 what have-2SG=SCL done
 ‘What did you do?’
- b. Che as=te *pa* fat?
 what have-2SG=SCL PA done
 ‘What did you do?’ (I want to know.)
- (19) Conventionalised use of the particle in wh-questions (Nònes)
- a. Che fa=i i puti?
 what do-3PL=SCL the boys
 ‘What are the boys doing?’
- b. Che fa=i *po* i puti?
 what do=3PL=SCL PO the boys
 ‘What are the boys doing?’ (I want to know.)

| Semantic contribution / function | Variety |
|----------------------------------|--|
| Requirement in why-questions | Valle Agordina, Falcade, Mellame d’Arsiè |
| Conventionalised use | Fascian, Nònes |

Table 3.3: Conventionalised use of the particle *pa/po* in wh-questions

Let us now turn to the varieties in which the use of the particle has become obligatory in questions.

3.4.3 Obligatory use of the particle in wh-questions

There is reason to assume that at the beginning of the 19th century, the particle *pa* was not used at all in Gherdëina wh-questions. In the eldest grammar of Gherdëina by Ujep Insam (1744–1826), which dates from around 1809, none of the wh-questions contains the particle *pa* and the particle is not mentioned at all in the grammar.¹⁰

- (20) Gherdëina wh-questions at the beginning of the 19th century (Insam 1809)
- a. *chi reshona?*
who talk-3SG
‘Who is talking?’
 - b. *chel autor seguitöis vo?*
which author follow-2PL you
‘Which author do you follow?’
 - c. *ulà schiröis=e dômesdì?*
where go-2PL=SCL afternoon
‘Where do you plan to go in the afternoon?’
 - d. *perche ne ugniös=e à nes chri?*
why not come-2PL=SCL to us seek-INF
‘Why are you not coming to seek us?’

In the first dialect description of Gherdëina published in 1864 by Johann Anton Vian, the use of the particle is already described as “frequent” (Vian 1864:102). However, the fact that Vian’s grammar exhibits wh-questions featuring the particle and wh-questions lacking it suggests that at that time, the use of the particle was not yet obligatory in Gherdëina.

¹⁰ The so-called “Insam-Grammar” is currently in the process of being published as an edited version by Paul Videsott (Free University of Bolzano, Italy).

- (21) Gherdëina wh-questions with (a–c) and without (d–f) the particle *pa*¹¹
(Vian 1864:100ff.)
- a. Co vâ=la *pa*?
how go-3SG=SCL PA
'How is it going? / How are you?' (176)
- b. Ulà stâsëis *pa*?
where remain-2PL PA
'Where are you living?' (100)
- c. Càŋ nës purtëis *pa* i mëiles?
when to-us bring-2PL PA the apples
'When will you bring us the apples?' (168)
- d. Co vâ=la?
how go-3SG=SCL
'Hos is it going? / How are you?' (176)
- e. Co stâsëis=e?
how be-2PL=SCL
'How do you do?' (100)
- f. Càŋ së udoŋ=se?
when REFL see-1PL=SCL
'When will we see each other?' (100)

Similar observations can be made also for Badiot. In the first grammar of Badiot, Bacher (1883), there are few occurrences of *pa* in wh-questions; the vast majority of wh-questions do not exhibit the particle.

- (22) Badiot wh-questions with (a–b) and without (c–d) the particle (Bacher 1883:77ff.)
- a. Olà has=te *pa* tò çhiapel?
where have-2SG=SCL PA your hat
'Where do you have your hat?' (176)
- b. Da ché has=te *pa* aldì, che l' armada [...] sia stada
of whom have-2SG=SCL PA hear-PTCP that the army be-SBJV been
patoçiada?
defeat-PTCP
'From whom did you hear that the arm [...] has been defeated?' (100)
- c. Chi ha contè questa cosa?
who have-3SG say-PTCP this thing
'Who said this thing?' (100)
- d. Quala fomena ha dit questes baúgies?
which woman have-3SG say-PTCP these lies
'Which woman has told these lies?' (100)

¹¹ Note, however, that the reduction of *pa* to 'a after sibilant (cf. 24) had not yet taken place (21b–c). Moreover, the 2PL enclitic subject pronoun was still present, although its use was unsteady, whereas this clitic pronoun is completely absent in the contemporary language.

Nowadays, in contrast, the particle *pa* is obligatory in Gherdëina and Badiot generic wh-questions with a standard interpretation. The modal interpretations and functions it shows in other clause types (cf. section 3.3) are completely absent in wh-questions.

- (23) Obligatory use of the particle in standard wh-questions
- a. Can compr=i *(*pa*) n liber? (Gherdëina)
 when buy-3PL=SCL PA a book
 ‘When are they going to buy a book?’
- b. Ulà vas=te *(*pa*)? (Badiot)
 where go-2SG=SCL PA
 ‘Where are you going?’

Note that in Gherdëina, the particle is reduced to *’a* after sibilant (24a–c) (cf. Anderlan-Obletter 1991:104), which can be taken as a further piece of evidence for the (advanced stage of the) grammaticalization process of the particle in this particular variety.¹²

- (24) Phonological reduction of the particle in Gherdëina
- a. Ulà ves’ *a*?
 where go-2SG=SCL PA
 ‘Where are you going?’
- b. Ulà cumpron=s’ *a* n liber? (Anderlan-Obletter 1991:104)
 where buy-1PL=SCL PA a book
 ‘Where do we buy a book?’
- c. Ciuldì cumprëis’ *a* n liber?
 why buy-2PL PA a book
 ‘Why do you buy a book?’

3.4.4 Obligatory use of the particle in yes/no-questions

Another interesting development concerns yes/no-questions. In the 19th century, the particle did not appear at all in Gherdëina (25) and Badiot (26) yes/no-questions.

- (25) Gherdëina yes/no-questions (Insam 1809)
- a. Cherdöis=e vó ch’ el vengie?
 think-2PL=SCL you that he come-3SG.SBJV
 ‘Do you think he’ll come?’

¹² The reduction of *pa* to *’a* after sibilant takes place only in the case of the particle; in other contexts, the cluster *s + p* is tolerated in Gherdëina. Hence, this reduction is not due to a phonological rule but indicates the advanced degree of grammaticalization of the particle.

- b. Compresais vö eng Tshiaval she el fossa Retiv?
 buy-2PL.COND you a horse if it be-3SG.IPFV.SBJV restive
 ‘Would you buy a horse if it were restive?’
- c. Audes? (Vian 1864:101ff.)
 hear-2PL
 ‘Do you hear/listen?’
- d. J=ël duneis=e?
 him=it give-2PL=SCL
 ‘Do you give it to him (as a present)?’

- (26) Badiot yes/no-questions in the early 19th century (Bacher 1883:131ff.)
- a. Has=te odü la çhiora che tò père ha comprè?
 have-2SG=SCL seen the goat that your father have-3SG buy-PTCP
 ‘Have you seen the goat your father bought?’
- b. Moriun=se nos, e nò vos?
 die-1PL=SCL we and not you
 ‘Are we dying and not you?’

Nowadays, however, the particle is obligatory for a standard interpretation of yes/no-questions in Gherdëina (27).

- (27) Standard yes/no-questions in Gherdëina
- a. Vën *(pa) ence Tone?
 come-3SG PA also Tone?
 ‘Is Tone coming as well?’
- b. Ne uniëis’ *(a) nia?
 NEG come-2PL PA NEG
 ‘Don’t you come?’

In Badiot, in contrast, the particle is not obligatory in standard yes/no-questions (28). Rather, if the particle occurs in yes/no-questions, it triggers a special interpretation and the question expresses surprise or doubt (Alton 1968) (29) or becomes rhetorical (cf. Poletto 2000) (30).

- (28) Standard yes/no-questions in Badiot
- a. Vagn=el ince l’ Antonio?
 come-3SG=SCL also the Antonio
 ‘Is Antonio coming as well?’
- b. Ne gnîs nia?
 NEG come-2PL NEG
 ‘Don’t you come?’

- (29) *pa* in Badiot yes/no-questions (Alton 1968:61)
- a. È=l *pa* bel mort ?
 be-3SG=SCL PA already dead
 ‘Is he already dead?’ (surprise)
- b. Es=t’ *pa* bun?
 be-2SG=SCL PA good
 ‘Are you capable (of doing that)?’ (doubt)
- (30) *pa* in Badiot yes/no-questions (cf. Poletto 2000:58)
- Vas=t *pa* a Venezia?
 go-2SG=SCL PA to Venice?
 ‘Are you going to Venice?’

Hence, while the particle is obligatory for a standard interpretation of a yes/no-question in Gherdëina, Badiot standard yes/no-questions do not involve the particle. If *pa* is present in Badiot yes/no-questions, it triggers a special interpretation.

In conclusion, as to the use of the particle *pa/po* in interrogatives, the varieties spoken in northern Italy can be broadly classified into three categories. The first category embraces varieties, in which the particle contributes some kind of “special value” such as ‘connection’ or ‘astonishment / indignation’ to the semantic interpretation of the question. In the second category of varieties, the particle has lost these interpretational values and although the use of the particle is still optional, it has become conventionalised and a characteristic trait of standard questions involving more interest and involvement on the part of the speaker. Finally, in the third category of varieties, the use of the particle is obligatory for a standard interpretation of question.

Considering the use of the particle in interrogatives from a diachronic perspective, we have observed that the particle became obligatory in Gherdëina and Badiot wh-questions and subsequently also in Gherdëina yes/no-questions. Gherdëina has thus developed further than the other varieties regarding the use of the particle *pa* in interrogatives. Relating the diachronic evidence to the synchronic diatopic variation we can conclude that the diachronic development as to the use of the particle in questions is reflected by the synchronic variation between the varieties.

The various interpretational values of the particle in some varieties, their absence in others and the different extents to which the particle is used in the varieties spoken in northern Italy suggest that the particle has undergone a grammaticalization process with several intermediate stages from a lexical element into a functional element. I adopt a view of grammaticalization in terms of Hopper & Traugott (1993:xv) who define ‘grammaticalization’ as “the process whereby lexical items and constructions come in certain linguistic contexts to serve grammatical functions, and, once grammaticalized, continue to develop new grammatical functions.” This definition in fact suggests two subcases of ‘grammaticalization’: (i) the development of grammatical forms out of lexical ones and (ii) the (further) evolution of already grammatical items into more grammatical elements.

It can be shown that the dialect variation observed in synchrony as to the use and the semantic contribution of the particle mirrors its diachronic development: I suggest that the variation between dialects and varieties regarding *pa/po* can be attributed to the fact that the grammaticalization of the particle has progressed further in some varieties than in others. Figure 3.2 sketches the grammaticalization process of the particle *pa/po*.

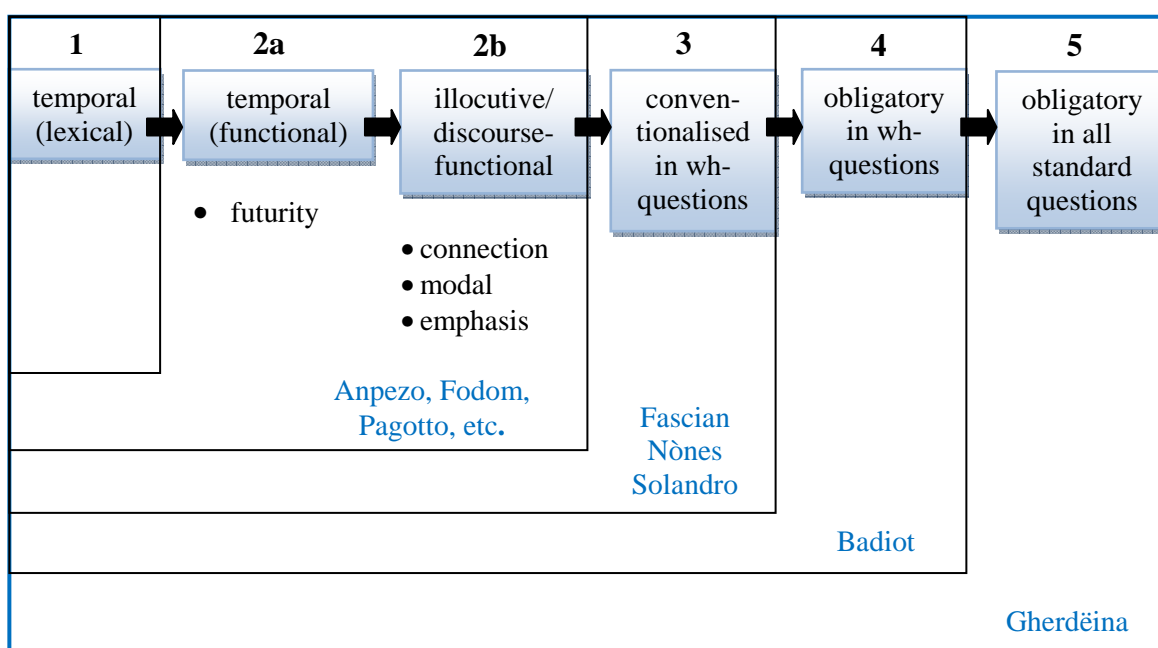


Figure 3.2: The grammaticalization process of the particle *pa/po*

Note that at least the first steps of this process correspond to the grammaticalization cline proposed by Abraham (1991) for modal particles in general (cf. figure 3.5 below).

The particle *pa/po* originates from the Latin temporal adverb POST ('afterwards, then') and can still be observed today with this lexical meaning in some contexts (cf. 3.3.1). We can suppose that on the basis of this temporal use of the particle other functional values have developed such as the expression of futurity in Badiot (cf. 3.3.1) or the connecting function of the particle in Fodom wh-questions (cf. 3.4.1). Apart from these functions, which can be derived from the original lexical meaning of POST, the particle has also acquired other functions and interpretational values in the case of which it is less obvious how they could have developed. These new functions of the particle, which include modal values like 'surprise', 'indignation' or 'emphasis' (cf. 3.4.1) can be observed in most varieties spoken in northern Italy (stage 1).

In the varieties of Dolomitic Ladin, the lexical value of the particle has weakened, modal functions have been lost and the use of the particle has become conventionalised in standard wh-questions (cf. 3.4.2). This process has possibly been enabled just by the particle's clause connecting and reinforcing functions which made it particularly suitable for use in questions. In the varieties Fascian, Nònes and Solandro, wh-questions featuring *pa/po* are perceived to sound more curious and involved, signalling the addressee that they are absolutely expected to give an answer. In pragmatics terms, this means that the information-seeking character of the question is reinforced. The corresponding wh-questions lacking the particle, in contrast, are "weak" in this respect, and are hence used in situations in which information seeking is maybe not the primary purpose, or, at least, less urgent. It can be supposed that at a certain point, speakers began to use the particle more and more often in order to make their questions seem important and to get an answer by all means. In consequence of increasing frequency of the particle the speakers got used to it and unconsciously agreed upon using it in questions ('convention').

In the varieties Gherdëina and Badiot, the particle has grammaticalized further in that it is not only conventionalised but even obligatory for a standard interpretation of a wh-question (stage 3) (cf. 3.4.3). Finally, in Gherdëina, but not in Badiot, *pa* has become obligatory in yes/no-questions as well and thus serves as a general question marker in this latter variety (stage 4) (cf. 3.4.4).

In this process, every single stage comprises also the preceding ones, i.e. if a variety belongs to stage 2, it will have presented and might still present also the functions and interpretations of stage 1, although these might become evident only in very few contexts in the present-day language.

In the light of this grammaticalization process, two issues arise: (i) what were the triggers of this process and (ii), why has the use of the particle developed further in some varieties than in others? In the next section, I sketch out a functional approach to these issues discussing whether they can be accounted for from a functional perspective.

3.5 A functional account?

In the present section, I sketch out a functional approach to the grammaticalization of the particle *pa/po*, relating the fact that the particle has become obligatory in Gherdëina and Badiot wh-questions (section 3.5.1) and Gherdëina yes/no-questions (3.5.2) to particular (morpho)syntactic properties of these varieties.

3.5.1 Wh-questions

It is striking that the particle *pa/po* has become obligatory in wh-questions just in those Dolomitic Ladin varieties which are characterised by the V2-property, while in the other varieties, which do not exhibit this property, the particle is not compulsory. On the basis of

this observation we might hypothesise that the fact that the particle has become obligatory is in some way connected to the V2-property.

In contrast to all the other modern varieties spoken in northern Italy, Gherdëina and Badiot are V2-languages, and hence inversion of subject and verb does not only occur in questions, but also in V2-contexts, where a constituent other than the subject occupies the first position of the sentence (cf. section 2.2.3.1). This leads to a structural ambiguity between wh-questions and V2-statements, given that in both clause types the verb actually ends up in the second position (figure 3.3). This ambiguity might even be reinforced by the fact that the words used as wh-expressions also have other functions, e.g. in wh-exclamatives, as relative pronouns or conjunctions. The fact that wh-expressions are not restricted to interrogative clauses calls into question whether we can really consider the wh-expression as an interrogative clause typing element. Moreover, also inverted word order cannot be considered the crucial element expressing interrogative force given that it occurs in Gherdëina and Badiot in both, questions (c), and statements (b) ('functional ambiguity of subject-verb-inversion').

| | | | | | | | |
|----|----------------------------------|--------|-------------------------|--------|----|----------|--------------|
| a. | | | Tone | va | a | Urtijëi. | |
| | | | Tone | go-3SG | to | Urtijëi | statement |
| | | | 'Tone goes to Urtijëi.' | | | | |
| b. | Duman | va | Tone | | a | Urtijëi. | |
| | tomorrow | go-3SG | Tone | | to | Urtijëi | V2-statement |
| | 'Tomorrow Tone goes to Urtijëi.' | | | | | | |
| c. | Can | va | pa | Tone | a | Urtijëi? | |
| | how | go-3SG | PA | Tone | to | Urtijëi | wh-question |
| | 'When does Tone go to Urtijëi?' | | | | | | |

Figure 3.3: Structural ambiguity between V2-statements (b) and wh-questions (c) in Gherdëina (and Badiot)

The idea that in Gherdëina (and Badiot), the use of the particle *pa* might be connected to the V2-property was already alluded to by Siller-Runggaldier (1993:293), who observes that “the polyfunctionality of inversion in Gherdëina and Badiot is compensated by the

grammaticalization and the obligatory presence of the interrogative particle *pa* [translation, FMHJ]”. Following this line of thought, the need to unambiguously distinguish a wh-question from other V2-contexts in which inversion also applies might have contributed to the evolution of *pa* into an obligatory wh-question marker in Gherdëina and Badiot. Further supporting evidence for such a claim derives from two observations: first, in the non-V2 varieties Fascian and Nònes, the particle is conventionalised but not obligatory. Under the assumption that *pa* is a clause typing, disambiguating element, these facts can directly be accounted for: given that in Fascian and Nònes, questions are the unique context in which subject-verb-inversion applies, there is no clause type ambiguity and hence no need for a functional element such as *pa* to disambiguate between clause types. Second, as we shall see in more detail in the following section, in (at least some varieties of) Bavarian, which is also a V2-language, the particle ’*n* has become obligatory in wh-questions (cf. Bayer 2012) and thus shows the same behaviour as Gherdëina and Badiot *pa*.

- (31) The particle ’*n* in Bavarian (Weiß 2002, Bayer 2012:23)
 Wos hosd’ *(-*n*) g’sogd?
 what have-2SG=SCL (*-N) said
 ‘What did you say?’

A functional approach along these lines, however, faces several problems: the first problem relates to the issue of whether V2-statements and wh-questions are truly ambiguous. In terms of their syntactic structure, they are, given that both involve a constituent in sentence-initial position followed by subject-verb-inversion (‘structural ambiguity’). However, the two clause types might be differentiated by prosody or by the wh-expression in wh-questions. As far as prosody is concerned, we will see in chapter 10 that in Gherdëina and Badiot, and also in the other varieties under consideration, wh-questions and statements involve the same intonational tune. Hence, prosody has to be ruled out as the crucial factor differentiating between V2-statements and wh-questions.

As to the role of the *wh*-expression for interrogative clause typing, one would need to study the psycholinguistic reality of *wh*-expressions: do we perceive that an utterance is a question as soon as we hear the *wh*-expression? This issue could best be investigated by means of an EEG experiment studying the activation patterns in V2-statements, *wh*-questions and other clause types featuring *wh*-expressions in sentence-initial position such as *wh*-exclamatives. For now, we have to leave this issue to future research.

A second problem for a purely functional approach concerns the fact that in spite of the evidence from Bavarian, there are many languages such as Standard German or Scandinavian, which did not develop obligatory question marking elements although they exhibit the V2-property and dispose of lots of sentential particles. In the light of this situation, then, the question is why varieties such as Gherdëina, Badiot and Bavarian should need a disambiguating element, i.e. a question particle, if the other V2-languages make do without it. A possible line of research could undertake a comparative analysis of Romance and Germanic V2-languages with respect to V2, (question) particles and interrogative clause typing in order to shed light on this issue.

3.5.2 Yes/no-questions

As regards *yes/no*-questions, the issue we need to address is why the particle *pa* has become obligatory in *yes/no*-questions in Gherdëina, grammaticalizing further into a general question marker, while this development has not taken place in Badiot. The functional approach I sketch out in the following relates the use of the particle *pa* in Gherdëina *yes/no*-questions to the special properties of the subject pronoun paradigm in this peculiar variety.

On a par with *wh*-questions, *yes/no*-questions also involve subject-verb-inversion and consequently, the verb ends up in the sentence-initial position (V1). Hence, V1-*yes/no*-interrogatives differ from (non-V2-)statements in the position of the subject pronoun:

while in (non-V2-)statements, the subject pronouns appears in preverbal position (32a), it occurs postverbally in yes/no-questions (32b).¹³

- (32) a. **L** maia pulënta. (Gherdëina)
 he eat-3SG polenta
 ‘He is eating polenta.’
 b. Maie=**I** pa pulënta?
 eat-3SG=SCL PA polenta
 ‘Is he eating polenta?’

Crucially, as shown in table 3.4, Gherdëina, contrary to Badiot, neither has preverbal subject clitics in the 1SG, 1PL and 2PL nor postverbal subject clitics in the 2nd persons (Anderlan-Obletter 1991:38; Thiele 2001:51f.).

| person | Gherdëina | | | Badiot | | | |
|--------|-----------|-----------|--------------|--------|-----------|----------|----------------------------------|
| | free | proclitic | enclitic | free | proclitic | enclitic | |
| 1SG | ie | | -i | iö | i | -i | * dropped in Alta Badia |
| 2SG | tu | te | | te | te | -te | |
| 3SG M | ël | l | -(e)l | ël | al | -el | |
| 3SG F | ëila | la / l' | -(e)la | ëra | ara | -era | |
| 1PL | nëus | | -s | nos | i * | i * | |
| 2PL | vo | | | os | i * | -e | |
| 3PL M | ëi | i | -i | ëi | ai | -i | |
| 3PL F | ëiles | les | -(e)les / -i | ëres | ares | -eres | |

Table 3.4: Subject pronoun paradigm of Gherdëina and Badiot
 (cf. Anderlan-Obletter 1991:38; Bernardi 1999:42, 73; Thiele 2001:51f.; Hack & Gaglia 2009:162)

Given that in Gherdëina, for the second person plural there is neither a preverbal nor a postverbal subject clitic and given that the free pronoun is not used (Anderlan-Obletter 1991:38; Hack & Gaglia 2009), a word order ambiguity would arise in this grammatical person in the absence of the particle *pa*: due to the lack of the subject clitic, it is not clear from a structural perspective whether an utterance such as (33) is a statement (33a) or a yes/no-question (33b).

¹³ Given their uniformity in form I assume the proclitic and the enclitic subject pronouns to be the same element occupying different positions in statements (32a) and questions (32b). The alternative account, i.e. assuming that the proclitic and the enclitic subject pronouns belong to different paradigms, in contrast, applies better to varieties in which there are clear differences in number and form between the two sets.

- | | | |
|---------------------------|-----------------------|-------------|
| (33) Maiëis la pulënta. | clause-type ambiguity | (Gherdëina) |
| a. Maiëis la pulënta. | => statement | |
| eat-2PL the polenta | | |
| ‘You are eating polenta.’ | | |
| b. Maiëis la pulënta? | => yes/no-question | |
| eat-2PL the polenta | | |
| ‘Are you eating polenta?’ | | |

In the light of these facts, we could hence argue that the particle *pa* became obligatory in Gherdëina in order to (help) disambiguate between clause types. In Badiot, in contrast, where the subject clitic paradigm is complete, this disambiguating function of the particle is not required.¹⁴ The minimal pair in (34) shows that in Badiot, unlike in Gherdëina (33), statements (34a) and yes/no-questions (34b) are not ambiguous with respect to clause-type, given that the subject clitics are expressed (in preverbal vs. postverbal position).

- | | | |
|-------------------------------|--------------------|----------|
| (34) a. I mangëis la polenta. | (statement) | (Badiot) |
| you eat-2PL the polenta | | |
| ‘You are eating polenta.’ | | |
| b. Mangëis=e la polenta? | (yes/no-questions) | |
| eat-2PL=SCL the polenta | | |
| ‘Are you eating polenta?’ | | |

The hypothesis we can derive from the Gherdëina and Badiot facts is that in Gherdëina, the particle *pa* became obligatory in yes/no-questions as well in order to (help) disambiguate between clause types and to clause type the sentence as interrogative. Further evidence for this hypothesis derives from the fact that there seems to be a relation between the loss of enclitic subject pronouns in Gherdëina and the increasing use of the particle *pa* in yes/no-questions as shown in figure 3.4.

¹⁴ Of course also intonation can be crucial for determining whether an utterance is a statement or a question. Cases such as (33), where statements and yes/no-questions exhibit the same syntactic structure, will be investigated from the perspective of prosody in chapter 9.

| | |
|---|--|
| a. Gàràtëis= e chest? spare-2PL=SCL that ‘Can you spare that?’ | (19 th century enclitic subject pronoun) interrogative |
| b. Gàràtëis chëst. spare-2PL that ‘Can you spare that?’ / ‘You spare that.’ | (loss of the enclitic subject pronoun) ambiguous input |
| c. Gàràtëis pa chëst? spare-2PL PA that ‘Can you spare that?’ | (interrogative particle <i>pa/po</i>) interrogative |
| d. Gàràtëis’ a chëst? spare-2PL PA that ‘Can you spare that?’ | (phonetic reduction of <i>pa/po</i>) interrogative |

Figure 3.4: Enclitic subject pronoun and particle *pa* in Gherdëina

In 19th century Gherdëina, the 2PL enclitic subject pronoun *-e* was still used (cf. Vian 1864) (a), but in the present-day language, it is completely missing in the paradigm (cf. table 3.4). (b) shows the same utterance after the loss of the enclitic subject pronoun, which is ambiguous between a (non-V2-)statement and a yes/no-question (cf. 33) due to the absence of subject pronouns which could indicate the word order present and hence the clause type. Strikingly, the loss of the enclitic subject pronoun appears to be correlated with an increasing use of the particle *pa* (c) suggesting that the former was in some way “replaced” by the latter. In fact, the wh-questions involving the 2PL in Vian (1864) either exhibit the enclitic subject pronoun *-e* (35a–b) or the particle *pa* (35a’–b’) but never both. Furthermore, in present-day Gherdëina, the particle is phonologically reduced to *'a* after verb desinences ending in *-s* (d) suggesting that there is a close relationship between the particle and the verb. Given that the reduced particle (d) and the 19th century 2PL subject clitic (a) are probably pronounced in a similar way, namely as a schwa, the present-day version of the utterance with the reduced particle (a) mirrors the 19th century version of the utterance with the enclitic subject pronoun (a). This suggests that in the present-day language, the particle has assumed the function previously served by the

enclitic subject pronoun. Further evidence for this assumption derives from the following observation: during the fieldwork interviews, when confronted with utterances such as (d), many Gherdëina informants did not perceive that the clitic 'a was in fact the particle *pa/po*.

(35) Gherdëina wh-questions involving the 2PL in Vian (1864:100ff.)

a. Càn vë=ŋ sëis=e? (100)
 when REFL=from-here go-2PL=SCL
 'When are you leaving?'

a'. Càn nës purtëis *pa* i mëiles? (100)
 when to-us bring-2PL PA the apples
 'When will you bring us the apples?'

b. Ulà stäsëis=e? (186)
 where remain-2PL=SCL
 'Where are you living?'

b'. Ulà stäsëis *pa*? (176)
 where remain-2PL PA

In sum, the facts observed with respect to the 2PL suggest that the particle *pa* can be considered a phenomenon of compensation for the loss of the enclitic subject pronoun. The process which rendered the particle obligatory might have started in the 2PL and, once having become established in this context, have been extended to other grammatical persons as well, reaching even the third persons, which have (and always had) both preverbal and postverbal subject clitics in Gherdëina. In order to verify this hypothesis, a frequency-based diachronic analysis of the use of the particle *pa* would have to be undertaken.¹⁵ Moreover, the role of the 2PL for the development regarding the use of the particle *pa* needs to be further investigated. A promising approach to do that could be to look at person features. Crucially, in the 2PL, the addressee and the subject are the same or the addressee is part of the group of referents representing the subject. In such a situation, the grammatical expression of the subject might not be necessary (cf. imperatives) and hence subject pronouns are omitted leading to the development shown in figure 3.4.

¹⁵ A first analysis of this kind has already been undertaken for the present work but did not help to shed light on the issue and was therefore not presented here. A major problem for diachronic analyses of this kind is the shortage of historical texts from the period of time when the particle *pa* started to be used in questions in Gherdëina.

3.5.3 Preliminary conclusion

In this section, I have approached the last steps in the grammaticalization process of the particle *pa/po*, i.e. the process rendering the particle *pa* in Gherdëina and Badiot wh-questions and in Gherdëina yes/no-questions obligatory, from a functional perspective.

Adopting such a functional view, it can be claimed that the particle became obligatory in wh-questions in order to resolve the structural ambiguity between V2-statements and wh-questions arising because of the polyfunctionality of subject-verb-inversion in these varieties. As for yes/no-questions, it was proposed that the particle *pa* became obligatory in Gherdëina in order to compensate for the loss of enclitic subject pronouns in certain grammatical persons which had led to a structural ambiguity: in the absence of subject clitics, it was not evident whether direct or inverted word order was present and hence whether the utterance was a statement or a yes/no-question.

We have seen, however, that a purely functional approach along these lines faces a couple of problems, in particular the fact that languages with similar properties such as Standard German have not developed obligatory clause typing elements. An even larger problem for the functional approach resides in the fact that the particle *pa* can also appear in other clause types as shown in section 3.3, even in Gherdëina and Badiot (cf. also Poletto 2000; Poletto & Zanuttini 2003). These observations suggest that interrogative clause typing is a complex phenomenon involving several linguistic components. For this reason, the present work aims at a broader approach to the study of question formation and interrogative clause typing considering both the syntax and the prosody of interrogatives and the interface between these two components.

In the following, I compare the facts related to *pa* with the German particle *denn* and its Bavarian clitic variant *'n*. This comparison is motivated by the fact that the particles *pa/po* and *denn* do not only share similar etimologies but also various syntactic and interpretational properties.

3.6 The German particle *denn*

The German particle *denn*, its uses, the semantic contributions it makes to the interpretation of questions and the syntactic positions in which it appears have been investigated in detail (cf. *inter alia* Thurmair (1989); Wegener (2002); Weiß (2002); Grosz (2005); Bayer (2012)). Strikingly, *pa/po* and *denn* share many properties, above all: (a) etymology; (b) interpretational values; (c) function; (d) phonetic reduction and (e) obligatoriness in questions (in some varieties).

As far as their etymology is concerned, both particles derive from temporal adverbs with the same meaning: *pa/po* is due to Latin POST ('afterwards, then') and *denn* derives from Old High German *thanne* ('afterwards, then') (cf. Wegener 2002:383). Moreover, the two particles share at least some of their interpretational values such as the connecting value (cf. Thurmair 1989): the function of the particle *denn*, on a par with *pa/po* (cf. section 3.4.1), is to relate the utterance to the preceding communicative [or situational, FMH] context (Thurmair 1989:164).

(36) Fodom (Pieve di Livinallongo)

a. Context:

“Sono appena arrivata a casa e ho trovato la porta chiusa, ma sono senza chiave.”

‘I have just arrived home and I have found the door closed but I don’t have my keys with me.’

b. “Olà vas=to *pa?*”

where go-2SG=SCL PA

‘Where are you going now?’

(37) German (Thurmair 1989:164)

a. Context:

“[...] und im letzten Jahr war ich sogar vom Klassenunterricht befreit! Da bekam ich dann Bücher, deutsche und polnische und durfte, wenn ich sie ausgelesen hatte, darüber Aufsätze schreiben.”

‘[...] and last year I was even excused from classes! Instead, I was given books, German and Polish books, and, as soon as I had read them I was allowed to write essays on them.’

- b. „Polnisch ...?“, warf Konrad erstaunt ein, “kannst du *denn*
 Polish throw-IPFV Konrad surprised in can-2SG you DENN
 auch Polnisch“?
 also Polish
 ‘Polish ...?’, Konrad asked surprised, ‘do you also know Polish?’ (connection)

Furthermore, *denn* – like *pa/po* – is considered a distinctive trait of questions and even an interrogative marker (cf. Thurmair 1989:167). Note, however, that *denn* is limited to interrogatives while *pa/po* can also appear in other clause types (cf. section 3.3).

In Gherdëina, the particle *pa* appears in the phonologically reduced variant *'a* after verb forms ending in a sibilant. Also *denn* exhibits a phonologically reduced variant, *'n*, which occurs in the Bavarian varieties and in colloquial German. According to Thurmair (1989:163), this phonological attrition indicates the high-frequent usage of the particle. While in colloquial German, the reduced form *'n* can appear both in postverbal position (38a) and directly after the *wh*-expression in verbless questions (38a'), *pa* can occur in its reduced form *'a* only in the former (38b) whereas it is always realised in its full form (*pa*) in the latter (38b'–b'').

(38) Colloquial German (Thurmair 1989:164)

- a. Wieviele Frauen hat *'n* der?
 how-many women have-3SG DENN he
 ‘How many women does he have?’
 a'. Wieso *'n* das?
 why DENN that
 ‘Why that?’

Gherdëina

- b. Ulà ves=*a*?
 where go-2SG=PA
 ‘Where are you going?’
 b'. Gherdëina
 *Ulà *'a*?
 where PA
 b''. Ulà *pa*?
 where PA
 ‘Where?’

Another trait that colloquial German and Bavarian *'n* shares with *pa* in Gherdëina and Badiot is the fact that it is obligatory in wh-questions with a standard interpretation.¹⁶

- (39) a. Bavarian (cf. Weiß 2002:324; Bayer 2012:23)
 Wos hos=d' *(=n) g'sogd?
 what have-2SG=SCL N say-PTCP
 'What did you say?'
 b. Badiot
 Ulà manges=t *(pa) la pulëinta?
 where eat-2SG=SCL PA the polenta
 'Where do you eat the polenta?'

The particles *pa* and *denn* seem to have undergone the same grammaticalization process from a temporal adverb into a question marker. Hence, the state of affairs exemplified by *pa/po* is not an isolated phenomenon but has direct parallels in German and its dialects. As for the development of German modal particles in general, Abraham (1991) has proposed a unidirectional cline, extended by Wegener (2002) and Bayer (2012) with respect to *denn* (figure 3.5). The Dolomitic Ladin varieties can be classified into this cline on the basis of their use of the particle *pa/po*. They do not only confirm Wegener's and Bayer's extension of the cline as to wh-questions but also suggest further refinements. First, given the Fascian and Nònes data, we have to assume a further intermediate 'conventionalised' stage and the data from Gherdëina suggest a further prolongation of this grammaticalization path to yes/no-questions and hence the stage of a 'general question marker'.

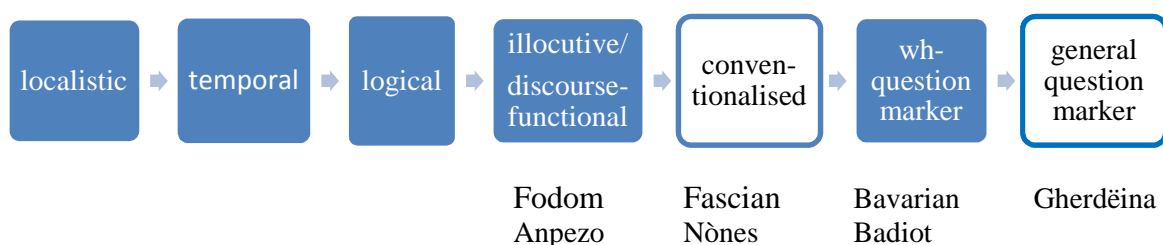


Figure 3.5: Grammaticalization cline for modal particles (based on Abraham 1991; Wegener 2002; Bayer 2012)

¹⁶ In Bavarian, *'n* is obligatory only in wh-questions, while it is optional in yes/no-question (Bayer 2012:23). Note, that not all speakers of Bavarian agree on this judgment, though.

Having discussed the uses and functions of the particle *pa/po* both from a diachronic and from a synchronic perspective, the next step to take is an analysis of the syntactic properties of the particle, i.e. its syntactic status and positions.

3.7 The syntactic properties of the particle *pa/po*

The parameters of syntactic variation found in Dolomitic Ladin wh-questions involving the particle *pa/po* include the following:

- (40) a. use of the particle *pa/po*
b. syntactic position of the particle *pa/po*
c. word order variation in *pa/po*-questions

Section 3.7.1 is concerned with the syntactic status of the particle and section 3.7.2 gives an overview of its syntactic positions in wh-questions.

3.7.1 Syntactic status

As far as the syntactic status of the particle is concerned, three main approaches have been put forward in the literature.

First, Manzini & Savoia (2005:614) do not acknowledge any grammaticalization regarding the particle and consider it as an adverb. They claim that *pa/po* is a syntactic phrase located in the INFL field on a par with (other) aspectual adverbs. However, there are several syntactic facts suggesting that this kind of analysis cannot be on the right track and that *pa/po* is not located in the INFL field, but higher, in the C field. First, from a semantic/pragmatic perspective, elements marking pragmatic/illocutive features like topic, focus etc. are typically located in the CP layer, where information structure is expressed (Rizzi 1997; Poletto 2002; Poletto & Zanuttini 2003). Moreover, as argued by Poletto

(2000, 2002) and Poletto & Zanutini (2003) on the basis of various syntactic tests, *pa/po* exhibits typical properties of a C element, in that it appears higher than the highest IP elements like Cinque's (1999) 'higher sentence adverbs' (*sicuramente* 'surely', *forse* 'perhaps', *oggi* 'today' etc.) (41), temporal adverbs of the class of *oggi* ('today') and the subject in SpecTP (42) in contexts where subject-verb-inversion occurs.

- (41) *po* > higher sentence adverbs (Poletto 2002:226f.)
- a. Al a ***pa*** d sigy mangé.
 he have-3SG PA of sure eat-PTCP
 'He has surely eaten.'
- b. *Al a d sigy ***pa*** mangé.
 he have-3SG of sure PA eat-PTCP
- (42) Inier a ***pa*** Gianni mangé la ciara. (Badiot)
 yesterday have-3SG PA Gianni eat-PTCP the meat
 'Yesterday John ate meat.'

Moreover, the particle is banned from embedded clauses (43b).¹⁷

- (43) Fascian (Pera di Fassa) (Poletto 2000:46)
- a. Co l fas=to ***pa?***
 how it do-2SG=SCL PA
 'How do you do it?'
- b. *Dime co l fas=to ***pa?***
 tell-IMP=me how it do-2SG=SCL PA

Having shown that *pa/po* is a CP element, we still have to determine the syntactic status of the particle, i.e. whether it is a syntactic phrase or a head. As regards the particle *pa* in the varieties Badiot and Fascian, Poletto (2000) and Poletto & Zanuttini (2003) assume that it is a syntactic phrase located in the specifier position of a functional projection in the lower portion of a split-CP structure.

- (44) [CP [C° V + SCL [CP *pa* [C° *che*]]]] (Poletto 2000:48)

¹⁷ In the Fascian subvariety of Pera di Fassa, though, the particle can also be observed in embedded contexts (Sabrina Rasom, p.c.). This observation cannot be accounted for in the present work and will be left for future research.

Given that the finite verb precedes the particle, the verb must have moved higher than *pa/po*. Poletto (2000) and Poletto & Zanuttini (2003) argue that if *pa/po* were a head, it would interfere with the movement of the finite verb to a higher C head. From this they conclude that the particle must be a syntactic phrase located in a position lower than the projection in which subject-verb-inversion occurs. The phrase-analysis of the particle, however, has two main drawbacks: first, it fails to offer a straightforward account for why the particle alternates with the complementizer *che* in Fascian.

- (45) Incompatibility of *pa/po* and the complementizer *che* in Fascian (Poletto 2000:47)
- a. Olà ***pa*** tu vas?
 where PA you go-2SG
 ‘Where are you going?’
 - b. Olà ***che*** tu vas?
 where that you go-2SG
 - c. *Olà ***che pa*** tu vas?
 where that PA you go-2SG
 - d. *Olà ***pa che*** tu vas?
 where PA that you go-2SG

Poletto (2000) and Poletto & Zanuttini (2003) locate the particle in the specifier position of the projection headed by the complementizer *che* and attribute the incompatibility between the particle and the complementizer to the Doubly Filled Comp Filter (DFCF). The DFCF prohibits simultaneous occupation of both the specifier and the head of the same functional projection if the two elements do not undergo spec-head agreement.¹⁸ A second problem for the phrase-analysis of the particle are *wh-pa*-questions (46): if the particle is analysed as a phrase in the specifier position of a C projection, this construction would be illicit under the assumption of the *wh*-criterion as the clause would involve two phrases (the *wh*-expression and the particle) and hence lack a head to enter spec-head agreement with the *wh*-phrase. Furthermore, there would be no straightforward explanation for why verb

¹⁸ In this respect, Poletto (2000:74f.) comments: “[...] the incompatibility between *pa* and the complementizer is probably due to a mismatch of features between the two elements – *pa* is a sort of adverbial, and the complementizer is a nominal element. The Spec-head agreement relation, which is the only way to circumvent the doubly filled Comp filter, must be complete in the sense that all features of the head and specifier must be compatible.”

movement (subject-verb-inversion) is blocked in *wh-pa*-questions in Fascian Brach/Cazet and Nònes (46c).¹⁹

(46) *wh-pa*-questions in Fascian Brach

- a. Che *pa*?
what PA
'What?'
- b. Che *pa* te magnes?
what PA you eat-2SG
'What are you eating?'
- c. *Che *pa* magnes=te?
what PA eat-2SG=SCL

The third analysis proposed in the literature concerns the particle *po* in Pagotto. Munaro & Poletto (2002, 2003, 2005) analyse the particle *po* in this variety as a syntactic head projecting a particle phrase *PrtP* within a split-C field.

(47) [_{Spec,prt} CP_i [*prt*][t_i]] (Munaro & Poletto 2003:128)

Evidence for the head analysis of *po*, which has first been proposed by Benincà (1995), derives from two main observations: first, as Poletto (2000) argues on the basis of data from Fascian (cf. 45 above), the head analysis of *pa/po* accounts in a straightforward way for the incompatibility of the particle with the complementizer *che* suggesting that both elements compete for the same position, a C head. Further evidence for the head status of the particle is provided by the fact that the particle fulfils Kayne's (1975) tests for cliticness in that it cannot be modified (48a), nor focalised (48b) nor bear contrastive accent.

- (48) a. *Olà vas=to proprio *pa*? (Fascian)
where go-2SG=SCL really PA
- b. *Olà vas=to PA?
where go-2SG=SCL PA (*pa* with stress)
'Where are you going?'

¹⁹ In this case, one would have to assume a null element in the lower C-head, which, however, is not desirable.

As we shall see in section 3.7.2.4 below, the ungrammaticality of *wh-pa*-sequences followed by finite clauses in Gherdëina and Badiot (49b) in contrast to *wh-pa* followed by non-finite clauses (49a) and the facts as to *wh-pa*-questions in Fascian Brach (46) can be accounted for in a straightforward way if we assume that the particle is a syntactic head.

- (49) a. Ciuldì *pa* abiné adum millions de paroles? (Gherdëina)
 why PA collect-INF together millions of words
 ‘Why collect millions of words?’
 b. *Cie *pa* maies ncuei?
 what PA eat-2SG today
 ‘What do you eat today?’

Finally, the head analysis of *pa/po* is in line with a widespread assumption in the grammaticalization literature according to which elements that become functional are turned into syntactic heads rather than into phrases (cf. Roberts & Roussou (1999, 2003) or van Gelderen’s (2004:10) ‘Head Preference or Spec-to-Head Principle’).²⁰

Elaborating more on this I would like to suggest that the whole grammaticalization path of the particle *pa/po* can be linked with the syntactic status of the particle. First, as a lexical element, i.e. as a temporal adverb, *pa/po* was a syntactic phrase. Then, when it grammaticalized evolving into a functional element – that is, first into an illocutive/discourse-functional particle and then into a question particle – *pa/po* was concomitantly turned into a syntactic head. Moreover, in Gherdëina, where the particle developed further into an obligatory element in both *wh*- and *yes/no*-questions, *pa* even seems to have become an affix. Evidence derives from the fact that after verbs ending in a sibilant, the particle appears in a phonologically reduced form, *’a*, indicating the advanced grammaticalization stage of the particle in this variety (50). Given that in all the other contexts, the cluster *s + p* is tolerated, this seems to be an idiosyncratic

²⁰ A head analysis is proposed also for modal particles in German (Coniglio 2006).

morphophonological alternation in the particle (the affix) which is characteristic of affix-base combinations.²¹

- (50) a. Ulà ves=*a*? (Gherdëina)
 where go-2SG =PA
 ‘Where are you going?’
 b. Ulà cumpron=*s=a* n liber?
 where buy-1SG=SCL=PA a book
 ‘Where are we going to buy a book?’

Given that the distributional facts as to *wh-pa*-questions in Badiot parallel those in Gherdëina (cf. section 3.7.2.4), I shall assume that also in Badiot, *pa* is at least on its way to affix-status, although we do not observe the phonological reduction of the particle as in Gherdëina. Figure 3.6 illustrates the grammaticalization path and the development as to the syntactic status of the particle *pa/po*.

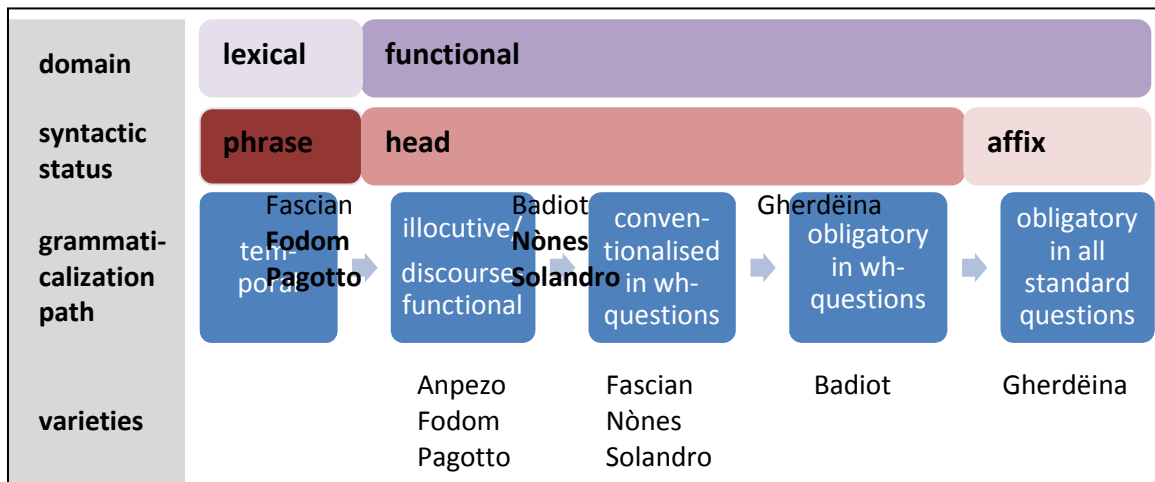


Figure 3.6: Grammaticalization path and syntactic status of the particle *pa/po*

In conclusion, on the basis of the above observations, I will adopt the head analysis for the particle *pa/po* (at least for the varieties Fascian, Nònes and Solandro). Note, however, that given the Head Movement Constraint (cf. Travis 1984), according to which heads move in

²¹ Note that the affix-analysis of the particle *pa* in Gherdëina (and Badiot) has two crucial theoretical consequences: first, if *pa* is an affix, SCI has to be considered a purely morphological process (if we do not want to assume that enclitic subject pronouns can incorporate in the verb form such as in Rocca Pietore (section 1.2.1.3, (16c-c’))). Second, the realisation of *pa* has to be taken as another morphological process of ‘interrogative inflection’ or ‘interrogative mood’ (cf. i.a. Renzi & Vanelli 1983; Fava 1993).

a strictly cyclic way, sentences such as (43a, 49b, 52b) raise the issue of how the subject clitic can get past the particle. I shall assume throughout the present work a feature-based version of ‘Relativized Minimality’ (RM) as proposed by Rizzi (2004b) according to which RM affects only features belonging to the same class, but not features belonging to different classes. Hence, given that the particle *pa/po* and subject clitics are not part of the same class of elements and do not share any syntactic features, they will not affect each other’s movement operations. Consequently, the SCL can occur in a position higher than *pa/po*.

3.7.2 Syntactic positions of the particle in wh-questions

Having affirmed that the particle occupies a head position in the C field, let us now consider in which syntactic positions the particle can occur in the different varieties. In wh-questions, the particle *pa/po* is observed in four different syntactic positions (not all positions are available to the particle in all varieties):

- (51) The syntactic position of the particle *pa/po*
- a. postverbal
 - b. postparticipial (in compound tenses) / postinfinitival (in modal verb constructions)
 - c. directly after the wh-expression (‘wh-*pa/po*-position’)
 - d. clause-final

3.7.2.1 The postverbal position

The postverbal position is the position in which the particle occurs most frequently in interrogatives in all varieties and can hence be considered the ‘default position’. Depending on whether or not an enclitic subject pronoun is realised, the particle occurs directly after the finite verb (52a) or after the enclitic subject pronoun (52b). (52c) shows the phonological reduction of the particle after sibilants in Gherdëina.

- (52) The postverbal position of the particle
- a. Canti soldi gjas *po* enta musina? (Nònes)
 how-much money have-2SG PO in-the purse
 ‘How much money do you have in your purse?’
- b. Tenc de soldi as=te *pa* te mujina? (Fascian Brach)
 how-much of money have-2SG=SCL PA in purse
- c. Can compres’ *a* n liber? (Gherdëina)
 when buy-2SG PA a book
 ‘When do you buy a book?’

3.7.2.2 The postparticipial position

In compound tenses, we find striking variation as to the position of the particle: in most varieties including Gherdëina, Badiot and Fascian, the particle occurs in its default postverbal position, i.e. directly after the auxiliary and the enclitic subject pronoun and before the participle (53a). In Nònes, Solandro and the variety of Fascian spoken in Pera di Fassa, in contrast, the particle appears only after the participle (53b–b’).²²

- (53) a. wh-SCI-*pa/po*-PTCP (Fascian Brach)
 Olà à=le *po* magnà la torta?
 where have-3PL=SCL.F PO eaten the cake
 ‘Where did they eat the cake?’
- b. wh-SCI-PTCP-*po* (Nònes)
 Ndo à=le magnà *po* la polenta?
 where have-3PL=SCL.F eaten PO the polenta
 ‘Where did they eat the polenta?’
- b’. wh-SCI-PTCP-*po*
 Che aon=e fat *po*? (Fascian of Pera di Fassa)
 what have-1PL=SCL done PO
 ‘What did we do?’

The postparticipial position of the particle in Nònes and Pera is striking. According to Cinque’s (1999) hierarchy, past participles occupy low IP-positions and hence the postparticipial position of the particle does not seem to be reconcilable with the proposal that *pa/po* occupies a C-position. This issue will be dealt with in section 5.4.

²² In compound tenses, the particle can also appear between subject-verb-inversion and the participle in Nònes and Solandro, however, this triggers a special interpretation of the wh-question.

3.7.2.3 The postinfinitival position

Similar variation is found in modal verb constructions. Most varieties place the particle in its default position, i.e. after the finite (modal) verb and hence before the infinitive (54a).

In Nònes and Solandro, in contrast, the particle comes only after the infinitive (54b).

- (54) a. wh-SCI-*pa/po*-INF (Fascian)
Can vél=ela **pa** vegnir?
when want-3SG=SCL.F PA come-INF
'When does she want to come?'
- b. wh-SCI-INF-*po* (Nònes)
Can vuel=ela nir **po**?
when want-3SG=SCL.F come-INF PO

It is striking that in compound tenses and modal verb constructions, the particle has become fixed in postverbal position in varieties such as Fascian, whereas it became fixed in postparticipial or postinfinitival position in others. We return to this issue in section 5.4.

3.7.2.4 The 'wh-*pa/po*-position'

The particle can also appear directly after the wh-expression, to which I will refer as the 'wh-*pa/po*-position'. In this case, we need to differentiate between two types of structures:

(a) reduced verbless wh-questions which consist only of the wh-expression and the particle (55) on the one hand and (b) wh-*pa/po*-questions involving some kind of proposition (56) on the other. While the first type is observed in all varieties, the second type is admitted only in some of them. Apart from 'wh-*pa/po* in isolation' (55), Gherdëina and Badiot admit the sequence wh-*pa* only in wh-questions involving a non-finite clause (56a–b vs. c) or with the fixed expression *co pa che* ('how come/why') (56d).²³

- (55) Verbless, reduced wh-*pa/po*-questions (Gherdëina)
a. Ulà **pa**?
where PA
'Where?'

²³ The possibility of wh-*pa* in (56c) seems to be due to the fact that the sentence contains a non-finite verb form which most probably does not raise, or which has different properties with respect to finite verbs.

- b. Can *po*? (Nònes)
 when PO
 'When?'

- (56) wh-*pa/po*-questions involving a proposition
- a. *Ciuldì *pa* mai=el n mëil? (Gherdëina)
 why PA eat-3SG=SCL an apple
 'Why does he it an apple?'
- b. *Ciuldì *pa* l maia n mëil?
 Why PA he eat-3SG an apple
- c. Ciuldì *pa* abiné adum milioni de paroles? (Gherdëina)
 why PA collect-INF together millions of words
 'Why collect millions of words?'
- d. Co *pa* che te ses tan dut?
 how PA that you know-2SG just all
 'How come that you now all this?'

Other varieties admit the sequence wh-*pa/po* also with finite clauses. In Venetian, the particle occurs adjacent to the wh-expression only with the wh-expression *perché* ('why') but not with other question words.

- (57) a. *Dove, *po*, ze=i ndai? (cf. Munaro & Poletto 2002:134, FN 6)
 where PO be-3PL=SCL gone
- b. Parché, *po*, i ze/ze=li ndai via?
 why PO they be-3PL/be-3PL=SCL gone away
 'Why did they leave?'

Nònes also allows wh-*po* in finite clauses but – as it seems – only with a restricted set of wh-expressions such as *parché* ('why') and *ndo* ('where') (cf. also Adami 2008:60; Bertagnolli 2008:31f.).

- (58) a. Parché *po* i puti i va a pè? (Nònes)
 why PO the boys they go-3PL on foot
 'Why are the boys going on foot?'
- b. Ndo *po* i à magnà l formai?
 where PO they have-3PL eaten the cheese
 'Where did they eat the cheese?'
- c. ??Ci *po* zugia?
 who PO play-3SG
 'Who plays?'
- d. ??Cal *po* preferises?
 which-one PO prefer-2SG
 'Which one do you prefer?'

- e. *Come **po** ve clamau?
 how PO REFL call-2PL
 ‘What is your name?’

In Fascian, in contrast, the particle occurs in the *wh-po*-position with all *wh*-expressions alike (59). We will see in the following section that *wh-pa/po*-questions differ from default *wh*-questions featuring the particle in postverbal position in stress properties, semantic interpretation and function: according to my informants, *wh-pa/po*-questions involve major emphasis on the *wh*-expression.²⁴

- (59) a. Olà **po** siede jic stasera? (Fascian)
 where PO be-2PL gone tonight
 ‘WHERE did you go tonight?’
 b. Che **pa** l=à fat la mama?
 what PA SCL=have-3SG done the mother
 ‘WHAT did mother do?’
 c. Chi **po** t=à menà chisc nef orloes?
 who PO to-you=have-3SG sent these new clocks
 ‘WHO sent these new clocks to you?’

On a par with *wh*-fronting languages, also *wh-in-situ*-varieties such as Valle Agordina (60a) or Pagotto (60b) exhibit the particle in the *wh-pa/po*-position. The *wh*-questions in (60) are standard information-seeking *wh*-questions in these *wh-in-situ*-varieties.

- (60) *wh-po in-situ*
 a. áş=tu fat kę **po** (Valle Agordina)
 have-2SG=SCL done what PO (ALD-II)
 ‘What have you done?’
 b. Magni=tu che **po** incoi? (Pagotto)
 eat-2SG=SCL what PO today
 ‘What are you eating today?’

Apart from the variation with respect to the availability of the *wh-pa/po*-position (or the wellformedness of *wh-pa/po*-structures), *wh*-questions featuring *wh-pa/po* also vary with

²⁴ Note that with the *wh*-expression *perché* (‘why’), *wh-po* is the default case. It is commonly observed that ‘why-questions’ exhibit particular properties. ‘Why-questions’ are often considered to be more emphatic and this might justify the presence of an extra element (here: *pa/po*).

regard to their word order properties. Benincà (1995) and Poletto (2000) argue with respect to Fascian that *wh-pa/po*-structures trigger direct word order (SV) and explicitly exclude *wh-pa/po* followed by subject clitic-verb-inversion (SCI).

- (61) *wh-po*-structures and word order (Fascian) (Benincà 1995; Poletto 2000:47)
- a. Olà **pa** tu vas? (= *wh-po*-SVO)
 where PA you go-2SG
 ‘Where are you going?’
- b. *Olà **pa** vas=to? (= *wh-po*-SCI)
 where PA go-2SG=SCL

(61a), where *wh-pa/po* is followed by direct word order (SV) is indeed the syntactic structure observed in the majority of varieties admitting *wh-pa/po*-questions, such as Fascian Brach or Nònes. My fieldwork data show, however, in contrast to (61b), that in the variety of Fascian spoken in Moena, Fascian Moenat, *wh-po* indeed does trigger inverted word order (SCI) (62b).

- (62) Sentence-initial *wh-po* and word order variation in Fascian
- a. *wh-po*-SVO (Fascian Brach)
 Olà **pa** le à magnà angérn?
 where PA they have-3PL eaten yesterday
 ‘Where did they eat yesterday?’
- b. *wh-po*-SCI (Fascian Moenat)
 Olà **po** à=le magnà na torta?
 where PO have-3PL=SCL eaten a cake
 ‘Where did they eat a cake?’

In this connection, it is worthwhile to point out that in some varieties, such as Nònes or Fascian Moenat, the particle can also appear inside a complex *wh*-constituent (63).²⁵

- (63) a. [Con cala **po** de chele iu] l fa l viaz? (Nònes)
 with which-one PO of these over-there he do-3SG the trip
 ‘With which one of them over there is he going to do the trip?’
- b. [Co tenč **po** soldi] as=to tel salvadanaio? (Fascian Moenat)
 how much PO money have-2SG=SCL in-the money box
 ‘How much money do you have in the money box?’

²⁵ Accordingly, a possible analysis of the examples in (62) would assume that also there, the particle is internal to the *wh*-expression, but see section 5.4.3.2.

In these cases, the word order properties are those exhibited by regular *wh-po*-questions (cf. 58, 59, 62) in which *po* follows the *wh*-expression: direct word order SV in Nònes (cf. 58) and SCI in Fascian Moenat (cf. 62b). As for Nònes *wh-po*-questions such as (58), the presence of direct word order instead of subject-verb-inversion could be explained by assuming that the particle occupies the C head targeted by the verb in this way blocking SCI. Note that such an analysis does not work out for complex *wh-po*-questions such as (63a): here, the particle is inside the *wh*-constituent and should not prevent the verb from moving. However, we still observe direct word order. Hence, this observation suggests that the sequence *wh-po* does not have a direct influence on word order in the sense that the particle *po* and the verb do not compete for the same syntactic head.²⁶ This finding will directly feed into the analysis of *wh-pa/po*-questions in section 5.4.3.2.

3.7.2.5 The sentence-final position

Finally, in Nònes (64a) the particle may also appear in sentence-final position.²⁷ Given that in this case, according to native speakers, the particle occurs in its temporal meaning ('afterwards, then') I shall assume that we are dealing with an adverb, i.e. a syntactic phrase situated in INFL (on a par with temporal adverbs) and not in C as in the cases addressed in the previous sections. The sentence-final position is also observed in Pagotto (64b), but here the particle does not seem to have temporal meaning.²⁸

²⁶ The observation made here that the particle and the verb do not compete for the same position also provides evidence for the account of *wh-SCI-pa/po*-questions in terms of feature-based 'Relativized Minimality' proposed in section 3.7.2.1.

²⁷ Munaro & Poletto (2003, 2005) mention the sentence-final position of the particle in Pagotto but do not provide a straightforward example showing the particle after an object, for instance; they rather give examples of *po* occurring after a participle such as (i) which, however, do not show whether the particle is indeed sentence-final or "merely" postparticipial as in Nònes (53b) above.

(i) Quando e=li partiti *po*? (Pagotto)
 when be-3PL=SCL leave-PTCP PO (Munaro & Poletto 2005:250)
 'When did they leave?'

²⁸ There is reason to assume that Nònes and Pagotto differ fundamentally as regards sentence-final *po*. I will come back to sentence-final *po* in section 5.4.

- (64) a. Ndo l=arai=te metuda la borsa *po*? (Nònes)
 where it=have-COND.1SG=SCL put-PTCP the handbag PO
 ‘Where could I have put the handbag then?’
- b. Che formai à=la magnà a Roma *po*? (Pagotto)
 which cheese have-3SG=SCL.F eaten in Rome PO
 ‘Which cheese did she eat in Rome?’

3.7.2.6 Preliminary conclusion

We have seen in this section that the particle *pa/po* can appear in five different syntactic positions in wh-questions whose properties and distribution across varieties are shown in table 3.5.

| Syntactic positions of the particle | | Gherdëina | Badiot | Fascian | | Nònes |
|-------------------------------------|--------------------------------------|-----------|--------|---------------|--------|-------|
| | | | | Cazet / Brach | Moenat | |
| postverbal (default) | | x | x | x | x | x |
| compound tenses | postverbal | x | x | x | x | |
| | postparticipial | | | | | x |
| modal verb constructions | postverbal | x | x | x | x | |
| | postinfinitival | | | | | x |
| wh- <i>pa/po</i> -position | wh- <i>pa/po</i> in isolation | x | x | x | x | x |
| | wh- <i>pa/po</i> + non-finite clause | x | x | | | |
| | wh- <i>pa/po</i> -SV | | | x | | x |
| | wh- <i>po</i> -SCI | | | | x | |

Table 3.5: The syntactic positions of the particle *pa/po* in wh-questions across varieties

Moreover, I have linked the grammaticalization path of the particle *pa/po* with its syntactic status arguing that the grammaticalization from a temporal adverb into a question particle has turned *pa/po* from a specifier (syntactic phrase) into a head element and, in the case of Gherdëina (and probably also Badiot), further into an affix.

In the next section, I turn to the semantic interpretation of wh-questions involving the particle *pa/po* (henceforth ‘*pa/po*-questions’).

3.8 The semantics of *pa/po*-questions

In sections 3.4 and 3.5, we have already discussed the different uses and functions of the particle in assertive and interrogative contexts. The issue of the present section is now whether the semantic interpretation of a wh-question containing the particle *pa/po* depends on the position of the particle in the clause.

3.8.1 The semantic interpretation of default wh-questions

The wh-question formation strategy involving the particle *pa/po* in postverbal position represents the unmarked option, the default (65). In these questions, the whole utterance is in focus – a conclusion reached also by Poletto (2000) and Poletto & Zanuttini (2003) – and they can thus be considered neutral focus questions. If *pa* is a focus marker – as Poletto & Zanuttini (2003) assume – the neutral focus reading can be attributed to the fact that *pa/po* comes after the verb triggering in this way focus on the whole clause.

- (65) Che mages=te *pa* anché? (Fascian)
what eat-2SG=SCL PA today
'What are you eating today?'

We have seen before that Nònes differs from the other varieties with respect to the position of the particle in wh-questions involving compound tenses or modal verb constructions.²⁹ This variation, however, does not influence the semantic interpretation of the wh-question in any way. Hence, we can treat these wh-questions as subtypes of the default wh-SCI-*pa/po*-strategy.

²⁹ One might assume that the difference in Nònes regarding the position of the particle in compound tenses and modal verb constructions is due to the fact that in Nònes, past participles and infinitives occupy a different position compared to the other varieties. As the tests in section 5.4.1 show, this is, however, not the case.

3.8.2 Wh-*pa/po*-questions

As shown above in section 3.7.2.4, wh-*pa/po*-questions exhibit variation between the four varieties with respect to the availability of the sequence wh-*pa/po* in wh-questions involving finite and non-finite clauses and with different question words.

In contrast to Gherdëina and Badiot, in Fascian, and to a lesser extent also in Nònes, wh-*pa/po*-questions are used in a regular way but differ from default wh-SCI-*pa/po*-questions in semantic interpretation and function. In Fascian (and in Nònes), wh-*pa/po*-questions are used in two main contexts: (i) in clarification questions and (ii) in special questions, i.e. ‘surprise-disapproval-questions’ (SDQs) along the lines of Obenauer (2004) (cf. section 1.1.3).³⁰ (66b) is a neutral focus wh-question elicited on the basis of the context in (66a).

- (66) a. You are on a holiday with your sister. You ask her to call home to tell your mother that everything is fine:
b. Can *chiames=te pa* la mama? (Fascian Brach)
when call-2SG=SCL PA the mother
‘When are you going to call mother?’

If, however, the two sisters have already talked about the phone call and agreed that they needed to call home, but still need to establish the exact time, a wh-*pa/po*-question is used to ask for clarification, i.e. to ask for more specific information. In this case, the question word is in narrow focus and sentence stress falls on the wh-expression. This focus and stress shift is mirrored by the fact that *pa/po* appears directly after the wh-expression and not in postverbal position.

- (67) a. You are on a holiday with your sister. You have agreed yesterday that your sister would call home to tell your mother that everything is fine, but your sister still has not done it yet. Now you really want an answer from her:
b. Can *pa* te *chiames* la mama? (Fascian Brach)
when PA you call-2SG the mother
‘WHEN are you going to call mother?’

³⁰ The word order differences between Fascian Brach and Moenat in wh-*pa/po*-questions (cf. section 3.7.2.4) do not play a role for the interpretation of the question.

Apart from its function as a clarification question, *wh-pa/po* can also be used as a surprise-disapproval-question (69b) (cf. section 1.1.3).

- (68) a. As everyday you are going to have lunch with Franca. You ask her:
 b. Che magnes=te *pa* anché? (Fascian Brach)
 what eat-2SG=SCL PA today
 ‘What are you eating today?’
- (69) a. Franca tells you that she is eating grasshoppers. You ask her (completely shocked):
 b. CHE *pa* te magnes? (Fascian Brach)
 what PA you eat-2SG
 ‘WHAT are you eating?’

In sum, in contrast to neutral focus *wh-SCI-pa/po*-questions which exhibit main stress on the verb, *wh-pa/po*-questions involve narrow focus on the question word and accordingly, sentence stress shifts onto the *wh*-expression. It seems, thus, that the particle *pa/po* always comes after main stress – i.e. the syntactic position of the particle depends on which constituent receives main stress – suggesting that *pa/po* is a focus particle. We will examine the prosodic differences between neutral focus and narrow focus *wh*-questions in detail in chapter 10.

3.8.3 Wh-cleft constructions

Apart from *wh-pa/po*-questions, Fascian also uses *wh*-cleft constructions such as (70) in contexts requiring narrow focus on the *wh*-expression. In Fascian, *wh-pa/pa*-questions are the predominant strategy to mark narrow focus on the *wh*-expression and cleft constructions are mainly used in subject-questions, while in Nònes, *wh*-cleft constructions represent the main narrow-focus-marking strategy (70b–d). In fact, (70d) is the Nònes equivalent to the Fascian *wh-po*-question in (67).³¹

³¹ For cleft questions such as (70) holds the same as for “normal” *wh-SCI-pa/po*-questions: I account for the fact that raising of the subject clitic is not blocked by the particle *pa/po* in a lower head position by assuming a feature-based version of ‘Relativized Minimality’ (Rizzi 2004b) (cf. section 3.7.1).

- (70) a. Chi é=l *pa* che magna n minestron a Roma? (Fascian)
 who be-3SG=SCL PA COMP eat-3SG a soup in Rome
 ‘Who eats a soup in Rome?’
- b. Ndo é=l *po* che vas? (Nònes)
 where be-3SG=SCL PO COMP go-2SG
 ‘Where are you going?’
- c. Che é=l *po* che i fa a Romen i noni?
 what be-3SG=SCL PO COMP they do-3PL in Romeno the grandfathers
 ‘What do the grandfathers do in Romeno?’
- d. Cant è=l *po* che clames la mama?
 when be-3SG=SCL PO COMP call-2SG the mother
 ‘When are you going to call mother?’

We will see in chapter 10 that although *wh-pa/po*-questions and *wh-cleft* questions both involve narrow focus on the question word, they differ in a striking way with regard to their prosodic characteristics.

3.8.4 Narrow focus marking and the omission of the particle

While Nònes and Fascian use the sequence *wh-pa/po* or *wh-cleft* constructions – and hence syntactic means – to signal narrow focus in clarification questions or SDQs, Gherdëina and Badiot recur to prosodic means for this purpose. Recall that in the latter varieties, the sequence *wh-pa/po* is not admitted in *wh*-questions involving finite clauses and is hence not available as a narrow focus marking strategy.

In Gherdëina and Badiot neutral focus *wh*-questions, the particle *pa* is obligatory and sentence stress falls on the verb. In narrow focus *wh*-questions, in contrast, the particle *pa* is omitted and sentence stress shifts to the *wh*-expression.³² Consider the differences between (71) and (72) in Gherdëina. If in a situation such as in (71a), the speaker wants to know which means of transportation Franca’s brother took in order to reach Val Gardena and he has no previous expectations or suspicions about which means Franca’s brother

³² Note that under an affix-analysis of the particle *pa* in Gherdëina and Badiot, we need to assume that these varieties have two kinds of verb paradigms: one for neutral focus questions involving the affix *pa* and a second one for narrow focus questions, which does not involve *pa*.

could have taken, the adequate way to ask for this information is to use a default wh-SCI-*pa*-question (71b).

- (71) a. Franca's brother came to Val Gardena to visit her. You ask her:
 b. Cun cie ie=l *pa* unì? (Gherdëina)
 with what be-3SG=CL PA come-PTCP
 'With what did he come?'

If, however, the speaker does not understand Franca's answer to question (71b) and needs to ask for clarification, the appropriate way to ask is given in (72). The wh-question lacks the particle *pa* but exhibits sentences stress – and narrow focus – on the wh-expression.

- (72) Cun CIE ie=l unì? (Gherdëina)
 with what be-3SG=SCL come-PTCP
 'With WHAT did he come?'

This kind of question is also used if the speaker has some kind of presumption because there is just a restricted set of possible answers (e.g. car and bus) and he wants to know specifically which one of the two possible means Franca's brother took. In addition, wh-questions lacking *pa* and involving narrow focus on the wh-expression can be used as SDQs in contexts of astonishment such as (73), where Franca's answer is completely unexpected, if not impossible.

- (73) a. Franca: My brother came by jumbo jet.
 b. Cun CIE ie=l unì? (Gherdëina)
 with what be-3SG=SCL come-PTCP
 'With what did he come?'

The same opposition between neutral focus and narrow focus wh-questions can be observed in Badiot. The neutral focus wh-SCI-*pa*-question in (74b) is an adequate question if the speaker does not have any previous idea of what kind of books Franca might have sent to her mother. If, however, the speaker already knows that there was a small selection of books of which Franca had considered to give one or some specific items to her mother,

the speaker uses the narrow focus wh-question lacking the particle in (74c). In this case, the purpose of the question is to clarify which specific books Franca has finally chosen to give to her mother.

- (74) a. Franca has brought some books to her mother. You ask:
 b. *Ći libri ti as pa purtè a la uma?* (Badiot)
 which books to-her have-2SG PA brought to the mother
 ‘Which books did you bring to your mother?’
 c. *ĆI libri ti as portè a la uma?*
 which books to-her have-2SG brought to the mother
 ‘WHICH books did you bring to your mother?’

Moreover, in a context such as (75a), the neutral focus wh-question in (75b) is a true request for information whereas the narrow focus wh-question lacking the particle in (76b) is used as an SDQ expressing astonishment about Franca’s answer that she had grasshoppers for dinner at her aunt’s (76a) or as an echo-question.

- (75) a. Franca was invited to dinner at her aunt’s. You want to know what Franca had for dinner.
 b. *Ći as=te pa mangè?* (Badiot)
 what have-2SG=SCL PA eaten
 ‘What did you eat?’
- (76) a. Franca tells you that she had grasshoppers for dinner at her aunt’s. You ask her (completely shocked):
 b. *ĆI as=te mangè?*
 what have-2SG=SCL eaten
 ‘WHAT did you eat?’

3.9 Conclusion

We have seen in this chapter that the particle *pa/po* occurs in numerous varieties spoken in northern Italy (cf. section 3.1). Deriving from the Latin temporal adverb POST (3.2) it has developed various meanings and functions (3.3–3.4) and undergone a grammaticalization process from a temporal adverb via a discourse-functional particle into an obligatory

functional element in questions. As to the fact that the particle has become obligatory in the varieties Gherdëina and Badiot, I have sketched out a functional approach but a purely functional account has not proved to be completely satisfactory (3.5). In fact, the grammaticalization of *pa/po* seems to be subject to a variety of intertwined factors such as the nature of the wh-expression with which it occurs (3.4.2), the existence and use of enclitic subject pronouns (3.5.2), the V2-property (3.5.1), structural and functional ambiguities (3.5.1, 3.5.2).³³

By comparing *pa/po* to the German modal particle *denn* and its Bavarian clitic variant *'n* (3.6), we have noticed that *pa/po* and *denn/'n* have various properties in common suggesting that the evolution undergone by *denn* and *pa/po* from a modal particle into a question marker might be a more general phenomenon.

As regards the syntactic status of the particle, I have considered the various approach put forward in the literature and have argued that the grammaticalization from a temporal adverb into a question particle has turned *pa/po* from a specifier (syntactic phrase) into a syntactic head. In Gherdëina, the particle seems to have evolved further into an affix.

Moreover, I have shown that *pa/po* occurs in several syntactic positions in wh-questions and that in some cases, the semantic interpretation of a wh-question depends on the syntactic position of the particle (3.8). Standard wh-questions involve neutral focus and the particle in its default postverbal position (wh-SCI-*pa/po*).

Clarification questions or SDQs, in contrast, involve narrow focus on the wh-expression and are construed in different ways depending on the variety. In Fascian, the most frequent narrow focus wh-question formation strategy exhibits the particle *pa/po* in the ‘wh-*pa/po*-position’. In Nònes, this strategy is also possible, but to a lesser extent and only with a restricted set of wh-expressions. Nònes rather uses wh-cleft questions in which the wh-expression is embedded into a copula construction. In Gherdëina and Badiot narrow focus

³³ The linear development schematised in table 3.4 is hence intended only as an approximation.

wh-questions, finally, the particle *pa* – which is obligatory in standard wh-questions – is lacking and narrow focus on the wh-expression is signalled by the prosody only, i.e. by main stress on the question word.

In sum, the hypothesis we can build on the discussion up to now is that the particle *pa/po* attaches to main stress. We will check this hypothesis on the basis of the prosodic characteristics of neutral focus and narrow focus wh-questions in detail in chapter 10.

As regards the issue of whether the particle *pa/po* should be considered an interrogative clause typing element, we have found much evidence pointing in this direction. The obligatoriness of the particle in Gherdëina and Badiot standard wh-questions and Gherdëina standard yes/no-questions is the most convincing evidence that the particle is indeed a question marker. The main counterargument with respect to this hypothesis, however, resides in the fact that the particle occurs also in assertive clause types such as statements or imperatives. What we can say for sure is that the particle is involved in focus marking given that all varieties show an interdependency between the focus properties of the wh-question and the use or syntactic position of the particle. We will have to await the prosodic analysis in chapters 8–10 to give a definite answer to this issue. Table 3.6 summarises the facts as to the syntax and semantics of *pa/po*-questions.

| Type of focus | Semantic interpretation | Syntactic structure | Position of the particle | Position of sentence stress ³⁴ | Varieties |
|---------------|--|----------------------|----------------------------|---|-------------------|
| Neutral focus | standard interpretation, request for information | wh-SCI- <i>pa/po</i> | postverbal | verb | all |
| Narrow focus | clarification question; SDQ | wh- <i>pa/po</i> -SV | wh- <i>pa/po</i> -position | wh-expression | Fascian |
| | | wh-cleft question | postverbal (copula) | (copula) verb | Nònes |
| | | WH-SCI | omitted | wh-expression | Gherdëina, Badiot |

Table 3.6: The syntactic and semantic properties of *pa/po*-questions

³⁴ The position of sentence stress has been determined on the basis of the recordings (cf. methodology section 2.4.2).

Chapter 4

The Framework

The present chapter provides a review of the literature on the left clausal periphery in Italian within the so-called cartographic approach introducing the various proposals that have been made especially with regard to interrogatives. Section 4.1 starts out discussing the analysis of *wh*-questions in generative grammar focusing mainly on Rizzi's (1991/1996) *wh*-criterion and on Cheng's (1991/1997) Clausal Typing Hypothesis as these not only form the cornerstone of generative analyses of constituent questions, but also feed into Rizzi's (1997) proposal concerning a more articulated CP. After that, section 4.2 presents the cartographic approach and traces the developments with regard to the fine structure of the left periphery and the functional projections involved in interrogatives. Building on Poletto's (2002) split-CP-structure for Badiot and integrating Rizzi's (2001) IntP as well as Benincà & Poletto's (2004) proposal that contrastive and new information focus target two distinct functional projections, I set out the specific phrase structure I will adopt for the syntactic analysis to follow in chapters 5 and 6. Moreover, in section 4.3, I introduce Roberts & Roussou's (1999, 2003) formal approach to cross-linguistic parametric variation to which I will refer further on with respect to the grammaticalization of the particle *pa/po*.

4.1 Wh-questions in generative grammar

The main research aim within generative grammar with respect to interrogative clauses is to develop a unified analysis for question formation in the languages of the world accounting for both the differences and the regularities. In the last twenty years, various proposals and principles have been put forward to account (i) for the syntactic phenomena observed in interrogatives and (ii) for how the question meaning of an interrogative clause is achieved. In the following, I review the most important theoretical cornerstones for the analysis of interrogatives, starting with Rizzi's (1991/1996) wh-criterion and Cheng's (1991/1997) Clausal Typing Hypothesis and discussing then the developments within the cartographic approach (section 4.2). These will form the theoretical basis for my analysis of the syntactic variation in Dolomitic Ladin question formation (chapters 5 and 6).

4.1.1 Rizzi's (1991/1996) wh-criterion

Building on the X'-system (Chomsky 1970, Jackendoff 1977), traditional analyses such as Rizzi (1991/1996) assume that both the wh-expression and the finite verb move to CP, involving two types of movement operations: A-movement of the inflected verb from I° (or T°) to C° and A' (A-bar)-movement of the wh-expression to SpecCP.³⁵ In this approach, it is assumed that movement of the wh-expression to SpecCP is motivated by the [wh]-feature sitting on the wh-expression and the requirement for wh-expressions to occur in a syntactic position from where they can gain scope over the whole utterance, i.e. SpecCP.³⁶ There, the wh-expression acts as an operator binding a (silent) variable in the

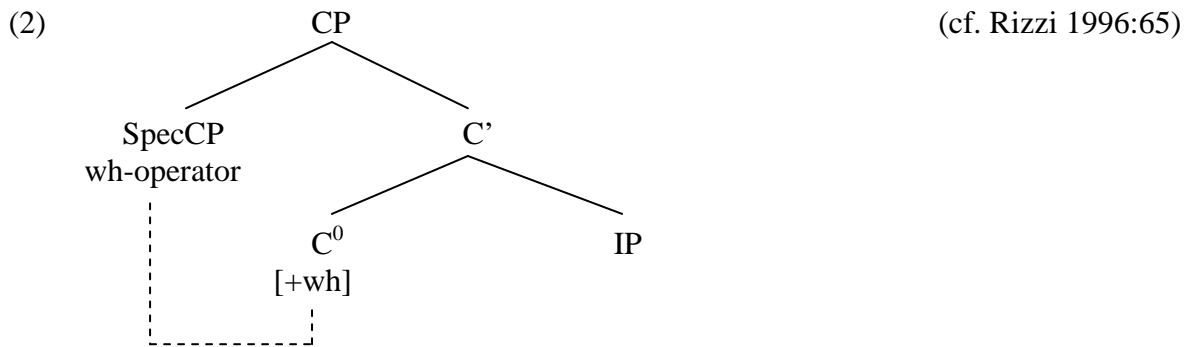
³⁵ While A-movement refers to a movement operation which targets an argument position (e.g. SpecIP), A'-movement refers to movement to a non-argument-position (e.g. SpecCP) (cf. Radford 2006).

³⁶ While the motivation for wh-movement assumed in Rizzi (1991/1996) is based on scope, Chomsky (2008) proposes a technically more specific mechanism along the lines of what he had suggested in his *Extended Projection Principle* (EPP) (cf. Chomsky 1995). The EPP expresses the requirement that every sentence needs to have a subject and it is assumed that the functional head T(ense) in finite clauses bears a strong [EPP]-feature triggering movement of a subject-DP to SpecTP and extending it in this way into a TP-projection. Building on this, Chomsky (2008) assumes for interrogatives that C bears an edge feature [EF]

argument position from which it has been extracted. Movement of the finite verb, in contrast, is attributed to the wh-criterion, in the sense that verb-movement is required to carry the [wh]-feature from I° to C°, as proposed by Rizzi (1991/1996), building on May (1985).

- (1) The wh-criterion (Rizzi 1991:2/1996:64)
- a. A wh-operator must be in a Spec-head configuration with $X^{\circ}_{[+wh]}$.
 - b. An $X^{\circ}_{[+wh]}$ must be in a Spec-head configuration with a wh-operator.

The wh-criterion requires the finite verb (X°) and the wh-expression (wh-operator) to enter a specifier-head configuration as illustrated in (2).



In this way, an agreement relation can be established between the element in the head-position and the element in the specifier-position, triggering the interpretation of the utterance as a question. This mechanism is based on the assumption that the finite verb bears the [wh]-feature and carries it along from I° (or T°) to C° in order to establish the agreement relation with the wh-expression. Evidence in support of the assumption that the finite verb carries the [wh]-feature, according to Rizzi (1991/1996:66), derives from languages exhibiting a “special morphology” in interrogatives, such as the Bantu language Kikuyu (Clements 1984) or the Austronesian languages Chamorro (Chung 1982) and Palauan (Georgopoulos 1985, 1991).

requiring it to be extended into a CP-projection with a specifier position on the edge of CP which hosts the wh-expression.

A final noteworthy aspect of the wh-criterion pertains to the fact that it can be applied to wh-fronting languages such as English or Italian as well as wh-*in-situ* languages such as Chinese and Japanese (cf. Rizzi 1991/1996:65). The difference between the two types of languages is accounted for by assuming that the wh-criterion can apply on two different levels: while in wh-fronting languages, the wh-criterion must be fulfilled at S-structure, in wh-*in-situ* languages, the wh-criterion can be taken to apply at LF. In this case, question operators move at LF to SpecCP satisfying the wh-criterion at this level. Given that the present work is not concerned with wh-*in-situ*-languages, I will not enter into further details here.

We shall see in the following, that under a split-CP-analysis, the wh-criterion – which requires adjacency or a spec-head relation between the wh-expression and the finite verb – is more difficult to maintain when more than one C projections are activated. In this case, one would have to assume, that the C head bearing the [wh]-feature varies across languages as proposed by Poletto (2000:83).

4.1.2 Cheng's (1991/1997) Clausal Typing Hypothesis

Following ideas by Chomsky and Lasnik (1977), Cheng (1991/1997) proposes that a clause must be 'typed' grammatically as declarative, interrogative etc. As regards clause typing of wh-questions, a given language must choose one of two strategies: either a wh-particle located in the head of the highest clausal projection, C° , is used, or else leftward movement of the wh-expression to the specifier position of this projection, SpecCP. Cheng's (1991) proposal, formalised as the 'Clausal Typing Hypothesis' (henceforth CTH), is given in (3).

- (3) Clausal Typing Hypothesis (Cheng 1991:22)
 Every clause needs to be typed. In the case of typing a *wh*-question, either a *wh*-particle in C° is used or else fronting of a *wh*-word to the Spec of C° is used, thereby typing a clause through C° by Spec-head agreement.

These two options for typing a clause as interrogative – i.e. fronting of the *wh*-expression (4a) or the presence of a dedicated question particle (4b) – are instantiated by English and Mandarin, respectively (cf. Cheng 1991:22).

- (4) a. [_{CP} Who_i [_{IP} t_i bought what]]? (English)
 b. Qiaofeng mai-le shenme ne (Mandarin Chinese)
 Qiaofeng buy-ASP what Q_{WH}
 ‘What did Qiaofeng buy?’

In English, the *wh*-expression *who* in (4a) moves to SpecCP in order to type the clause as interrogative. The *wh*-expression *what*, in contrast, remains in-situ (i.e. in the position where it has been base-generated) as the clause is already typed by *who*. In Mandarin Chinese (4b), interrogative clause typing happens via the question particle *ne*, which Cheng (1991) assumes to be a head base-generated in C° , so that the *wh*-expression *shenme* (‘what’) does not need to move but may remain in-situ.

Cheng discusses several generalizations following from the Clausal Typing Hypothesis. The most important one for our present research purposes concerns the relation between *wh*-movement and the use of question particles regarding clause typing of a *wh*-question. Building on the principle of Economy of Derivation (Chomsky 1991) Cheng (1997:28) states the following generalization:

- (5) No language has yes-no particles (and thus *wh*-particles) and also syntactic *wh*-movement.

Hence, it is assumed that in wh-questions, Economy of Derivation rules out movement of the wh-expression where a question particle types a clause as interrogative and excludes languages exhibiting both wh-movement and question particles.

Although exceptions to the Clausal Typing Hypothesis are “typologically rare” (Stevens 2005:50), languages exhibiting both sentence-initial wh-expressions and question particles have indeed been attested, among others Albanian, Basque, Finish, French, Scottish Gaelic, Hebrew, Hungarian, Russian or Tagalog (Ultan 1978, Bruening 2004).³⁷ As we shall see in the following chapters, also the varieties of Dolomitic Ladin (at least Gherdëina and Badiot) provide counterevidence for the generalization in (5), given that they exhibit obligatory wh-fronting and the question particle *pa/po*.³⁸

4.2 The cartographic approach

Up to the middle of the 1980s, each of the clausal layers (predication, proposition, illocution) was assumed to be made of just one single functional projection (VP, IP, CP), but this assumption soon turned out to be too simplistic and more complex structures were proposed. Beginning with Pollock’s (1989) split-INFL hypothesis, all three structural layers have been split up into several functional projections, giving rise to the cartographic research paradigm.

On the basis of a comparative analysis of verb movement in English and French, Pollock (1989) proposed to split INFL into two further projections, Tense (TP) and Agreement (AgrP). Moreover, building on the observation that in languages like French, not only subjects but also objects agree with the verb, AgrP was split further into AgrS (subject

³⁷ Cheng herself accounts for some of these counterexamples by proposing an analysis in terms of pseudoclefts.

³⁸ A possible solution to this problem would be to assume that in languages of this type, Economy of Derivation is overruled by some other requirement that has to be fulfilled.

agreement) and AgrO (object agreement) (Kayne 1989, Chomsky 1991, Belletti 2001). As to the verb phrase, Larson (1988, 1990) and Hale & Kayser (1991) suggested a VP-shell-analysis, splitting up VP into a functional vP and a lexical VP. Finally, Rizzi (1997) argued on the basis of evidence which we shall see in more detail in section 4.2.1 for an articulated CP-structure.

These influential pieces of research have given rise to a research paradigm within generative grammar which has become known as the ‘cartographic approach’ (cf. Pollock 1989; Rizzi 1997, 2004; Cinque 1999, 2006; Belletti 2004; Benincà & Poletto 2004). The basic assumption of this approach is that all languages share a uniform make-up of the clause structure involving a universal hierarchy of functional projections relevant for interpretation. Evidence for the existence of these distinct functional projections derives from two kinds of observations: first, several typical CP elements such as wh-expressions, topicalised elements, focalised elements etc. can appear together and second, many languages exhibit markers for these categories such as dedicated question or focus particles, special verb morphology etc. The co-occurrence of typical CP elements suggests that there is more than just one position available in the C domain and many approaches have been put forward to account for these facts, *inter alia* CP-recursion, adjunction to SpecCP or multiple specifiers. However, these theories cannot account for the observation that the functional elements in the CP layer appear in a fixed order and that they are subject to several positional and interpretational constraints.

In the light of this situation, the cartographic approach seeks to map the fine structure of the left periphery of the clause by examining the respective orderings of the functional projections and their syntactic and semantic properties. Cross-linguistic variation, in contrast, is captured in this framework by the assumption that languages differ with respect to which projections in the universal make-up of the clause structure are overtly realised, and hence ultimately in the lexical properties of linguistic elements such as wh-expressions

etc. (cf. Cinque 2006). It is assumed that the activation of a given functional projection and hence of the corresponding interpretation is achieved via movement of the inflected verb through or into the head-position of the relevant phrase. More recent minimalist work, though, proposes that the inflected verb checks the relevant feature(s) in this head position, thereby triggering the corresponding interpretation.

One of the major criticisms brought forward against the cartographic approach pertains to the vast abundance of functional projections it postulates thereby creating highly complex structures. In the present work, I follow the cartographic approach but at the same time aim at keeping the CP-structure simple and shall refrain as far as possible from the postulation of additional functional projections.

The cartographic approach has resulted in a range of different proposals concerning the architecture of the left periphery, including Rizzi (1997, 2001) (sections 4.2.1–4.2.2), Poletto (2000, 2002) (4.2.3, 4.2.5), Benincà (2001) (4.2.4) or Benincà & Poletto (2004) (4.2.6). In the following sections, I address the most important insights of these studies regarding the cartographic analysis of interrogatives and present then the split-CP-structure assumed in the present work (4.2.7).

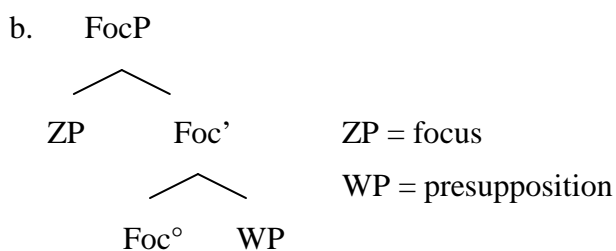
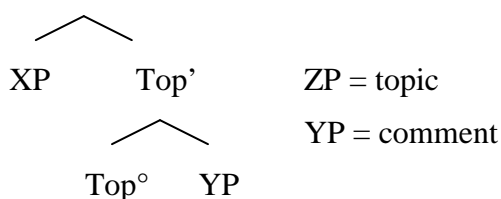
4.2.1 Rizzi's (1997) split-CP system

In his influential 1997 article, Rizzi proposes an articulated C field breaking down the complementizer phrase into four distinct projections, ForceP, FocP, TopP and FinP.³⁹ This seminal work, which marks the beginning of research into the fine structure of the left periphery of the clause, examines elements typical of the complementizer domain such as *wh*-expressions, relative pronouns, topicalised and focalised elements and determines the relative order of these elements in the split-CP structure.

³⁹ Note that TopP is recursive and can appear higher and lower than FocP (cf. 7).

The complementizer level is generally considered as an interface in two respects (cf. Rizzi 1997; Benincà 2001): on the one hand, it connects the propositional content expressed in IP and VP “outwards” with the supra-ordinate structure, i.e. a governing clause or the discourse. This aspect of CP, which determines the clause type, its pragmatic values and its selection from a governing verb is assumed to be encoded in the highest CP projection, ForceP. On the other hand, the CP also encodes an “inward” relation with IP, as suggested by the distribution of complementizers and the finiteness of inflection. The functional projection determining this relation is assumed to be the lowest CP projection, FinP. Hence, in Rizzi’s (1997) system, the functional heads Force (Force°) and Finiteness (Fin°) close off the complementizer system upwards and downwards, respectively. In between Force and Fin, Rizzi proposes two further functional heads, Top and Foc, which project phrases hosting the Topic/Comment and the Focus/Presupposition articulations. In the former, the topic phrase is in SpecTopP and the comment is taken as the complement of Top° (6a), while in the latter, the focused element is in SpecFocP and the presupposition is the complement of Foc° (6b).

(6) a. TopP (Rizzi 1997:286f.)



These two articulations are activated according to Rizzi's *criteria* theory which posits that movement operations are triggered to satisfy certain criteria in line with what we have seen in section 4.1 with respect to the [wh]-criterion. If a constituent bearing the [Top]- or the [Foc]-feature moves to the specifier position of the corresponding projection in order to satisfy the [Top]- or [Foc]-criterion, this constituent enters a spec-head relation with Top° or Foc°, thereby activating the articulation and the semantic interpretation connected with it.⁴⁰ Rizzi's (1997) overall split-CP-structure is articulated as follows:

(7) Force (Top*) Foc (Top*) Fin IP (Rizzi 1997:288)

On the basis of the observation that wh-expressions are incompatible with focalised constituents (8), Rizzi (1997:298) claims that wh-expressions move to SpecFocP. This suggestion is in line with a widespread but not uncontroversial assumption that wh-expressions are focalised (cf. Gunter 1966; Rochemont 1978; Culicover & Rochemont 1983; Erteschik-Shir 1986 for a critical overview).

(8) a. *A chi IL PREMIO NOBEL dovrebbero dare? (Rizzi 1997:298)
to whom the prize nobel must-COND.3PL give
'To whom THE NOBEL PRIZE should they give?'
b. *IL PREMIO NOBEL a chi dovrebbero dare?
the prize nobel to whom must-COND.3PL give

Although Rizzi's (1997) split-CP-proposal has been very influential and laid the foundations for subsequent work such as Benincà & Poletto (2004), there are nevertheless some problems and inconsistencies in his system.

The first criticism regards Rizzi's assumptions as to the specification of the clause type. Rizzi (1997:283) assumes that the clause type (declarative, interrogative, relative, exclamative etc.) is specified in ForceP, the highest CP projection.

⁴⁰ Note that in Rizzi's (1997) theory, left dislocated elements are topics and hence located in SpecTopP.

Complementizers express the fact that a sentence is a question, a declarative, an exclamative, a relative, a comparative, an adverbial of a certain kind etc., and can be selected as such by a higher selector. This information is sometimes called the clausal type (Cheng 1991), or the specification of Force (Chomsky 1995).

On the basis of the distribution and the relative order of different CP elements Rizzi (1997) locates relative operators in the highest specifier position of the C-system, SpecForceP, while he locates wh-expressions in SpecFocP – given that they compete for this position with focalised constituents. This assumption, however, is inconsistent with the clause-determining function he attributes to the Force projection. If Force indeed specifies the clause type – as Rizzi (1997) claims – the wh-expression should be located in SpecForceP rather than in SpecFocP.⁴¹

A second problem concerns Rizzi's criteria theory. Extending his assumptions regarding the wh-criterion (Rizzi 1991/1996) (4.1) to the other functional projections in the CP layer, Rizzi (1997) assumes that movement into the left periphery takes place in order to satisfy certain criteria. A given criterion requires an operator and a head endowed with the corresponding feature to enter a spec-head configuration. This triggers I-to-C-movement as the head must carry the feature from a lower position, in which it is base-generated (T° in the case of the [wh]-feature), to C in order to satisfy the criterion.

In the case of wh-questions, for instance, this theory predicts that the wh-expression and the head endowed with the [wh]-feature, i.e. the finite verb, always end up in a spec-head configuration and are structurally adjacent at spell-out. However, it can be shown that this is in fact not always the case and the structural adjacency at spell-out does not hold in all cases for other criteria as well. As to the relative position of topic and focus elements in the articulated C-system, for instance, Rizzi (1997) observes that several topic elements can intervene between the focus phrase QUESTO ('this') and the finite verb *dovremmo* ('we

⁴¹ Otherwise, one would have to postulate some sort of chain-relation between SpecForceP and the spelled-out wh-expression in SpecFocP.

should') (9) (Rizzi 1997:295f). Although verb movement to satisfy the structural adjacency required by the [Foc]-criterion has not occurred, the sentences are grammatical.

- (9) a. Credo che a Gianni, QUESTO, domani, gli dovremmo dire.
 believe-1SG that to Gianni, THIS tomorrow to-him must-COND.1PL tell-INF
 C Top Foc Top IP
- b. Credo che domani, QUESTO, a Gianni, gli dovremmo dire.
 C Top Foc Top IP
- c. Credo che domani, a Gianni, QUESTO gli dovremmo dire.
 C Top Top Foc IP
- d. Credo che a Gianni, domani, QUESTO gli dovremmo dire.
 C Top Top Foc IP
- e. Credo che QUESTO, a Gianni, domani, gli dovremmo dire.
 C Foc Top Top IP
- f. Credo che QUESTO, domani, a Gianni, gli dovremmo dire.
 C Foc Top Top IP

Rizzi (1997) tries to account for this by postulating (at least for Italian) that the Foc head is inherently endowed with the [Foc]-feature, i.e. the [Foc]-feature is base-generated in Foc^o, and that for this reason, no verb-movement to C is required. This analysis is inconsistent given that first Rizzi (1997) extends the mechanism proposed for the wh-criterion (triggering verb-movement to satisfy the spec-head configuration) to the other CP projections but then makes particular assumptions regarding the focus phrase.

Moreover, Rizzi (1997) proposes that both focalised constituents and wh-expressions move to SpecFocP. This raises the question, then, why the one feature ([wh]) should be base-generated in T^o and carried to C by verb-movement, while the other feature ([foc]) is already inherent to the corresponding C head. Given the variation between languages as to the position of features such as [foc] in Rizzi's (1997) theory, it is unclear where the criteria postulated really are located. As we shall see below, the option of having projections inherently endowed with features plays a decisive role also in Rizzi's subsequent work.

4.2.2 The position Int(errogative) (Rizzi 2001)

In a later paper, Rizzi (2001) reviews his original CP-structure in Rizzi (1997), arguing for a position Int(errogative) within the C domain, which he inserts in the previously proposed sequence of functional projections in the following way:

(10) Force (Top*) **Int** (Top*) Foc (Top*) Fin IP (Rizzi 2001:289)

Rizzi provides two main pieces of evidence for the position Int: first, the element introducing embedded yes/no-questions in Italian, *se* ('if'), can be preceded and followed by a topic (11), whereas the declarative complementizer *che* (which is assumed to be in Force^o) can only be followed by a topic (12) (Rizzi 2001:289).

- (11) a. Non so **se, a Gianni**, avrebbero potuto dir=gli la verità.
not know-1SG if to Gianni have-COND.3PL can-PTCP say=him the truth
'I don't know if to Gianni, they could have said the truth.'
b. Non so, **a Gianni, se** avrebbero potuto dir=gli la verità.
not know-1SG to Gianni if have-COND.3PL can-PTCP say=him the truth
- (12) a. Credo **che, a Gianni**, avrebbero dovuto dir=gli la verità.
believe-1SG that to Gianni, have-COND.3PL must-PTCP say=him the truth
'I believe that to Gianni, they should have said the truth to him.'
b. *Credo, **a Gianni, che** avrebbero dovuto dir=gli la verità.
believe-1SG to Gianni that have-COND.3PL must-PTCP say=him the truth

Rizzi (2001:289) concludes from this distribution that "*se* occupies a position distinct from, and lower than, the one occupied by *che*, a position which is necessarily higher than Foc, but can be preceded by a topic".⁴²

⁴² Further evidence for the claim that the position Int(errogative) has to be distinct from, and lower than, Force comes from Spanish, where in some embedded questions the Force head is expressed in cooccurrence with Int, as shown by the sequence *que si* ('that if') in this fixed order (Rizzi 2001:290).

(i) Maria decia / preguntaba que si no debiéramos dejarlas en paz [...]. (Rizzi 2001:290)
'Maria was saying / asking that if we shouldn't leave them in peace [...].'

Second, Rizzi (2001:292f.) observes that in Italian, a small class of wh-elements including *perché* ('why') and *come mai* ('how come') behave differently from ordinary wh-operators in that they do not require inversion as shown by the contrast between (13) and (14).

- (13) a. Che cosa ha fatto Gianni? (Rizzi 2001:292)
 what thing have-3SG done Gianni
 'What did Gianni do?'
 a'. *Che cosa Gianni ha fatto?
 what thing Gianni have-3SG done
 b. Dove è andato Gianni?
 where be-3SG gone Gianni
 'Where did Gianni go?'
 b'. *Dove Gianni è andato?
 where Gianni be-3SG gone
- (14) a. Perché Gianni è venuto? (Rizzi 2001:293)
 why Gianni be-3SG come
 'Why did Gianni come?'
 b. Come mai Gianni è partito?
 how come Gianni be-3SG left
 'Why did Gianni leave?'

Rizzi (2001:292f.) accounts for these data by suggesting that wh-operators like *perché* and *come mai* are base-generated in the specifier position of the functional projection IntP. In contrast to other wh-operators, *perché* and *come mai* do not move from a lower position to SpecIntP, but are first merged (in the sense of Chomsky 1998/2000) in this position.⁴³ In this view, Int^o is intrinsically endowed with the [wh]-feature and, under the wh-criterion, no verb movement is needed to carry the [wh]-feature from I to C; whence no subject-verb-inversion applies. Crucially, independent evidence for the assumption that *perché* and *come mai* occupy a position distinct from and higher than ordinary wh-operators derives from the fact that the former can co-occur with focalised constituents (15) whereas the latter cannot (16) (Rizzi 2001:290–294).

⁴³ This holds for one-clause questions, while Rizzi proposes a different derivation for complex interrogatives.

- (15) a. Perché QUESTO avremmo dovuto dir=gli, non qualcos' altro?
 why THIS have-1PL-COND must-PTCP say=him not something else
 'Why THIS we should have said to him, not something else?'
 b. Come mai IL MIO LIBRO gli ha dato, non il tuo?
 how come the my book to-him have-SG given not the your-one
 'How come MY BOOK you gave to him, not yours?'
- (16) a. *A chi QUESTO hanno detto (non qualcos' altro)?
 to whom THIS have-3PL said (not something else)
 'To whom this say said (not something else)?'
 b. *QUESTO a chi hanno detto (non qualcos' altro)?
 THIS to whom have-3PL said (not something else)
 c. *A GIANNI che cosa hanno detto (non a Piero)?
 TO GIANNI what thing have-3PL said (not to Piero)
 d. *Che cosa A GIANNI hanno detto (non a Piero)?
 what thing TO GIANNI have-3PL said (not to Piero)

In sum, in the light of the different distributional properties of wh-expressions, Rizzi claims that ordinary wh-operators like *chi* ('who') or *che cosa* ('what') move from their first merge position to SpecFocP, thus competing with focalised elements, whereas 'special' wh-elements like *perché* and *come mai* are base-generated (first merged) in SpecIntP.

I will show in section 4.2.7 below, that the special properties of *perché*-questions in many varieties spoken in northern Italy provide further evidence for a position Int with the properties proposed by Rizzi (2001).

4.2.3 Poletto (2000)

Poletto (2000:chapter 3) provides an analysis of interrogative structures in Northern Italian dialects arguing that all of these dialects share the same set of functional projections. She accounts for the dialectal variation as to question formation strategies such as subject-clitic-verb-inversion (SCI), wh-*che*, etc. by splitting the interrogative portion of the CP into four distinct functional projections (CP₁, CP₂, CP₃/AgrCP and CP₄), of which a maximum of three projections can be simultaneously activated in a wh-question. Her evidence for these four different projections comes from (i) the different morphemes occupying the

head position of the individual projections, which can be the complementizer *che*, the verb, a focus marker etc.; (ii) the interpretative differences of wh-questions triggered by the activation of the different projections and (iii) different positional properties of weak and strong wh-expressions.

Poletto claims that the wh-expressions move to the specifier positions of different projections depending on the interpretation of the wh-question that has to be achieved. While the highest CP (CP1) encodes “modal interrogatives” (questions which “convey a modal meaning of possibility and can be translated with a modal verb”, e.g. ‘What could he have done in such a situation?’ (Poletto 2000:70)), the projection immediately below (CP2), which hosts deictic subject clitics, triggers a “surprise” interpretation. AgrCP (CP3), which is the landing site of V-to-C-movement, is activated when the wh-question is a true request for information, i.e. an ‘out-of-the-blue’-question. The lowest CP (CP4), finally, which hosts the complementizer *che* or the interrogative morpheme *lo* in its head and question particles such as *pa/po* in its specifier, triggers a rhetorical interpretation. The fine structure of Poletto’s (2000:170) “interrogative field” within CP is shown in (17).

(17) [_{CP1} *che* [_{CP2} deictic subject clitic [_{CP3/AgrCP} SCI [_{CP4} [_{SpecC4} *pa*] [_{C°4} *ch/lo*]]]]]

For our current research purposes, the crucial facts of Poletto’s (2000) analysis are the following: the complementizer *che* and the particle *pa* are assumed to be located in fixed positions, with the particle located in the specifier position of the lowest CP projection, whose head can host the complementizer *che*.⁴⁴ Subject clitic-verb-inversion (SCI) is assumed to target a higher projection than the particle *pa/po* accounting for the fact that the particle occurs after SCI. Standard wh-questions in the sense of true requests for information involve the projection AgrCP (CP3).

⁴⁴ There is a second position for the complementizer in the highest CP-projection (CP1) but this is not the crucial one for Dolomitic Ladin interrogatives.

In subsequent work, Poletto (2002) makes further refinements to the split-CP-structure. Before we can address Poletto's (2002) proposal, though, we need to look at Benincà's (2001) modification to the topic/focus field, on which Poletto (2002) is based.

4.2.4 Benincà's (2001) split-CP system

Building on Rizzi's (1997) split-CP structure, Benincà (2001) makes three main modifications to it with respect to the topic/focus portion of the structure:

First, she argues – contra Rizzi (1997) – that there is no topic position lower than focus, given that a focus constituent cannot precede a topic (18a), while the opposite order is fine (18b). She concludes from this distribution that all left dislocated elements must be located higher than focalised ones.⁴⁵

- (18) The relative position of topic and focus (Benincà 2001:57)
- a. *A GIANNI, un libro di poesie, lo regalerete.
to Gianni a book of poems it give-FUT.2PL
 - b. Un libro di poesie, A GIANNI, lo regalerete.
a book of poems to Gianni it give-FUT.2PL
'You will give a book of poems TO GIANNI.'

Second, she distinguishes between Hanging Topics (henceforth HT) on the one hand and Left Dislocation (henceforth LD) on the other based on the differences displayed in table 4.1 (cf. also Cinque 1983, Benincà 1988):

| Diagnostic | Hanging Topic | Left Dislocation |
|-------------------------------------|---------------------------------------|--|
| element on the left | just a DP, without any preposition | the entire argument, including any preposition |
| use of resumptive pronoun | obligatory in all cases | obligatory only with direct and partitive objects; optional in other cases |
| agreement of the resumptive pronoun | in number and gender, but not in case | in gender, number and case |
| iteration | not possible | possible |

Table 4.1: Hanging Topic vs. Left dislocation (cf. Benincà 2001:43f.)

⁴⁵ Note, however, that according to Rizzi (1997), in contrast, the ordering Focus > Topic is fine (cf. 9e).

Benincà (2001) claims that HT is higher than LD and provides evidence for this proposal from two observations: first, HT precedes LD whereas the opposite order is not possible (*idem*:8) and second, in embedded clauses, HT precedes the complementizer *che*, whereas LD follows it (*idem*:16f.). In Benincà's structure, HT is located in what she calls 'Disc(ourse)P(hrase)' while LD targets a lower position, TopP.

| | | | | | | |
|------|-------|-----------------|-------|-------|--------------------------|-------------------|
| (19) | DiscP | ForceP | TopP | FocP | FinP | (Benincà 2001:62) |
| | HT | sub. <i>che</i> | LD | wh | interr./excl. <i>che</i> | |
| | | | topic | focus | | |

Let us now consider Poletto's (2002) analysis.

4.2.5 Poletto's (2002) split-CP system

Building on Benincà's (2001) structure, Poletto (2002), on the basis of evidence from the V2-variety Badiot, proposes further refinements to the structure. In particular, Poletto (2002) (a) confirms Benincà's (2001) intuition that there is a separate CP projection for scene setting adverbs, (b) claims – contra Rizzi (1997) – that focalised elements and wh-expressions target two different CP projections (Foc and Wh, respectively) and (c) shows that there are several positions for LD elements. She also proposes an account of the restrictions concerning the CP elements in Badiot V3-sentences. In the following, I shall summarise Poletto's main modifications to the split-CP structure but I will not treat her analysis of Badiot V3-clauses in detail here.

Poletto's (2002) first modification to the structure concerns the assumption of a 'scene setting position', a high position occupied by circumstantial and quantificational adverbs such as *doman* ('tomorrow'). Evidence for this position derives from the observation that lower adverbs (i.e. adverbs that are located in the specifiers of the projections targeted by past participle movement, cf. Cinque 1999), according to Poletto (2002:221f.) can only appear in sentence-initial position when they are contrastively focalised (20b), whereas

circumstantial and quantificational adverbs do not necessarily show this kind of contrastive focus interpretation when they are in first position (21). Hence, while lower adverbs need to be contrastively focalised, circumstantial and quantificational adverbs need not; they rather provide background information and ‘set the scene’.

- (20) a. *Trees l feje=l. (Poletto 2002:222)
 always it do-3SG=SCL
 b. TREES l feje=l.
 always it do-3SG=SCL
 ‘He ALWAYS does it.’

- (21) a. Duman n vagn=l **pa** nia.
 tomorrow not come-3SG=SCL PA not
 ‘Tomorrow he is not coming.’
 b. DUMAN n vagn=l **pa** nia.
 tomorrow not come-3SG=SCL PA not
 ‘Not tomorrow [...].’

Moreover, Poletto (2002:225) shows that scene setting adverbs must be distinguished from HT given that in declarative V2-contexts, scene setting adverbs can satisfy the V2-requirement and be located immediately before the verb (22a), while HTs cannot (22b).

- (22) a. Duman ti da=i l liber a Giani. (cf. Poletto 2002:225)
 tomorrow DAT give-1SG=SCL the book to Giani
 ‘Tomorrow I will give the book to Giani.’
 b. *Giani, ti a=i bel dè l liber.
 Giani DAT have-1SG=SCL already given the book
 ‘John, I have already given him the book.’

Further evidence for the exact location of the scene setting position derives from the observation that in Standard Italian, circumstantial adverbs can follow HTs (23a) while the opposite order is not possible (23b–c) (Poletto 2002:225). Hence, the scene setting position must be lower than HT.

- (23) a. Mario, nel 1999, gli hanno dato il premio Nobel.
 Mario in-the 1999 to-him have-3PL given the prize Nobel
 ‘Mario, in 1999, they gave him the Nobel Prize.’

- b. ^{??}Nel 1999, Mario, gli hanno dato il premio Nobel.
 in-the 1999 Mario to-him have-3PL given the prize Nobel
- c. *Sul giornale, Mario, ne hanno parlato malissimo.
 on-the newspaper Mario of-him have-3PL spoken badly

Poletto (2002:226) arrives thus at the following structure:

(24) [Hanging TopicP [Scene setting [Force [Left Dislocation [FocusP [IP]]]]]]

Second, contra Rizzi (1997), she argues for a distinction between the focus position and the position of *wh*-expressions. Her evidence derives from embedded interrogatives, where a focalised element can be combined with a *wh*-expression (Poletto 2002:235f.).

(25) Mi hanno chiesto A GIANNI chi ha portato il
 to-me have-3PL asked to Gianni who have-3SG brought the
 libro non ad Antonio.
 book not to Antonio
 ‘They asked me who brought the book to Gianni, not to Antonio.’

Third, Poletto (2002) assumes several LD positions, which we will see in more detail when considering Benincà & Poletto’s (2004) analysis in the following section 4.2.6. Integrating these modifications, Poletto (2002:237) proposes the following structure for the Dolomitic Ladin variety Badiot:

(26) Split-CP structure for Badiot (Poletto 2002:237)
 [Hanging Topic [Scene setting [Force [LD ... [LD [Focus [WH]]]]]]]

Respecting the chronological order of the publications, the last work we shall address here is Benincà & Poletto (2004). A manuscript version of this article was available already much before so that Poletto (2002) bases some of her analyses on it.

4.2.6 Benincà & Poletto (2004)

Benincà & Poletto (2004) further examine the portion of the CP hosting topic and focus and claim that this portion can be split into two parts: a topic field and a focus field below it.⁴⁶ In contrast to Rizzi (1997), who assumes that topic is recursive, Benincà & Poletto (2004) do not allow recursiveness and instead argue that the topic field contains several distinct topic positions which are characterised by different syntactic and semantic properties. In Benincà & Poletto's (2004) split-CP structure (27), topic is split into frame and thematization. While the frame portion hosts the hanging topic and scene setting elements, thematization embraces left dislocation and a position for list interpretation (LI), which deals with a given set of similar items. On a par with their claim regarding the topic field, Benincà & Poletto (2004) show that also focus is not a single XP but a field embracing several focus projections (cf. Brody 1990 on Hungarian). Two main kinds of foci are identified: contrastive focus, which selects an element of a given set and informational focus, which is not marked for contrastiveness but instead as "relevant information" (cf. also the focus typology in section 1.4.3.1). Informational focus is located in the lowest focus projection, while contrastive focus is higher and constitutes a subfield in itself. According to Benincà & Poletto (2004) there are at least two contrastive focus projections, one of them hosting adverbs or objects and the other one circumstantial and quantificational adverbs. Moreover, they put forward evidence – contra Rizzi (1997, 2001) – that there is no topic position lower than focus.

(27) Benincà & Poletto (2004:71)

[HT [Scene Sett. [LD [LI [[_{CONTR.CP1} adv./obj. [_{CONTR.CP2} circ. adv. [_{INFORM.CP}]]]]]]]]]
| _____ | | _____ | | _____ |
| FRAME | | THEME | | FOCUS |

⁴⁶ Note that Benincà & Poletto's (2004) analysis concentrates on declarative clauses and not on interrogatives.

4.2.7 The split-CP structure assumed in the present work

The split-CP structure I will assume for my analysis of Dolomitic Ladin wh-questions is mainly based on Rizzi (1997, 2001) and Poletto (2002) as well as insights from Benincà & Poletto (2004). I will depart from Poletto's (2002) structure which is not much of a surprise given that it is based on the Dolomitic Ladin variety Badiot. My main modifications to Poletto's (2002) structure concern two aspects: first, I follow Rizzi's (2001) proposal regarding the existence of a position *Int* and provide further evidence for such a position from varieties spoken in northern Italy (section 4.2.7.1). Second, drawing on insight from Benincà & Poletto (2004), I assume two types of focus, new information focus and contrastive focus (4.2.7.2).

4.2.7.1 Evidence for the position *Int* from varieties spoken in northern Italy

It has often been observed that in the varieties spoken in northern Italy, the wh-expression *perché* behaves differently from other wh-operators. This observation could provide evidence for Rizzi's (2001) proposal that *perché* involves a different functional projection, namely *Int*. I shall limit myself to two aspects: first, on a par with Italian (cf. section 4.2.1), the wh-expression *perché* does not trigger inversion in a number of Northern Italian dialects and in some Dolomitic Ladin varieties. As noted by Benincà & Poletto (1997a:7), a lot of the varieties spoken in northern Italy are losing subject-verb-inversion in questions. This holds also for Fascian, where inversion in questions is being substituted by the complementizer *che* and direct word order (cf. chapter 6), but *perché* is the only wh-operator in this variety that triggers direct word order also in the absence of the complementizer *che* (28). Moreover, in Nònes, wh-questions featuring *parché* ('why') always exhibit direct word order (29a). Direct word order is sometimes also observed in questions involving other wh-expressions such as *con c(h)i* ('with whom') (29b) and *par ci* ('for whom') (29c).

- (28) a. *Perché i scolées va a pe?* (Fascian Brach)
 why the pupils go-3PL on foot
 ‘Why are the pupils going on foot?’
 b. **Olà i scolées va a pe?*
 where the pupils go-3PL on foot
 ‘Where are the pupils going on foot?’
 b’. *Olà va=i a pe i scolées?*
 where go-3PL=SCL on foot the pupils
- (29) a. *Parché la Maria mangia a Roma?* (Nònes)
 why the Maria eat-3SG in Rome
 ‘Why does Maria eat in Rome?’
 b. *Con chi Francesca l à magnà la polenta a chjasa?*
 with whom Francesca she have-3SG eaten the polenta at home
 ‘With whom did Francesca eat the polenta at home?’
 b. *Par ci Francesca la laža la lum empyada?*
 for whom Francesca she let-3SG the light switched-on
 ‘For whom does Francesca leave the light switched on?’

The occurrence of direct word order instead of inverted word order in these cases could be accounted for by assuming a position Int(errogative) à la Rizzi (2001) which is intrinsically endowed with the [wh]-feature so that no verb movement – and hence no inversion – is required to carry the [wh]-feature from T° to C°. If Rizzi’s theory is correct, we can hypothesise that wh-expressions such as Fascian *perché* (‘why’) and Nònes *parché* (‘why’) – and maybe also *con chi* (‘with whom’) and *par ci* (‘for whom’) – occupy SpecIntP. We will address this issue in more detail in chapter 5.

The second point concerns the fact that *perché*-questions show a special behaviour as regards the use and syntactic position of the particle *pa/po* in a number of varieties in northern Italy. Two main facts need to be mentioned here: in varieties such as Valle Agordina (30), Falcade (31) and Mellame d’Arsiè, the particle *po* only appears in questions involving *perché* but not with other wh-operators.⁴⁷

⁴⁷ Note, however, that if we assume along the lines of Rizzi (2001) that in these varieties, *perché* is first merged in SpecIntP and that verb movement is not required due to Int° being intrinsically endowed by the [wh]-feature, the fact that inversion applies in these interrogatives is unexpected and needs to be accounted for. Hence, although these data seem to provide further support for Rizzi’s (2001) position Int because of the particular behaviour of the particle *po* at the same time they go against it given that these *po*-questions involve subject-verb-inversion.

- (30) Valle Agordina (ALD-II)
- a. Parké **po** kōnp̄re=tu kēle monáde?
 why PO buy-2SG=SCL this rubbish
 ‘Why do you buy such a junk?’
- b. Kánde kamíne=tu?
 when walk-2SG=SCL
 ‘When are you leaving?’
- (31) Falcade (ASIt)
- a. Parchè **po** magne=o ’n pom?
 why PO eat-2PL=SCL a apple
 ‘Why are you eating and apple?’
- b. Kánde kamíne=t̄o?
 when walk-2SG=SCL
 ‘When are you leaving?’ (ALD-II)

In Nònes, the particle appears predominantly in the wh-*po*-position with *parché* (32a–a’), whereas it normally appears in postverbal position in questions involving other wh-expressions (32b–c’’).

- (32) a. Parché **po** seu nadi a Malé alieri? (Nònes)
 why PO be-2PL gone to Malé yesterday
 ‘Why did you go to Malé yesterday?’
- a’. ^{??}Parché seu nadi **po** a Malé alieri?
 why be-2PL gone PO to Malé yesterday
- b. ^{??}Come **po** ve=clamau?
 how PO REFL=call-2PL
- b’. Come ve=clamau **po**?
 how REFL=call-2PL PO
 ‘What is your name?’
- c. ^{??}Ndo **po** nan?
 where PO go-1PL
- c’. *Ndo **po** nan=te?
 where PO go-1PL=SCL
- c’’. Ndo nan=te **po**?
 where go-1PL=SCL PO
 ‘Where are we going?’

In the light of these facts, we could assume that the particle *pa/po* is in fact the overt realisation of the [wh]-feature in Int^o. We are now left with the issue as to where exactly this position Int is located in an articulated CP-structure.

In Rizzi's (2001) original analysis, Int is located between two topic projections. Such an analysis can be maintained also for Dolomitic Ladin given that in Fascian and (to a lesser extent also in) Nònes, the sequence *wh-po* either precedes (33a) or follows (33b) LD.

- (33) a. Chi *pa* l formai l magna a Roma? (Fascian Brach)
 who PA the cheese it eat-3SG in Rome
 'Who is having cheese in Rome?'
 b. La polenta chi *pa* la magna a Roma? (Fascian Brach)
 the polenta who PO it eat-3SG in Rome
 'Who is having polenta in Rome?'

Hence, I will integrate the position Int in between Poletto's (2002) two LD elements.⁴⁸

- (34) [Hanging Topic [Scene setting [Force [LD **Int** [LD [Focus [WH]]]]]]]

4.2.7.2 Focus elements

The second modification I wish to make to Poletto's (2002) structure regards the treatment and position of focus elements. As discussed in section 4.2.1, Rizzi's (1997, 2001) motivation to locate normal *wh*-expressions in FocP comes from the observation that *wh*-expressions and focused elements are mutually excluded and he concludes from this that the two elements compete for the same position. According to Poletto (2002:235f.), in contrast, *wh*-expressions and focused elements can co-occur (at least in embedded questions), and this is why she assumes two separate positions for these elements: *wh* and Foc, respectively. At first sight, these two approaches are contradicting, yet they can both be maintained given that they obviously refer to different types of focus: while Rizzi's (1997) observation concerns 'new information focus', Poletto's (2002) refers to contrastive

⁴⁸ Benincà & Poletto (2004) argue that the higher LD position hosts left dislocated elements whereas the lower LD position is characterised by a "list interpretation" (LI) (cf. section 4.2.6). In the Fascian data, in contrast, the two sequences *wh-pa/po* – LD (33a) vs. LD – *wh-pa/po* (33b) do not involve a difference in interpretation. We can conclude from this that in Fascian, there is no difference between the two LD elements. From a cartographic perspective, of course, this is not a very desirable assumption and further research on the Fascian left periphery is needed to reach a definite conclusion. On the basis of the present data, however, I have to assume that both LD positions can host the same type of element and for this reason I label both positions "LD" instead of referring to the lower one as "LI".

focus. Hence, I shall assume with Rizzi that (new information) focus and *wh*-expressions indeed compete for the same syntactic position whereas I follow Poletto in assuming that the position of *wh*-expressions (and new information focus elements) is distinct from and lower than contrastive focus elements. Further evidence for such a view comes from Benincà & Poletto (2004), where two distinct positions are proposed for new information and contrastive focus elements. In the light of these insights, I arrive at the structure in (35) as the basis for my analysis in chapters 5 and 6:

(35) [HT [SS [Force [LD **Int** [LD [Foc_{contr.} [WH / Foc_{inf.} [Fin]]]]]]]]]

In the following, I review Roberts & Roussou's formal approach to cross-linguistic variation, the background for the account of the grammaticalization of the particle *pa/po* proposed in section 5.1.

4.3 Roberts & Roussou's (1999, 2003) formal approach to cross-linguistic parametric variation

Roberts & Roussou (1999, 2003) address the issue of syntactic change and grammaticalization from a minimalist perspective and develop a formal framework for cross-linguistic variation and change. This work is relevant for the research purposes of the present dissertation in several respects, especially regarding the grammaticalization of the particle *pa/po* and the syntactic change in question formation strategies in Fascian. In the following, I provide an overview of Roberts & Roussou's framework discussing in particular (i) the view of language variation they adopt (section 4.3.1), and (ii) the way in which they formalise grammaticalization (4.3.2).

4.3.1 Language variation

In Roberts & Roussou's framework, all languages are assumed to exhibit the same series of functional categories while cross-linguistic variation is accounted for by assuming that languages differ with respect to whether these categories are realised morphophonologically or not. Following Borer (1984) and Chomsky (1995) in locating language variation in the lexicon, Roberts & Roussou claim that the specification of whether or not a given functional category has a PF-representation is determined in the lexicon of the particular language, i.e. listed in the lexical entries of morphemes.⁴⁹ An asterisk is used to indicate that a given functional feature F requires a PF-realisation (F*) and parameterisation is formally captured by assuming that * is randomly assigned to features associated with functional heads.

- (36) Roberts & Roussou's (2003:29) conception of the lexicon
- a. Lexical items, specified as $\pm V$, $\pm N$, with PF- and LF-properties given
 - b. Substantive universals encoded as interpretable features of functional heads
 - c. * assigned in a language-particular fashion to (b).

Crucially, in this theory, the requirement that a given feature F* gets a PF-representation can be satisfied in two different ways, depending on which option the lexicon of the language in question makes available: *move* (movement of material from a lower syntactic position to a higher one, 'internal merge', Chomsky 2001) or *merge* (insertion of appropriate morphological material from the mental lexicon directly into the syntactic structure, 'external merge'). Against this backdrop, parametric variation is attributed to two dichotomies: (i) whether a given functional feature is realised or not (37a) and (ii) if so, by which syntactic operation this is achieved – by *move* or *merge* (37b).

- (37) a. F* ? Yes/No (Roberts & Roussou 2003:30)
b. If F*, is it satisfied by *move* or *merge*?

⁴⁹ In the standard view of interfaces taken here, 'Phonological Form' (PF) is the interface with the Articulatory-Perceptual and 'Logical Form' (LF) the interface with the Conceptual-Intentional system.

Note that in Roberts & Roussou's (2003:30) theory, there is a third option available for the realisation of a functional feature F^* , i.e. *move/merge*. This case is suggested with respect to syntactic affixes, which trigger both *merge* of morphological material from the lexicon into the syntax and *move* in order to combine it with a stem in accordance with constraints like the stray affix filter.

4.3.2 Grammaticalization

Building on the options in (34), Roberts & Roussou see grammaticalization as a change from the *move* to the *merge* option for the realisation of a functional feature (38), which hence amounts to an "instance of parameter change" (Roberts & Roussou 2003:201).

(38) 'Grammaticalization' in Roberts & Roussou's approach

$$F^*_{move} > F^*_{merge}$$

In technical terms, movement of a lower head to a higher functional head is lost and the original moved lexical item is reanalysed as the exponent of a higher functional head corresponding to the earlier target of movement (2003:198).

(39) $[_{XP} Y + X [_{YP} \dots t_y \dots]] > [_{XP} Y = X [_{YP} \dots Y \dots]]$

This view is in line with the general minimalist assumption that *merge* is more economical (cf. Chomsky 1995) than *move* and consequently always preferred over *move*. Grammaticalization and syntactic change happen when the trigger of a certain parameter setting (i.e. *move* or *merge*) is ambiguous, in formal terms, when there is 'feature syncretism'. The term 'feature syncretism' refers to "the presence of more than one formal feature in a given structural position" (Roberts & Roussou 2003:201). An element realising both the feature [x] and the feature [y] is more complex than an element realising the feature [x] only. Grammaticalization involves 'structural simplification' in the sense of

Longobardi (2001:294), i.e. the new structure contains fewer formal feature syncretisms than the original structure. Note that *move* always involves feature syncretism given that there is one feature licensing the moved element in its original position and another feature triggering movement. *merge* is less complex than *move* given that it only involves the former feature. Hence, Roberts & Roussou's conception of grammaticalization in terms of a change from *move* to *merge* involves structural simplification given that an element realising a certain functional feature is directly merged into the position to which it previously moved from a lower position.

In chapter 5, I exploit the concept of 'structural simplification' with respect to the grammaticalization of the particle *pa/po*. Yet, the conception of it that I will adopt slightly differs from Longobardi's (2001) and Roberts & Roussou's (1999, 2003) original one.

4.4 Conclusion

This chapter was concerned with the syntactic analysis of interrogatives in generative grammar. After having introduced fundamental concepts such as the 'wh-criterion' or the 'Clausal typing hypothesis', I have traced the developments within the cartographic approach with respect to the fine structure of the left periphery in interrogatives beginning with Rizzi (1997) until recent work by Benincà & Poletto (2004). Building on the phrase structure proposed by Poletto (2002) for Badiot and insight from Rizzi (2001) and Benincà (2001), I shall assume the following split-CP structure for the analysis of Dolomitic Ladin interrogatives in chapters 5 and 6.

(40) [HT [SS [Force [LD **Int** [LD [Foc_{contr.} [WH / Foc_{inf.} [Fin]]]]]]]]

Chapter 5

A cartographic analysis of wh-questions involving the particle *pa/po*

5.1 Introduction

The present chapter proposes an analysis of *pa/po*-questions in the four varieties under consideration within the Cartographic approach (cf. chapter 4).

Let us first recall the results from the previous chapters regarding the syntax of the particle *pa/po*. In section 3.7.1, I have argued that the particle *pa/po* must be a syntactic head (X^0) in the C domain. Moreover, the analysis of the syntactic and semantic properties of the particle *pa/po* and the different semantic interpretations related to *pa/po*-questions have shown that we need to distinguish between two main wh-question types with different focus properties: (i) neutral focus wh-questions and (ii) narrow focus wh-questions.

Neutral focus wh-questions with a standard interpretation exhibit *pa/po* in its default (postverbal) position and the particle is obligatory in Gherdëina and Badiot whereas it is conventionalised in Fascian and Nònes.

Narrow focus wh-questions, in contrast, show the particle in the wh-*pa/po*-position and were found to differ regarding word order after the sequence wh-*pa/po*, which can be direct (SV) (Fascian Cazet/Brach, Nònes) or inverted (VS) (Fascian Moenat). Table 5.1 summarises the facts as to neutral and narrow focus *pa/po*-questions.

| Focus properties | Question formation strategy | Use of <i>pa/po</i> |
|------------------|-----------------------------|---------------------|
| Neutral focus | wh-SCI- <i>pa/po</i> | obligatory |
| | wh-SCI- <i>pa/po</i> | conventionalised |
| Narrow focus | wh- <i>pa/po</i> -SV | |
| | wh- <i>pa/po</i> -SCI | |

Table 5.1: *pa/po*-questions and focus properties

These data suggest that the particle *pa/po* indicates the position of focus in the sentence and occurs to the right of the focus-bearing element: when the particle appears in postverbal position, the whole sentence is in focus (neutral focus) and when it appears after the *wh*-expression, the latter is in narrow focus. These findings repeat what has been observed with respect to other languages as well.

According to Ladd (2008:256), in many languages, the location of sentence stress can be seen as analogous to the location of focus particles. These focus particles normally have a neutral or default location but can attach to other locations to convey narrow focus. In Turkish, for instance, the question particle *mi* attaches to the focused element in the yes/no-question in (1); but when there is no special focused word, the particle attaches to the finite verb (2).

- (1) The position of the question particle *mi* in Turkish narrow focus questions (Ladd 2008:226)
- a. Mehmet MI geldi?
Mehmet INTERROG. come-PAST
'Was it MEHMET who came?'
 - b. Buraya uçakla MI geldiniz, vapurla MI?
here-to plane-by INTERROG. come-PAST-2PL steamship-by INTERROG.
'Did you come here by PLANE or by STEAMSHIP?'
- (2) The position of the question particle *mi* in Turkish neutral focus questions (Ladd 2008:225)
- a. Gazete geldi *mi*?
newspaper come-PAST INTERROG.
'Did the newspaper come?'
 - b. Yorgun *musunuz*?
tired INTERROG.-2PL
'Are you tired?'

We will come back to the relation between the position of particles and focus or sentence stress in chapter 10. What matters for the present syntactic analysis of *pa/po*-questions is that the interpretation of the question changes depending on the position for the particle. There are basically two possibilities to capture these semantic differences in the syntactic structure: first, we could assume that the particle *pa/po* occupies a fixed position in the

sentence structure and that the variation observed between wh-SCI-*pa/po*-questions and wh-*pa/po*-questions is due to movement of the other constituents in the clause. A second way of viewing this variation is to assume that the particle can occupy two distinct positions and that the two types of questions target two different functional projections triggering different semantic interpretations. The second approach is more in line with the Cartographic approach while the first approach corresponds better to the minimalist intention of keeping the syntactic structure as simple as possible.

We can now proceed to the syntactic analysis of *pa/po*-questions. In the course of the chapter, we will consider the various question formation strategies involving the particle *pa/po* in different syntactic positions and examine how these various positions can be accounted for.

The chapter is organised as follows: in section 5.2, I propose a formalisation of the grammaticalization process undergone by the particle *pa/po* exploiting the concept of ‘feature syncretism’. After that, in section 5.3, I analyse the default question formation strategy, wh-SCI-*pa/po*, and in section 5.4, I account for the various other syntactic positions of the particle *pa/po*, in particular the wh-*pa/po*-position and the postparticipial position in Nònes. I also claim that the word order variation between Fascian Cazet/Brach and Nònes on the one hand and Fascian Moenat on the other in wh-*pa/po*-questions is due to a strong ‘residual’ V2-property in Moenat. Section 5.5 concludes the chapter summarising the main findings.

5.2 An account of the grammaticalization of the particle *pa/po*

The present section discusses how the grammaticalization of the particle *pa/po* into a question particle can be accounted for in syntactic terms. I shall limit myself to the step from the focus particle into the question particle here. My proposal builds on Rizzi's (1997) claim that *wh*-expressions move to FocP and Longobardi's (2004) and Roberts & Roussou's (1999, 2003) concept of 'feature syncretism'. In line with the grammaticalization cline I have proposed for *pa/po* in chapter 3, I will argue that the particle *pa/po* was originally a Foc element and that it inherited the [wh]-feature in Foc.

In the light of the observation that focused constituents and *wh*-expressions are mutually exclusive, Rizzi (1997) proposes that these two elements compete for the same position, SpecFocP.¹ Under this view, it follows that Foc^o, the landing site for verb-movement, is endowed with two different features, [Foc] and [wh]. In Rizzi's (1997) approach, it is assumed that verb movement from T carries the [wh]-feature to C, i.e. Foc^o which, in Roberts & Roussou's (1999, 2003) terms would amount to saying that *wh** is satisfied by *move*. But there is more to it: the varieties under consideration exhibit enclitic subject pronouns in questions. In Fascian and Nònes, these enclitic pronouns only appear in questions given that these are the only contexts in which inversion applies in these varieties. Hence, in Roberts & Roussou's (1999, 2003) terms, this case could be treated on a par with literary French (chapter 4, table 4.2), namely by saying that *wh** is realised by (a) an enclitic subject pronoun and (b) movement of a verbal basis to which this enclitic pronoun attaches (*wh**_{*move and merge*}).

¹ Poletto (2002) argues against Rizzi (1997) claiming for a distinct position for *wh*-expressions (cf. section 4.2.5). Her claim is based on the observation that *wh*-expressions co-occur with focused elements. However, as I have argued in section 4.2.7.2, the discrepancy between Rizzi (1997) and Poletto (2002) seems to be due to the fact that the two authors talk about two different types of foci: 'new information focus' in the case of Rizzi (1997) and 'contrastive focus' in the case of Poletto (2002).

The crucial point for our discussion about the particle *pa/po*, however, is that the particle sits in a syntactic head which hosts the [foc]-feature and the [wh]-feature at the same time. We have just argued that wh^* is satisfied via verb movement and enclitic subject pronouns, $wh^*_{move\ and\ merge}$, but we still need to say something about the [foc]-feature. In Rizzi's criteria-approach, the interpretation of focus, topic, wh etc. always happens in a spec-head configuration with a head and a specifier bearing the same feature-specification. Hence, as to the [foc]-feature in FocP, we can assume that originally, it was satisfied by *pa/po* in its function as an emphasis marker / focus particle, i.e. in Roberts & Roussou's terms, Foc^*_{merge} . Hence, the Foc° head does not only host verb-movement and the enclitic subject pronoun for $wh^*_{merge\ and\ move}$, but also the focus particle *pa/po* for foc^*_{merge} . I assume that it was in this complex situation in the Foc° head with two different features being satisfied by different mechanisms, that the particle *pa/po* came to inherit the [wh]-feature.

This process might have been encouraged by the fact that the postverbal position after the finite verb and the enclitic subject pronoun is the neutral or default location of the particle *pa/po*. As observed by Ladd (2008:256), in this default location, there is often ambiguity between a broad focus reading (i.e. neutral focus on the whole utterance) and a narrow focus reading (i.e. narrow focus on the verb), which might have led to semantic/pragmatic bleaching of the focus properties of the particle *pa/po*. Figure 5.1 illustrates what the situation in a previous stage of Fascian might have been like. The postverbal position of *pa/po* causes an ambiguity between a reading involving neutral focus on the whole sentence (a) and an alternative reading characterised by narrow focus on the verb (b). I suppose that given this ambiguity, it was often not clear whether the particle triggered the neutral focus or the narrow focus reading. In this situation, the narrow focus properties of *pa/po* might have bleached leaving just the neutral focus reading of the utterance.

- | | |
|---|---|
| <p>a. neutral focus reading</p> <p>Che mages=te pa anché? what eat-2SG=SCL PA today ‘What are you eating today?’</p> | <p>b. narrow focus reading</p> <p>Che mages=te pa anché? what eat-2SG=SCL PA today ‘What are you EATING today?’</p> |
|---|---|

Figure 5.1: Ambiguity between broad focus and narrow focus readings related to the position of the particle *pa/po*

In a situation in which it was not clear any more that the particle served the function to indicate focus, it might have been a little step to associate it with the [wh]-feature and reanalyse it as a question particle. Evidence for this process derives from the following observation: until now, the use of the particle *pa/po* in the varieties Fascian and Nònes is not obligatory but “only” conventionalised (cf. chapter 3). This might be due to the fact that in these varieties, subject-verb-inversion is still the main means of satisfying wh* and *merge* of the particle *pa/po* merely makes a contribution to the interpretation of the utterance as a question.

Moreover, the process assumed here can also account for Fascian Brach and Cazet wh-*po*-questions (cf. chapter 3) which involve the particle *pa/po* in the wh-*po*-position and direct word order instead of SCI and are interpreted as wh-questions with narrow focus on the wh-expression (cf. chapter 3).

- | | |
|---|------------------------|
| <p>(3) Che pa te mages? what PA you eat-2SG ‘WHAT are you eating?’</p> | <p>(Fascian Cazet)</p> |
|---|------------------------|

In wh-*po*-questions, both the focus and the interrogative clause typing properties of the particle become evident. The location of the particle after the wh-expression triggers narrow focus on the question word and, at the same time, prevents SCI, i.e. subject-verb-inversion.

So far, we have considered the varieties Fascian and Nònes, where the use of the particle is conventionalised in wh-questions. We still need to account for the fact that the particle is obligatory in wh-questions in the varieties Gherdëina and Badiot.

In section 3.5, I have sketched out a functional approach to this issue arguing that the particle *pa* became obligatory in Gherdëina and Badiot in order to disambiguate between clause types given that these varieties exhibit the V2-property and subject-verb-inversion does not only apply in wh-questions but also in V2-statements. Due to the polyfunctionality of subject-verb-inversion in these varieties, there is both a structural and a functional ambiguity between V2-statements and wh-questions and the use of the particle *pa* could be seen as a repair strategy for this ambiguity. Under the assumption of a simple C-system (i.e. a pre-split-C-analysis), it is not clear from the surface structure whether V-to-C-movement in these varieties occurs in order to satisfy the wh-criterion (Rizzi 1991/1996, cf. section 4.1.1), or wh* (Roberts & Roussou 1999, 2003) or whether verb movement to C applies for the sake of the V2-constraint which could be translated into a [V2]-feature, or, in Roberts & Roussou's terms, into V2*.

My proposal is now the following: I implement this functional ambiguity by exploiting Longobardi's (2001) and Roberts & Roussou's (1999) concept of 'feature syncretism': under an unsplit-CP-analysis, verb-movement targets a C head which bears a [wh]-feature and a [V2]-feature and hence, it is not clear which one of these features or both is satisfied by verb movement; *move* seems to take place for the sake of both, wh* and V2*.² Apart from that, there is the particle *pa*, which – as we have argued above with respect to Fascian and Nònes – has lost (most of) its emphatic function and hence its specialisation as a focus particle and has become a characteristic trait of interrogatives. In a situation of functional syncretism, where one element (subject-verb-inversion) realises more than one feature ([wh], [V2] and [foc]), “the preferred option is to have a one-to-one mapping between features and lexical items” (Roberts & Roussou 2003:203). Hence, the fact that the particle *pa* became obligatory in Gherdëina and Badiot wh-questions can be attributed to the need

² Alternatively, one could assume that the finite verb carries the [wh]-feature from T° to C°. For the proposal put forward here, it does not matter which approach is adopted.

to resolve this syncretism and achieve a situation in which the [wh]-feature on the one hand and the [V2]-feature on the other, i.e. wh* and V2*, are realised by separate means. We can assume that V2* is realised by verb movement, hence *move*, whereas wh* is realised by *merge* of the particle *pa*. Focus in Gherdëina and Badiot wh-questions, finally, involves omission of the particle *pa* and is a matter of prosody as will be shown in chapter 10. Table 5.2 summarises the claim made as to the grammaticalization of the particle into a question marker.

| | | | |
|---------------|--|--|--|
| Step 1 | originally in all Dolomitic Ladin varieties | <i>pa/po</i> as a focus particle | foc* realised by <i>merge</i> of <i>pa/po</i> |
| Step 2 | conventionalisation of the particle | <i>pa/po</i> loses focus properties (semantic bleaching), acquires wh-properties | foc* realised by <i>merge</i> wh* realised by <i>move</i> and <i>merge</i> |
| Step 3 | obligatorification of the particle <i>pa</i> | <i>pa</i> becomes an obligatory question particle | V2* realised by <i>move</i> wh* realised by <i>merge</i> of <i>pa</i> foc* realised by prosody |

Table 5.2: The grammaticalization of the particle *pa/po*

5.3 The default question formation strategy: wh-SCI-*pa/po*

After having retraced the grammaticalization process of the particle *pa/po* and proposed an implementation of this process in Roberts & Roussou's (1999, 2003) approach, we can now turn to the default question formation strategy involving SCI and *pa/po* in postverbal position. In varieties like Gherdëina and Badiot on the one hand and in Fascian and Nònes on the other, this question formation strategy represents the unmarked case and involves neutral focus. Recall that Gherdëina and Badiot differ from Fascian and Nònes in that the use of the particle is obligatory in the former whereas it is conventionalised in the latter.

Under the assumption of the split-CP structure proposed in chapter 4, the observation that left dislocated elements precede wh-SCI-*pa/po* (6) suggests that wh-SCI-*pa/po* involves a low CP projection.

- (4) [HT [SS [Force [LD **Int** [LD [Foc_{contr.} [WH / Foc_{inf.} [Fin]]]]]]]]
- (5) a. I neni, co va=i **pa** a La Ila? (Badiot)
 the grandfathers how go-3PL=SCL PA to La Ila
 ‘How do the grandfathers get to La Ila?’
- b. La polenta, chi la magne=lo **po** a Roma? (Fascian Moenat)
 the polenta who it eat-3SG=SCL PO in Rome
 ‘The polenta, who eats it in Rome?’

This corresponds to Poletto’s (2002) and Poletto & Zanuttini’s (2003) analyses, which locate the particle in a low C-position. Note, however, that these papers propose a phrase-analysis of the particle, whereas we have shown in section 3.7, that the particle *pa/po* should be better analysed in terms of a syntactic head. We are now left with the task to determine which low CP projection is targeted by *wh-SCI-pa/po*.

Given that *wh-SCI-pa/po* is the default question formation strategy, it is straightforward to assume that it targets the position usually associated to neutral focus *wh*-questions with a standard interpretation: FocP in Rizzi’s (1997, 2001) account and *whP* in Poletto’s (2000) approach (cf. section 4.2.5). Given our considerations in section 4.1.10 and the split-CP structure proposed there and repeated in (6), we can assume that *wh-SCI-pa/po* targets the position *wh / Foc_{inf.}*.

- (6) [HT [SS [Force [LD **Int** [LD [Foc_{contr.} [WH / Foc_{inf.} [Fin]]]]]]]]
 ↑
wh-SCI-pa/po

The analysis in (6) can apply to all varieties under consideration here – irrespective of whether the particle is obligatory or conventionalised. Yet, the situation with regard to neutral focus *wh*-questions involving compound tenses is more complex given that in some varieties, the particle appears in its default position after *SCI* whereas in other varieties, it only occurs in postparticipial position. The following section seeks to account for this variation.

5.4 An account of the variation as to the syntactic position of the particle in wh-questions

In the following, I account for the various positions of the particle *pa/po* in wh-questions. Recall, that the particle *pa/po* appears in four main positions: (i) postverbal, (ii) in the wh-*pa/po*-position, (iii) postparticipial and (iv) sentence-final.

Let us first examine the variation between the postverbal and the postparticipial positions in wh-questions involving compound tenses. We have seen in chapter 3 that in Gherdëina, Badiot and Fascian and in most other varieties in northern Italy, the particle *pa/po* appears in its default (postverbal) position, in this case more specifically after the auxiliary and before the participle (7a), while in Nònes (and Solandro), the particle occurs in postparticipial position (7b). The examples in (7) are repeated here from chapter 3, for convenience.

- (7) a. wh-SCI-*po*-PTCP (Fascian Brach)
Olà à=le *po* magnà la torta?
where have-3PL=SCL.F PO eaten the cake
'Where did they eat the cake?'
- b. wh-SCI-PTCP-*po* (Nònes)
Ndo à=le magnà *po* la polenta?
where have-3PL=SCL.F eaten PO the polenta
'Where did they eat the polenta?'

I now discuss three different approaches and examine whether they can account for the variation between the postverbal and the postparticipial position of the particle as well.

The first approach (section 5.4.1) is based on the hypothesis that the difference between (7a) and (7b) is in fact not variation regarding the position of the particle but variation as to the position (or landing site) of the past participle. This hypothesis will be examined referring to Cinque (1999), who proposes a universal hierarchy of functional projections in IP on the basis of the relative position of the verb and different classes of adverbs. Second, I discuss Munaro & Poletto's (2002, 2003, 2005) 'clausal fronting analysis' proposed for

variation in particle placement in Pagotto (5.4.2). Finally, given that *pa/po* shares many properties with German *denn* (cf. 3.7) we will examine whether the analysis of German wh-questions featuring *denn* proposed by Bayer (2012) and Bayer & Obenauer (2010) can account also for the variation as to *pa/po* (5.4.3). The ultimate conclusion I will reach is that a purely syntactic perspective cannot offer a satisfying account of the syntactic variation related to *pa/po*. Rather, the variation regarding the position of the particle seems to be an issue for the prosody-syntax interface.

5.4.1 Participle movement

Consider the variation regarding the position of the particle *pa/po* in wh-questions: as shown on the basis of data in response to *ALD-II* stimulus 207 ('Cosa hai fatto?'), most varieties place the particle after SCI and before the participle (8), whereas in Nònes, Solandro (9) and Pagotto (10), the particle occurs after the participle.

- (8) 'Cosa hai fatto?' (ALD-II, 207)
- | | | | | | |
|----|-----|---------|-----------|------|------------------|
| | wh | V(=SCL) | PO | PTCP | |
| a. | Ce | és' | <i>a</i> | fat? | (Gherdëina) |
| b. | Ci | as=t | <i>pa</i> | fat? | (Badiot) |
| c. | Ci | as=te | <i>pa</i> | fat? | (Marèò) |
| d. | Che | as=to | <i>po</i> | fat? | (Fascian Moenat) |
| e. | Chi | e=t | <i>po</i> | fač? | (Tirano) |
| f. | Che | as | <i>po</i> | fat? | (Cembra) |
- (9) 'Cosa hai fatto?' (ALD-II, 207)
- | | | | | | | |
|----|-----|---------|--|------|-------------|------------|
| | wh | V(=SCL) | | PTCP | PO | |
| a. | Che | as | | fat | <i>po</i> ? | (Nònes) |
| b. | Che | as | | fat | <i>po</i> ? | (Solandro) |
- (10) 'When did they arrive?' (Pagotto)
- | | | | | | | |
|--|--------|------------|--|-------------|-------------|--|
| | Quando | e=li | | rivadi | <i>po</i> ? | |
| | when | be-3PL=SCL | | arrive-PTCP | PO | |

Under the assumption that the particle occupies a fixed position in the sentence structure as claimed by Poletto & Zanuttini (2003), Munaro & Poletto (2003, 2005), Grosz (2005) or

Coniglio (2006), among others, the variation observed could be attributed to movement of the past participle to different functional projections.

(11) Hypothesis:

Varieties in (8) differ from the varieties in (19–10) in the landing site of the past participle.

This hypothesis makes the following prediction: in the varieties with the particle in postparticipial position (Nònes, Solandro, Pagotto), the participle should move to a higher position than in the varieties with the particle in postverbal position (Gherdëina, Badiot, Fascian etc.). In the following, I shall test this hypothesis on the basis of the universal hierarchy of functional projections in IP established by Cinque (1999).

Cinque departs from the assumption that adverbs occupy fixed positions in the sentence structure, i.e. that they are located in the unique specifier position of functional projections whose head positions serve as landing sites for verb (or participle) movement. By determining the relative position of the finite verb with respect to different classes of adverbs in a cross-linguistic survey he proposes a universal hierarchy of functional projections within the IP layer.

| Functional projections in IP | |
|---|--|
| [<i>frankly</i> Mood _{speech act} [<i>fortunately</i> Mood _{evaluative} [<i>allegedly</i> Mood _{evidential} | |
| [<i>probably</i> Mod _{epistemic} [<i>once</i> T(Past) [<i>then</i> T(Future) [<i>perhaps</i> Mood _{irrealis} | |
| [<i>necessarily</i> Mod _{necessity} [<i>possibly</i> Mod _{possibility} [<i>willingly</i> Mod _{volition} | |
| [<i>inevitably</i> Mod _{obligation} [<i>cleverly</i> Mod _{ability/permission} [<i>usually</i> Asp _{habitual} | |
| [<i>again</i> Asp _{repetitive(I)} [<i>often</i> Asp _{frequentative(I)} [<i>quickly</i> Asp _{celerative(I)} [<i>already</i> T(Anterior) | |
| [<i>no longer</i> Asp _{terminative} [<i>still</i> Asp _{continuative} [<i>always</i> Asp _{perfect} | |
| [<i>just</i> Asp _{retrospective} [<i>soon</i> Asp _{proximative} [<i>briefly</i> Asp _{durative} | |
| [<i>characteristically</i> Asp _{generic/progressive} [<i>almost</i> Asp _{prospective} [<i>completely</i> Asp _{SgCompletive(I)} | |
| [<i>tutto</i> Asp _{PlCompletive} [<i>well</i> Voice [<i>fast/early</i> Asp _{celerative(II)} [<i>again</i> Asp _{repetitive(II)} | |
| [<i>often</i> Asp _{frequentative(II)} [<i>completely</i> Asp _{completive(II)} | |

Table 5.3: The universal hierarchy of functional projections (Cinque 1999:106ff.)

The crucial fact for our research purposes is the following: Cinque observes that in various Northern Italian dialects the (active) past participle obligatorily occurs to the left of different classes of adverbs and concludes from this that in these varieties, the past

participle raises to distinct functional heads. Cinque (1999:146) shows that in (Standard) Italian, the active past participle obligatorily raises higher than *tutto* (‘everything’) (and *bene* (‘well’) and *presto* (‘early’)), whereas in Bellunese, the active past participles must even raise higher than *del tut* (‘completely’).

| | | | | | | | |
|--------------------|----------|-------|----------|-----------|-----------------|---------|----------|
| Italian | √ mica | √ già | √ più | √ sempre | √ completamente | √ tutto | * bene * |
| Friulian | √ mingul | √ zà | √ plui | √ simpri | √ completaminti | √ dut | * ben * |
| Venetian | * miga | * già | ?? più | ? sempre | √ del tuto | √ dut | * ben * |
| Bellunese | * mia | * za | * pi | ?? sempre | √ del tut | * tuto | * ben * |
| Piedmontese | * pa | * già | * pi nen | √ sempre | √ dal tüt | √ tüt | * ben * |

Table 5.4: Raising of the active past participle in Italian varieties (Cinque 1999:147)³

In the light of Cinque’s (1999) observations and under the hypothesis stated in (11), we expect to find a difference between the varieties in (8) on the one hand and the varieties in (9–10) on the other with respect to the landing site of the past participle: the past participle should move higher in the varieties in (9–10) than in the varieties in (8) given that in the former, it precedes the particle *pa/po*, whereas in the latter, it follows the particle.

In order to test this hypothesis, I compare in table 5.5 a variety featuring postverbal *pa* (Gherdëina) and a variety with postparticipial *po* (Nònes) regarding the position of the past participles with respect to Cinque’s (1999) ‘lower adverbs’, namely *mica* (‘not even’), *già* (‘already’), *più* (‘not...any more’), *sempre* (‘always’), *tutto* (‘everything’), *bene* (‘well’).

| | | | | | | | |
|------------------|----------|--------|-------|----------|------------------|-------|---------|
| Nònes | * mǐgja | * dza | * pu | * semper | √ daltut | √ tut | √ ben * |
| Gherdëina | * nianca | * bele | * plu | * for | √ cumpletamënter | √ dut | √ bën * |

Table 5.5: Raising of the active past participle in Nònes and Gherdëina

In Nònes, the active past participle raises higher than *ben* (‘well’) but not higher than *semper* (‘always’), and the same holds also for Gherdëina. The two varieties behave thus in a similar way as Venetian and Bellunese. (12) and (13) report some of the test sentences used to determine the relative position of the past participle and the particle *pa/po*.

³ Position of the active past participle before the adverb: √ = grammatical, * = ungrammatical.

- (12) Nònes
- a. [...] i à **semper perlà** 'l todesč [...]. (Bertagnolli
 they have-3PL always talk-PTCP the German 1912, II, 123)
 'They have always talked German.'
- b. El Mario l=à rescrit **deltut** el liber. (fieldwork)
 the Mario SCL=have-3SG rewrite-PTCP completely the book
 'Mario has rewritten the book completely.'
- (13) Gherdëina
- a. Nëus son **for** jic tla Talia. (fieldwork)
 we be-1PL always gone to-the Italy
 'We always went to Italy.'
- b. [...] y l bosch s=à mpadrunì (Corpuslad)
 and the wood REFL=have-3SG taken-possession-of
cumpletamenter de si ana.
 completely of his soul
 '[...] and the wood has taken completely possession of his soul.'
- c. De chi se à=la pa namurà **cumpletamënter?** (fieldw.)
 of whom REFL have-3SG=SCL.F PA fallen-in-love completely
 'With whom has she completely fallen in love?'

As we can see from examples (12) and (13), Nònes and Gherdëina do not differ with respect to the landing site of the (active) past participle, which in both raises higher than *cumpletamënter/deltut* ('completely') but cannot precede *for/semper* ('always'). Hence, we can conclude that the variation between Gherdëina-type varieties and Nònes-type varieties as regards the position of the particle in questions involving compound tenses cannot be attributed to different landing sites targeted by the past participle because that hypothesis would entail that the participle moves higher in Gherdëina than in Nònes. Therefore, let us now look at a different approach proposed by Munaro & Poletto (2002, 2003, 2005) as to the different positions of the particle *po* in the Bellunese variety Pagotto.

5.4.2 A clausal-fronting analysis of the phenomenon

In Pagotto, the particle *po* can appear in two different syntactic positions: directly after the wh-expression (in the 'wh-*po*-position') (14a) or in sentence-final position (14b).

- (14) The positions of the particle *po* in Pagotto (Munaro & Poletto 2003:134f.)
- a. Quando, *po*, e=li rivadi?
 when PO be-3PL=SCL arrived
- b. Quando e=li rivadi, *po*?
 when be-3PL=SCL arrived PO

In order to account for the two different *po*-positions, Munaro & Poletto (2002, 2003, 2005) propose that the particle heads a functional projection in the CP layer whose specifier can either host the wh-expression or the whole clausal complement of the particle. In this view, wh-*po*-questions like (14a) are derived via movement of the wh-expression into the specifier of the projection headed by the particle under stranding of the rest of the clause (15a). The sentence-final position of the particle in structures like (14b), in contrast, is considered to result from movement of the whole clause to the specifier position of the projection headed by the particle ('clausal fronting') (15b).⁴

- (15) a. [_{FP} wh_i [_{F°} *particle*] [_{CP} t_i [_{IP} ... t_i ...]]] (Munaro & Poletto 2003:139, 142)
- b. [_{FP} CP_i [_{F°} *particle*] [_{CP} t_i]]

Munaro & Poletto's analysis has the advantage that the particle *po* occupies a fix syntactic position while the syntactic variation can be nicely attributed to movement operations of different parts of the sentence which are motivated by interpretational differences between the two types of wh-questions in (14): question (14b), where the whole sentence is located in the specifier of the projection headed by *po* – and thus in the scope of the particle – is reported to involve neutral focus. Question (14a), in contrast, where only the wh-expression is in the scope of the particle, the question word is in narrow focus (cf. wh-*pa* in Fascian, section 3.9.2).

Let us now examine whether this kind of derivation can account for Nònes wh-VS-PTCP-*po*-constructions as well.

⁴ I provide here only a short summary of Munaro & Poletto's (2002, 2003, 2005) account, in which for reasons of space and exposition, I simplify processes that are in fact more complex in the original analysis.

At first sight, it seems as if Nònes *wh*-VS-PTCP-*po*-questions like (16a) can indeed be derived on a par with the Pagotto constructions following Munaro & Poletto's (2002, 2003, 2005) clausal fronting analysis. The particle is located in a C head (17a) and its postparticipial position would be derived via movement of the whole clause to the specifier of the particle (17b).

- (16) a. Che as fat *po*? (Nònes)
 what have-2SG do-PTCP PO
 'What did you do?'
- b. Ndo à=le magnà *po* la polenta?
 where have-3PL=SCL eat-PTCP PO the polenta
 'Where did they eat the polenta?'
- (17) a. [*po*] [_{CP} che as fat]
 b. [[[_{CP} Che as fat]_x [*po*]] t_x]

However, comparing in more detail the Nònes facts to Pagotto, there are three problems. The first problem concerns the status of elements following the particle *po*: according to Munaro & Poletto (2003:137), elements occurring after clause-final particles in northern Italian varieties such as Venetian (18a) or Pagotto (18b) are right-dislocated and the presence of resumptive clitics is taken as evidence for this assumption.

- (18) a. Dove le=gavarò messe, *ti*, le ciave?! (Venetian)
 where them=have-FUT.1SG put-PTCP, TI, the keys
 'Where could I have put the keys?'
- b. Quando lo=à=la magnà, *mo*, al polastro?! (Pagotto)
 when it=have-3SG=SCL eat-PTCP, MO, the chicken
 'When did she eat the chicken?'

Following an analysis proposed by Kayne & Pollock (2001) and Munaro, Poletto & Pollock (2001), Munaro & Poletto (2003) account for right dislocation by assuming that the prosodically emarginated constituent undergoes in fact left dislocation to the specifier position of a Topic projection lower than the projection occupied by the particle, followed

by remnant movement of the whole clause.⁵ Under this analysis, sentences like (18a) would be derived as shown in (19).

- (19) a. [*ti*] [_{TopP} le chiave]_x [Dove le gavarò messe t_x] (Pagotto)
 b. [[_{CP} Dove le gavarò messe t_x]_y [*ti*] [_{TopP} le chiave]_x t_y]

However, as I argue in the following, in contrast to the Venetian and Pagotto facts, in Nònes, the particle *po* is not sentence-final but truly postparticipial and elements following the particle in Nònes are not right-dislocated but simply appear in their argumental positions. In order to prove this, I use a test with quantifiers based on the fact that quantified elements cannot be right-dislocated (cf. Cardinaletti 2001).⁶

With regard to the quantifier test we can make the following prediction: if the particle is sentence-final as claimed by Munaro & Poletto, quantifiers should precede the particle. On the other hand, if quantifiers occur after the particle, we can be sure that the particle is not sentence-final. Consider the differences between Pagotto (20) and Nònes (21).

- (20) Quantifiers in *po*-questions (Pagotto)
 a. Quante olte à=tu vist ogni nono *po*?
 how-many times have-2SG=SCL see-PTCP every grandfather PO
 ‘How many times did you see every grandfather?’
 b. Quando avéo magnà tut *po*?
 when have-2PL eat-PTCP everything PO
 ‘When did you eat everything?’

- (21) Quantifiers in *po*-questions (Nònes)
 a. Ndo as magnà *po* vergot?
 where have-2SG eat-PTCP PO something
 ‘Where did you eat something?’
 b. Cante bote as vist *po* ogni nono?
 how-many times have-2SG see-PTCP PO every grandfather
 ‘How many times did you see every grandfather?’

⁵ Evidence for an analysis of apparent right-dislocated elements as left dislocation followed by clausal movement derives from the observation that the sentences considered by Munaro & Poletto (2003) cannot “be preceded by a focalized XP, which is prosodically tied to the verbal complex” which would indicate right dislocation (cf. Benincà 1988).

⁶ I am indebted to Cecilia Poletto for suggesting this test to me.

The quantifier test shows an obvious difference between Pagotto and Nònes: while in Pagotto, quantified expressions precede the particle *po* (20), Nònes shows the opposite order with quantifiers following the particle (21). These results allow us to conclude that in Nònes, contrary to Pagotto, elements following the particle are not right-dislocated and the particle is not sentence-final. Consequently, the clausal fronting analysis as proposed by Munaro & Poletto (2003, 2005) for Pagotto is not applicable to account for the Nònes facts as we would have to assume that only certain parts of the clause move to SpecCP, leaving arguments such as in (16b) behind in the VP.

Moreover, a second problem for the clausal fronting analysis with respect to the Nònes data resides in the fact that in Nònes, the sequence *wh-po* in finite clauses is only possible with some *wh*-expressions (cf. chapter 3). Under a clausal fronting analysis, however, the movement mechanisms in (19) would be expected to apply across the board with all *wh*-expressions and hence, the differences between the question words with respect to the availability of the *wh-po*-position in Nònes would remain unaccounted for.

Finally, apart from not being applicable to account for the different *po*-positions in Nònes, the clausal fronting analysis can also not explain the variation in Fascian, where the particle does appear in the *wh-po*-position with all question words but where its default position is postverbal instead of postparticipial or even sentence-final. The postverbal position of the particle can clearly not be accounted for via clausal fronting given that we cannot simply move certain parts out of the VP while leaving others behind.

In conclusion, although the clausal fronting analysis offers an elegant and convincing approach to account for the different *po*-positions and the corresponding semantic interpretations in Pagotto, it cannot be extended to the other varieties.

In the light of the syntactic and semantic similarities between the particle *pa/po* and the German particle *denn* noted in section 3.7, the derivation proposed for *denn* might actually also be able to account for the variation with regard to the position of the particle *po/pa*.

Therefore, let us now consider Bayer's (2012) and Bayer & Obenauer's (2010) 'piggy-back'-movement analysis of German wh-questions featuring the modal particle *denn*.

5.4.3 'Piggy-back'-movement

5.4.3.1 Bayer & Obenauer's (2010) and Bayer's (2012) approach

The German particle *denn* and the particle *pa/po* occurring in many varieties spoken in northern Italy have many common characteristics (cf. section 3.7). This holds in particular for the syntactic positions in which the two particles occur. Like *pa/po*, *denn* too appears in postverbal position (22a) or in the 'wh-*pa/po*-position' (22b).

- (22) Syntactic positions of the German particle *denn* (Bayer 2012:22)
- a. Wohin ist er denn gefahren?
 where be-3SG he DENN go-PTCP
 'Where did he go?' (I wonder)
 - b. [WOHIN denn] glaubst du, dass der Hans gefahren ist?
 where DENN believe-2SG you that the Hans go-PTCP be-3SG
 'WHERE do you think Hans went?' (focus on the wh-expression)

In a similar way as Munaro & Poletto (2002, 2003, 2005), Bayer (2012) and Bayer & Obenauer (2010) analyse the German particle *denn* as a functional head projecting a particle phrase which takes a verb phrase (VP) as its complement.

- (23) [_{PrtP} [_{Prt}° *denn*] VP] (Bayer 2012:18)

In this way, the authors account for the fact that *denn* adds a further interpretational specification to the question. In order to implement this relationship, Bayer & Obenauer (2010) propose that the particle bears an interpretable feature [wh] which requires the particle to appear in the scope of an interrogative head. Following minimalist principles, the interpretative value of the particle can be activated by an agreement relation between a probe, a syntactic head bearing a non-interpretable feature [-int], and a goal with the corresponding interpretable feature [+int] in the structural configuration c-command. We

will not go further into the technical details of the derivation here, but shall instead consider the structure in (23b).

Given that German is a V2-language, it must be the case that in wh-questions such as (22b), the particle *denn* forms a constituent with the focalised wh-expression; otherwise the V2-constraint would be violated. According to Bayer’s (2012) analysis, the particle moves together with the wh-expression to a specifier position in the C domain. Bayer & Obenauer (2010) do not assume that the particle cliticises onto the wh-expression but instead propose that the particle enters into a feature sharing relation (Chomsky 2000, 2001) with the focalised wh-expression.⁷ More specifically, the authors attribute an uninterpretable focus feature [Foc] to Prt° , which then as a probe looks out for (24a) and attracts the focalised wh-expression with the matching interpretable feature [iFoc] to its specifier (24b) for feature valuation. In this way, the particle and the wh-expression form a constituent which Bayer & Obenauer (2010) call ‘Small PrtP’.⁸

- (24) a. $\text{Prt}^\circ_{\text{uFoc} [\]}$ $\text{wh}_{\text{iFoc} [\]}$ \Rightarrow
 b. $[\text{wh}_{\text{iFoc} [=]} [\text{Prt}^\circ_{\text{uFoc} [=]} \text{wh}_{\text{iFoc} [=]}]]$

Having matched the features in the spec-head configuration, the particle *denn* moves ‘piggy-back’ with the wh-expression up to the sentence-initial position (SpecForceP), from where it has scope over the whole sentence.

Our task is now to examine whether this kind of analysis can be applied to the facts related to *pa/po* as well. But before turning back to the variation between the postverbal and the postparticipial position of the particle, we need to consider first how Bayer & Obenauer’s (2010) and Bayer’s (2012) approach accounts for wh-*po*-questions.

⁷ Focus particles often form constituents with XPs or various lexical categories.

⁸ The notation used here differs from Bayer & Obenauer’s (2010) original one. Notation: Foc: focus; i: interpretable; u: uninterpretable; [] unvalued; [=] valued.

Given the similarities with regard to the syntactic properties of the particles *denn* and *pa/po* (3.7), let us assume following Bayer & Obenauer (2010) that *pa/po* constitutes the head of a particle phrase (PrtP) in the C domain.

(25) [PrtP [Prt° *pa/po*] CP]

In the following, I examine the various *pa/po*-positions from the perspective of Bayer & Obenauer's approach. Let us start out with *wh-pa/po*-questions (section 5.4.3.2) and then turn to *wh*-questions featuring the particle in postparticipial position (5.4.3.3).

5.4.3.2 Wh-*pa/po*-questions

Wh-questions featuring the sequence *wh-pa/po* at the beginning of the sentence constitute a challenge for our analysis because they involve a number of particular characteristics and many loci of variation between the individual varieties that need to be accounted for. Therefore, let us recall from chapter 3, which factors we need to take into consideration.

| Phenomenon | Varieties |
|-----------------------------------|---|
| <i>wh-pa/po</i> in isolation | possible in all varieties |
| <i>wh-pa/po</i> in finite clauses | <ul style="list-style-type: none"> • Fascian: with all <i>wh</i>-expressions across the board • Nònes: with some <i>wh</i>-expressions • Gherdëina and Badiot: out |
| word order | <ul style="list-style-type: none"> • Fascian Brach & Cazet, Nònes: direct (SV) • Fascian Moenat: inverted (SCI) |
| focus properties | <i>wh</i> -expression is in narrow focus and receives main stress |

Table 5.6: The characteristics of *wh-pa/po*-questions

The first issue we need to discuss is what the relation between *wh-pa/po*-questions and *wh-SCI-pa/po*-questions is. There are two possible options: the particle could either occupy one fix C position in both constructions or it could appear in two different positions.

If we assume that the particle *pa/po* occupies a fix position in a C head, the two different constructions can be derived by moving either the *wh*-expression or the whole clausal complement to the specifier of the projection headed by the particle. The advantage of this

kind of analysis, which is reminiscent of the clausal fronting analysis proposed by Munaro & Poletto (2002, 2003, 2005) for Pagotto (cf. section 5.4.2) is that it could easily account for the different focus properties observed in *wh-pa/po*- and *wh-SCI-pa/po*-questions. In this view, the element moved to the specifier of the projection headed by the particle is in focus. However, we have already seen in section 5.4.2, that a clausal fronting analysis cannot apply to Fascian or Nònes because in contrast to Pagotto, the particle is not clause-final in these varieties.

Therefore, let us explore the second option, i.e. that the particle occupies distinct positions in the two different question formation strategies. From a cartographic perspective, this option is to be preferred: the *wh*-questions featuring the sequence *wh-pa/po* at the beginning of the sentence are marked in the sense that the *wh*-expression is focalised and they involve narrow focus on the *wh*-expression. Hence, given that *wh-pa/po*-questions differ from *wh-SCI-pa/po*-questions in focus properties, a cartographic analysis would assume that the two question formation strategies involve two different functional projections in the left periphery. As shown in (26) and (27), this seems to be the case: *wh-pa/po* occurs to the left of Left Dislocation (26), while *wh-SCI-pa/po* appears to its right (27). *Wh-pa/po* thus seems to target a higher C-position than *wh-SCI-pa/po*.

(26) *wh-pa/po* > LD (Fascian Brach)

- a. Olà **pa** l formai la l magna?
 where PA the cheese she it eat-3SG
 ‘WHERE does she eat the cheese?’
- b. Chi **pa** la marena la magna a Roma?
 who PA the lunch it eat-3SG in Rome
 ‘WHO has lunch in Rome?’

(27) LD > *wh-SCI-pa/po* (Fascian Brach, Cazet)

- a. L formai, olà l magn=ela **pa**?
 the cheese where it eat-3SG=SCL PA
 ‘The cheese, where does she eat it?’
- b. La polenta, chi la magn=elo **po** a Roma? (Fascian Moenat)
 the polenta who it eat-3SG=SCL PO in Rome
 ‘The polenta, who eats it in Rome?’

Another important feature of *wh-pa/po*-constructions is word order. We have already seen in chapter 3 that *wh-pa/po* is followed by direct word order (SV) in Fascian Brach (28a) and Nònes (28b) whereas we observe inverted word order (SCI) in Fascian Moenat (28c).

- (28) a. Che *pa* te magnes anché? (Fascian Brach)
 what PA you eat-2SG today
 ‘WHAT are you eating today?’
- b. Can *po* la vuel venir? (Nònes)
 when PO she want-3SG come-INF
 ‘WHEN does she want to come?’
- c. Che *po* magne=to ancö? (Fascian Moenat)
 what PO eat-2SG=SCL today
 ‘WHAT are you eating today?’

The sequence *wh-po* followed by inverted word order (SCI) in Fascian Moenat (28c) corresponds both from a syntactic and an interpretational perspective to *wh-denn*-questions in German.

- (29) [Wohin *denn*] glaub=st du, dass der Hans gefahren ist? (Bayer 2012:22)
 where DENN think-2SG you that the Hans go-PTCP be-3SG
 ‘WHERE do you think Hans went?’

Hence, we might be able to propose for Fascian Moenat *wh-po*-SCI-questions (cf. 28c) an analysis along the lines of Bayer & Obenauer’s (2010) account of *wh-denn*-SCI-questions in German (cf. section 5.4.3.1). This derivation can proceed in the following way: the particle *pa/po* is a syntactic head projecting a particle phrase (PrtP) (cf. (25) and repeated in (30) for convenience).

- (30) [_{PrtP} [_{Prt°} *po*] CP]

Prt° bears an uninterpretable [uFoc]-feature and probes for the focalised *wh*-expression *che* with the corresponding interpretable feature [_iFoc] (31a) with which it enters into a feature sharing relation. Prt° attracts the focalised *wh*-expression *che* to its specifier (SpecPrtP) for feature valuation (31b) and forms a constituent with it.

- (31) a. $\begin{array}{c} [\text{PrTP } [\text{Pr}^\circ \text{ } \textit{po}]] \\ | \\ [\text{uFoc}] \end{array}$ $\begin{array}{c} [\text{QP CHE}] \\ | \\ [\text{iFoc}] \end{array}$
- b. $[\text{PrTP CHE}_{\text{iFoc} [=]} [\text{Pr}^\circ \textit{po}_{\text{uFoc} [=]} \text{CHE}_{\text{iFoc} [=]}]]$

Having matched the features in the spec-head configuration, the particle moves ‘piggy-back’ with the wh-expression to the specifier of a functional projection in the higher portion of the C domain, from where it gains scope over the whole sentence.

- (32) $[\text{SpecCP } [\text{Che } \textit{po}]] \text{ à=le magnà } [\text{che } \textit{po}] \text{ ancö?}$

Further evidence in support of such an analysis comes from another variety, Pagotto, in which certain wh-expressions remain *in-situ*, certain others front and certain wh-expressions can also do both (cf. Munaro 1997). In this variety, we observe the sequence wh-*po* in the thematic position of the wh-expression.

- (33) Magni=tu $[\text{che } \textit{po}]$ incoi? (Pagotto)
 eat-2SG=SCL what PO today
 ‘What are you eating today?’

However, other wh-expressions such as *parché* (‘why’), *ndé* (‘dove’) or *quando* (‘when’) move to the sentence-initial position carrying the particle *po* ‘piggy-back’ like in Moenat.

- (34) $[\text{Quando } \textit{po}]$ o=la vegner $[\text{quando } \textit{po}]?$ (Pagotto)
 when PO want-3SG=SCL.F come-INF when PO
 ‘When does she like to come?’

Let us now turn to the Fascian Brach and Nònes case, i.e. wh-questions featuring wh-*pa/po* in sentence-initial position followed by direct word order (SV) – instead of inverted word order (SCI) in Moenat. The wh-question (28a) is repeated in (35) for convenience:

- (35) Che **pa** te mages anché? (Fascian Brach)
 what PA you eat-2SG today
 ‘WHAT are you eating today?’

Let us consider possible derivations for this construction.

First of all, it could be assumed that the particle occupies the head position of a functional projection, e.g. Prt° , and that the *wh*-expression moves to its specifier position, i.e. SpecPrtP . Under the assumption that the particle is an unbound morpheme, the occurrence of direct word order instead of SCI could be attributed to the fact that the head position targeted by verb movement is already filled by the particle and consequently, SCI is blocked. Alternatively, it could be assumed that the particle and the *wh*-expression target the position $\text{Int}(\text{errogative})$ proposed by Rizzi (2001) which is considered to be intrinsically endowed with the $[\text{wh}]$ -feature (cf. chapter 4.2.2). Given that Int° already bears the $[\text{wh}]$ -feature, verb movement is not required to carry the $[\text{wh}]$ -feature to C and consequently, SCI does not occur.

However, such an analysis does not seem to be on the right track for several reasons: first, the fact that Fascian Brach *wh-po*-questions exhibiting direct word order imply narrow focus on the *wh*-expression on a par with the corresponding *wh-po*-questions with inverted word order in Moenat suggests that both constructions have to be analysed in a similar fashion. A second piece of evidence against the *pa/po*-as-an-unbound-morpheme-analysis and for a *wh-po*-constituent-analysis comes from the relative order of the sequence *wh-po* and left dislocated elements. As shown in (36), the sequence *wh-pa/po* precedes LD – irrespective of whether the word order is inverted (36a) or direct (36b) – suggesting that also in Fascian Brach and Cazet *wh-pa/po*-questions with direct word order the particle and the *wh*-expression form one constituent.

- (36) *wh-po* > $\boxed{\text{LD}}$ > VS in Fascian Moenat (a) and *wh-po* > $\boxed{\text{LD}}$ > SV in Fascian Brach (b)
- a. A chi *po* $\boxed{\text{Tone}}$ g=à=lo dat n pom de èlber?
 to whom PO Tone DAT=have-3SG=SCL give-PTCP an apple of tree
 ‘To WHOM did Tone give an apple?’
- b. Olà *pa* $\boxed{\text{la Marianna}}$ la magna l formai?
 where PA the Marianna she eat-3SG the cheese
 ‘WHERE does Marianna eat the cheese?’

A third piece of evidence for the constituent-analysis of the sequence *wh-pa/po* derives from the observation that the particle can occur within complex *wh*-constituents such as (37) and that there, the particle does not have any influence on word order (cf. section 3.7.2.4).⁹ Such a construction is also possible in Nònes (37c) which normally admits *wh*-questions featuring *wh-pa/po* in finite clauses only to a limited extent. In these constructions, we can take the presence of *pa/po* as the manifestation of an incorporated focus-feature inside a complex *wh*-phrase.

- (37) a. [Da tenc **pa** de egn] le laora a Moena? (Fascian Brach)
 for how-many PA of years they work-3PL in Moena
 ‘For how many years have they been working in Moena?’
 b. [Co tenč **po** soldi] as=to tel salvadanaio? (Fascian Moenat)
 how much PO money have-2SG=SCL in-the money box
 ‘How much money do you have in the money box?’
 c. [Con cala **po** de chele iu] l fa l viaz? (Nònes)
 with which-one PO of those over-there he do-3SG the trip
 ‘With which one of those over there does he do the trip?’

In conclusion, we can analyse Fascian Brach/Cazet and Nònes *wh-pa/po*-SV-questions in the same way as Fascian Moenat *wh-pa/po*-SCI-questions, i.e. in terms of formation of a constituent made of the *wh*-expression and the particle *pa/po* and successive movement of this constituent to a specifier position of a functional projection in the higher portion of the C domain. We are now left with the task to determine where exactly this functional projection is located in the sentence structure.

Under the ‘*wh-pa/po*-constituent’-analysis proposed here, the head of the functional projection targeted by *wh-pa/po* remains empty, given that subject-verb-inversion does not occur. This recalls the position *Int*^o proposed by Rizzi (2001) on the basis of the observation that in Italian, some *wh*-expressions (e.g. *perché*, ‘why’) do not require subject-verb-inversion. In chapter 4, we have taken the sequence *wh-pa/po* followed by

⁹ The word order following the complex *wh-pa/po*-constituent corresponds to that in ‘normal’ *wh-pa/po*-questions, i.e. SV in Fascian Brach/Cazet (37a) and Nònes (37c) and SCI in Fascian Moenat (37b).

direct word order as evidence for a position Int à la Rizzi (2001) and we have supposed that *pa/po* might be the overt realisation of the [Int]-feature sitting in Int°. However, in the light of the ‘wh-*po*-constituent’-analysis we have to revise this view, given that the particle cannot be located in the head position if it is part of a complex wh-*pa/po*-constituent.

Building on Rizzi (1997, 2001), Poletto (2000, 2002), Benincà (2001) and Benincà & Poletto (2004), I repeat the split-CP structure proposed in chapter 4 for convenience:

- (38) [HT [Scene Setting [Force [LD **Int** [LD [Foc_{contr.} [WH / Foc_{inf.} [Fin]]]]]]]]]
 ↑
 wh-*pa/po*

In what follows, I argue that wh-*pa/po* targets the position Int. Evidence for this claim derives from two observations: first, in Fascian Brach/Cazet and Moenat and Nònes, wh-*pa/po* can precede LD (39a) but can also follow it (39b).

- (39) a. Chi **pa** la marena la magna a Roma? (Fascian Brach)
 who PA the lunch it eat-3SG in Rome
 ‘Who is having lunch in Rome?’
 b. La polenta chi **pa** la magna a Roma?
 the polenta who PA it eat-3SG in Rome
 ‘Who is eating polenta in Rome?’

This distribution can be accounted for in a straightforward way by assuming that wh-*pa/po* targets Int and that in (39a), the lower LD-position is activated, while in (39b), it is the higher LD-position.

Second, wh-*pa/po* must precede contrastive focus elements as predicted by (40).

- (40) a. Chi **pa** l FORMAI l magna a Roma (no la polenta)? (Fasc. Brach)
 who PA the cheese it eat-3SG in Rome (not the polenta)
 ‘Who eats the CHEESE in Rome (not the polenta)?’
 a’. *L FORMAI chi **pa** l magna a Roma (no la polenta)?
 The cheese who PA it eat-3SG in Rome (not the polenta)
 b. Perché **pa** MARIA la magna a Roma (no Rita)?
 why PA Maria she eat-3SG in Rome (not Rita)
 ‘Why does Maria eat in Rome (not Rita)?’

b'. * MARIA perché *pa* la magna a Roma (no Rita)?
 Maria why PA she eat-3SG in Rome (not Rita)

Having argued that *wh-pa/po* targets the position Int, we now need to examine why Fascian Brach/Cazet and Nònes on the one hand and Moenat on the other differ in word order after the sequence *wh-pa/po*.

5.4.3.3 Word order variation in *wh-pa/po*-questions

We have seen that the subvarieties of Fascian differ as to the requirement to have SCI in questions. In Moenat, SCI is obligatory and we do not observe any question formation strategy featuring direct word order. In Brach and Cazet, in contrast, SCI is not compulsory as shown by the fact that various question formation strategies involve direct word order.

- (41) Question formation strategies involving direct word order in Fascian Brach/Cazet
- a. Che *pa* te magnes anché? (wh-*pa/po*-SV)
 what PA you eat-2SG today
 ‘What are you eating today?’
 - b. Olà che tu vas? (wh-*che*-SV)
 where that you go-2SG
 ‘Where are you going?’
 - c. Perché i beč i va a pe? (wh-SV)
 why the boys they go-3PL on foot
 ‘Why are the boys going on foot?’ wh-SV
 - d. Chi che l é che va a pe a scola? (wh-*che*-cleft-SV)
 who that it be-3SG that go-3SG on foot to school
 ‘Who is it who goes to school on foot?’

I suggest that this difference between Fascian Brach/Cazet on the one hand and Fascian Moenat on the other can be captured by assuming two different degrees of the ‘residual’ V2-property (cf. section 2.2.3.1). Recall that the term ‘residual V2-property’ (Rizzi 1991/1996) refers to the assumption that the Old Romance languages were characterised by the V2-property like Germanic languages but that they have lost this property and show a residue of it only in subject-verb-inversion in questions. In this view, Moenat is characterised by a ‘strong’ residual V2-property given that SCI in questions is

obligatory, whereas Fascian Cazet and Brach exhibit just a ‘weak’ residual V2-property as questions can also involve direct word order. As illustrated in figure 5.2, these different strengths of the residual V2-property can be envisaged as different stages in a diachronic development towards the loss of the V2-property.

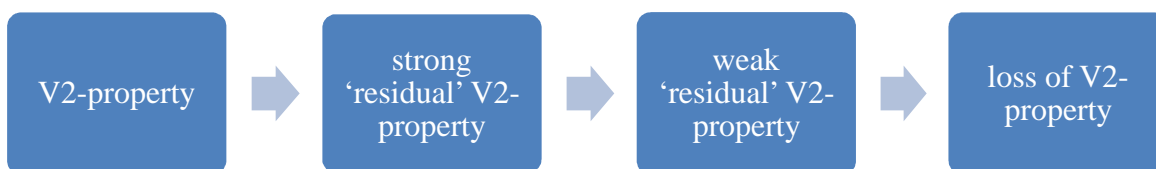


Figure 5.2: Stages in the loss of the V2-property

Turning back to *wh-pa/po*-questions and assuming a ‘*wh-pa/po*-constituent’-analysis, we can account for the variation between Fascian Brach/Cazet on the one hand and Moenat on the other in the following way: in Fascian Brach/Cazet, the *wh-po*-constituent moves to SpecIntP and given that Int^o is intrinsically endowed with the [wh]-feature (Rizzi 2001), a spec-head agreement relation is established enabling feature checking and triggering the interpretation of the utterance as a question. Consequently, verb-movement, i.e. SCI, is not necessary to carry the [wh]-feature to C and is thus blocked under *economy*. This option is possible in Fascian Brach and Cazet because of their weak ‘residual’ V2-property.

In Moenat, the *wh-pa/po*-constituent also moves to SpecIntP and the feature checking process in the spec-head configuration between the *wh*-expression in the specifier and the [wh]-feature in the head position of IntP takes place. However, in accordance with the strong residual V2-property of Moenat, verb movement is triggered and consequently, SCI occurs. This amounts to saying that in Moenat *wh-pa/po*-questions, SCI is not required for interrogative clause typing. In Brach and Cazet, SCI is blocked because there is a more economic mechanism to achieve interrogative clause typing of the sentence, i.e. via the spec-head configuration of the *wh*-expression and Int^o, which is intrinsically endowed with the [wh]-feature. In Moenat, in contrast, SCI does occur, but not for interrogative clause

typing reasons but for the sake of a strong ‘residual’ V2-property. Further evidence for this claim derives from Moenat *wh-po*-questions such as (36a), which show that SCI does not target Int, but a lower position, possibly WH.¹⁰

In Nònes, *wh-po* is only possible with some *wh*-expressions but not with others (cf. section 3.7). Under the approach just proposed it can be assumed that only the former *wh*-expressions can form a *wh-po*-constituent with the particle and move to SpecIntP, whereas the latter cannot. The possibility to form such a *wh-po*-constituent might be due to the intrinsic properties of the *wh*-expressions.

5.4.3.4 Gherdëina/Badiot *wh-pa*-questions

In Gherdëina and Badiot, the sequence *wh-pa* is not possible in *wh*-questions involving finite propositions (42b–b’) but *wh-pa*-questions involving non-finite propositions (42c) and reduced verbless *wh-pa*-questions (42a) are grammatical.

(42) *wh-pa/po*-questions in Gherdëina (repeated from section 3.7.2.4)

- a. Ulà *pa*?
where PA
‘Where?’
- b. *Ciuldì *pa* mai=el n mël?
why PA eat-3SG=SCL an apple
‘Why does he it an apple?’
- b’. *Ciuldì *pa* l maia n mël?
why PA he eat-3SG an apple
- c. Ciuldì *pa* abiné adum millions de paroles?
why PA collect-INF together millions of words
‘Why collect millions of words?’

At first sight, one might want to attribute the ungrammaticality of (42b–b’) to the fact that these varieties exhibit a true V2-property requiring in any case verb movement to C. However, as we have just seen in the case of Moenat, verb movement, and hence V2, and the formation of a *wh-pa*-constituent should not be mutually exclusive. The

¹⁰ The assumption that Moenat SCI targets the position WH is straightforward given that SCI happens for the sake of a ‘residual’ V2-property which is confined to *wh*-questions.

ungrammaticality of *wh-pa*-questions + finite proposition in Gherdëina and Badiot has another motivation: given that in these varieties, *pa* is an affix (cf. section 3.7.1), it cannot attach to the *wh*-expression, which is a syntactic phrase, but only to a verbal head and hence the particle would have to appear in postverbal position. As regards reduced verbless *wh-pa*-questions (42a), one could suppose that the verb is invisible (ellipsis) and only the *wh*-expression and the particle are overtly realised. However, such an account would violate the ‘Stranded Affix Filter’ (Lasnik 1981), according to which a morphologically realised affix must be a syntactic dependent of a morphologically realised category, at surface structure. Therefore, I rather assume that the *wh*-expression involves a complex internal structure featuring a foc position which hosts the particle *pa*. Such an account establishes a neat correspondence between the complex interbal structure of *wh*-expressions and the articulate structure of CP (‘split-CP analysis’). A similar analysis can also be proposed for Gherdëina and Badiot *wh-pa*-questions involving a non-finite proposition (42c).¹¹

In fact, we have seen in section 3.9, that Gherdëina and Badiot use other strategies to place narrow focus on the question word. While in varieties such as Fascian, narrow focus on the *wh*-expression is triggered by the particle in the *wh-po*-position, in Gherdëina and Badiot, narrow focus is a matter of prosody only.

Moreover, this raises not only the question of whether a position Int really exists in Gherdëina and Badiot but also what function verb movement really has for interrogative clause typing. With the analysis proposed for *wh-pa/po*-questions in mind let us now turn back to *wh*-questions featuring the particle in postparticipial position.

¹¹ Note, however, that in this account, we have to assume that there are two different kinds of *pa* in Gherdëina and Badiot: *pa*₁, an affix and *pa*₂ un anbound morpheme (a syntactic head).

5.4.3.5 The postparticipial position

The varieties Gherdëina, Badiot and Fascian on the one hand and Nònes (and Solandro) on the other, exhibit variation as to the position of the particle in compound tenses. In (43), I repeat the examples from (8) and (9) with the two structures observed: the postverbal position (43a) and the postparticipial position (43b).

- (43) a. Che as=to *po* fat? (Fascian Moenat)
what have-2SG=SCL PO do-PTCP
'What did you do?'
- b. Che as fat *po*? (Nònes)
what have-2SG do-PTCP PO

As for the postverbal position of the particle in compound tenses (43a), we can assume the same analysis as for the postverbal position in simple tenses (cf. section 5.3).

Regarding the postparticipial position of the particle in Nònes (and Solandro), in contrast, we have seen that it is truly postparticipial and not sentence-final as in Pagotto (cf. section 5.4.2). Moreover, it was shown in section 5.4.1, that the postparticipial position cannot be attributed to differences regarding participle movement between varieties such as Fascian and varieties such as Nònes or to a Munaro & Poletto-style (2002, 2003, 2005) 'clausal fronting' analysis.

In the light of these facts, I explore in the following whether a 'piggy-back-movement'-approach as proposed in the previous section for wh-*pa/po*-questions can account for the postparticipial position of the particle.

In a first step, we have to determine where exactly in the sentence structure the particle is located when it appears in postparticipial position. There are in fact two possibilities: (i) *po* could be located in INFL in a lower position than the past participle or (ii) the particle could be located further down the structure in the VP. The first possibility would account for the fact that *pa/po* derives from a temporal adverb (cf. section 3.3), which, according to Cinque (1999) occupies a fix position in the INFL layer. The second option, in contrast,

which we will develop here, corresponds in some way to the analysis suggested before for the sequence *wh-pa/po*.

On a par with what has been proposed in section 5.4.3.2, we can assume that the particle unites with the *wh*-expression in its thematic position under the mechanism shown in (31–32) (43a). The difference between Fascian and Nònes can now be implemented in the following way: in contrast to Fascian, Nònes does not allow ‘piggy-back’-movement of the particle together with the *wh*-expression to SpecCP and the *wh*-expression moves alone to a specifier position in the C domain leaving the particle behind (44b). As a result, the particle *po* appears in postparticipial position.¹²

- (44) a. à=le mandà [che *po*] a la nona? (Nònes)
 have-3PL=SCL.F send-PTCP [what PO] to the grandmother
 b. [Che] à=le mandà [~~che~~ *po*] a la nona?
 [what] have-3PL=SCL.F send-PTCP [~~what~~ PO] to the grandmother

Note that this mechanism differs from the derivation proposed for *wh-SCI-pa/po*-questions (cf. section 5.3) in that the postparticipial position results here from the *wh-pa/po*-constituent-analysis assumed before for *wh-pa/po*-questions.

Under an analysis along these lines, the fact that in Nònes, *wh-pa/po*-questions are observed mainly with the *wh*-expression *parché* (‘why’), whereas this construction is marginal or even ungrammatical with other *wh*-expressions (cf. chapter 3.7), receives a straightforward account:¹³ Nònes does not admit ‘piggy-back’-movement of the particle together with the *wh*-expression. The fact that *wh-po*-questions are observed with the *wh*-expression *parché* (‘why’) can be attributed to the general assumption that in contrast to other *wh*-expression, the question word for ‘why’ does not move to C but is directly merged into a C-position.

¹² The positional variation regarding the *wh*-expression is in some way similar to quantifier floating, i.e. the phenomenon that quantifiers such as *all*, *both* and *each* can occur in more than one position in the sentence.

¹³ In Nònes, *wh-po*-questions are possible without restrictions only in the case of the *wh*-expression *parché* (‘why’), a question word which is characterised by particular properties in many languages of the world.

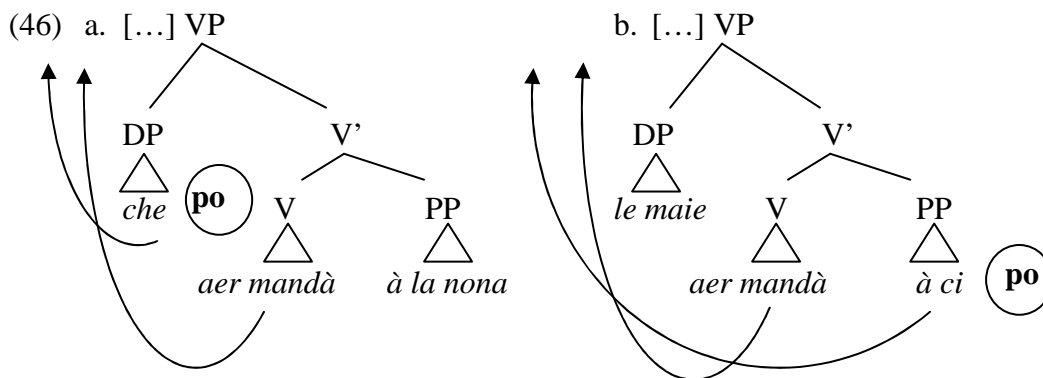
However, the problems of such an analysis clearly outweigh its advantages. The ‘piggy-back’-movement account of the postparticipial position of the particle is problematic in three different respects: the first problem concerns the fact that here, a mechanism originally proposed for narrow focus wh-questions is now applied to neutral focus wh-questions with a standard interpretation. While wh-*pa/po*-questions involve narrow focus on the wh-expression Nònes (and Solandro) wh-questions featuring the particle *po* in postparticipial position, do not involve narrow focus but are neutral focus ‘out-of-the-blue’-questions. Hence, it would not be straightforward to assume that the particle unites with the wh-expression in VP – which under our previous assumptions should trigger narrow focus on the wh-expression – even if the particle is left behind later when the question word raises to C.

A second problematic aspect of this analysis resides in the fact that the particle *pa/po* is a functional element, which – as argued in section 3.7 – belongs to the C domain. Hence, it is not straightforward to assume that the particle merges into VP, where normally only lexical items are expected.

Finally, a third counterargument regards the fact that the particle *po* in Nònes (and Solandro) appears in postparticipial position independent of the grammatical function of the wh-expression which is fronted to C. Under a ‘piggy-back’-movement approach, however, this would not be expected. Consider the Nònes wh-questions in (45), so-called ‘double-object-construction’ in the sense of Larson (1988) featuring a direct object and an indirect object in oblique case. In (45a), the direct object is questioned and hence represented by the wh-expression *che* (‘what’) and the indirect object is *a la nona* (‘to the grandmother’). In (45b), in contrast, the direct object is *le maie* (‘the pullovers’) and the indirect object is questioned and hence represented by the wh-expression *à ci* (‘whom’).

- (45) a. Che à=le mandà **po** a la nona? (Nònes)
 what have-3PL=SCL.F send-PTCP PO to the grandmother
 ‘What did they send to grandmother?’
 b. À ci g’ à=la mandà **po** le maie? (Nònes)
 to whom DAT have-3SG=SCL.F send-PTCP PO the pullovers
 ‘Whom did she sent the pullovers?’

In both wh-questions – independent of the grammatical function of the element questioned (as represented by the wh-expression) – the particle always appears directly after the participle. Under a ‘piggy-back’-analysis, however, this would not be expected. (46) shows a Larson (1988)-style structure of the VP of the two wh-questions in (46) with the indirect object being the complement of the verb and the direct object some kind of “inner subject” (cf. Grewendorf 2002:53).



If the particle *po* really united with the wh-expression in this stage as proposed above, then we would expect the particle to surface in two different positions after the wh-expression, the auxiliary and the participle have moved out of VP. In (46a), the wh-expression is fronted leaving the particle behind, the auxiliary moves to C and the active past participle raises to some IP-position (cf. Cinque 1999). Thus, the order within VP is [*po* – indirect object (*à la nona*)] and this is borne out as can be seen in (45a). In (46b), in contrast, the wh-expression representing the indirect object in oblique case, the auxiliary and the active past participle are moved out of VP. As a consequence, only the direct object *le maie* (‘the pullovers’) and the particle remain in VP – in this particular order. Hence, only (46a)

derives the postparticipial position of the particle, whereas according to (46b), the particle would appear not after the participle but only after the direct object and this is not the position the particle *po* occupies in Nònes.

In sum, we have seen here that also the ‘piggy-back’-analysis does not provide a satisfactory account of the postparticipial position of the particle in particular and of the variation regarding the syntactic position of the particle in wh-questions in general.

The problems of the syntactic analyses examined in the previous sections and the observations with regard to the differences in interpretation and stress properties depending on the syntactic position of the particle suggest that the position of *pa/po* is ultimately a matter of the prosody-syntax interface. I show in chapter 10 that indeed the different positions of *pa/po* in Nònes can be accounted for from the perspective of prosody.

5.5 Conclusion

The aim of this chapter was to propose a syntactic analysis of the variation found in the question formation strategies involving the particle *pa/po*. In section 5.2, I have formally implemented the grammaticalization of *pa/po* into a question particle within Roberts & Roussou’s (1999, 2003) framework by exploiting the concept of ‘feature syncretism’ with regard to the features [wh], [foc] and [V2] as well as Rizzi’s (1997) claim that wh-expressions and (information) focus elements target the same position in the CP.

After that, we have examined the syntactic variation in Dolomitic Ladin wh-questions involving the particle *pa/po*. These wh-questions can be classified into two main types depending on their semantic interpretation and focus properties: first, in standard wh-questions involving neutral focus (section 5.3), the particle appears in postverbal position

after SCI (*wh-SCI-pa/po*). I have argued on the basis of the split-CP-structure introduced in chapter 4 that this question formation strategy targets the projection WH.

Narrow focus *wh*-questions, in contrast, exhibit the particle in the *wh-pa/po*-position and I have argued for an analysis inspired by Bayer's (2012) and Bayer & Obenauer's (2010) account regarding *wh-denn*-questions in German. In *wh-pa/po*-questions, the particle forms a constituent with the *wh*-expression – in this way triggering narrow focus on the question word – and then moves 'piggy-back' with it to the specifier of the position Int in the C domain. As regards the word order variation after the sequence *wh-po/pa*, I have related the presence of direct word order in Fascian Brach and Cazet to the position Int (Rizzi 2001), which – being already intrinsically endowed with the [wh]-feature – does not trigger verb movement to C. The presence of SCI in Fascian Moenat *wh-po*-questions, in contrast, was attributed to the strong 'residual' V2-property of this variety which obligatorily requires verb movement to C.

Moreover, I have argued that in Gherdëina and Badiot, *wh-pa*-questions involving finite propositions are ungrammatical because in these varieties, *pa* is an affix and cannot attach to phrases but only to verbal heads. In these varieties, narrow focus *wh*-questions involve omission of the particle *pa* and major prosodic stress on the question word.

As far as the variation regarding the position of the particle in *wh*-questions involving compound tenses is concerned, I have discussed a variety of syntactic approaches but neither 'particle placement' (section 5.4.1), 'clausal fronting' (Munaro & Poletto 2002, 2003, 2005) (5.4.2) nor 'piggy-back-movement' (Bayer & Obenauer 2010; Bayer 2012) were able to provide a satisfactory account of the postparticipial position. Instead, there is reason to assume that the position of the particle is governed not only by syntactic constraints, but also by prosodic factors. Therefore, we will come back to this issue in chapter 10 when studying the prosody of *wh*-questions. Table 5.7 summarises the various *wh*-question formation strategies involving the particle *pa/po*.

| | Gherdëina | Badiot | Fascian | | Nònes |
|----------------------------|-----------|--------|-------------|--------|-------|
| | | | Cazet/Brach | Moemat | |
| Neutral focus | | | | | |
| wh-SCI- <i>pa/po</i> | x | x | x | x | x |
| wh-SCI- <i>pa/po</i> -PTCP | x | x | x | x | |
| wh-SCI-PTCP- <i>po</i> | | | | | x |
| Narrow focus | | | | | |
| wh- <i>pa/po</i> -SV | | | x | | x |
| wh- <i>po</i> -SCI | | | | x | |
| WH-SCI | x | x | | | |

Table 5.7: Question formation strategies involving the particle *pa/po*

In sum, the question formation strategies involving the particle *pa (po)* can be located in a split-CP structure in the following way:

- (47) [HT [SS [Force [LD **Int** [LD [Foc_{contr.} [**WH** / Foc_{inf.} [Fin]]]]]]]]
- ↑ ↑
 wh-*pa/po*-SV wh-SCI-*pa/po*
 wh-*po*-SCI wh-SCI-*pa/po*-PTCP
 wh-SCI-PTCP-*po*

In conclusion, in line with the cartographic approach which postulates separate functional projections for distinct semantic interpretations, I have shown that in Dolomitic Ladin wh-questions featuring the particle *pa/po*, two different CP projections are activated: the lower WH-position in neutral focus wh-questions and the higher position **Int** in narrow focus wh-questions.

In the following chapter, we shall be concerned with wh-*che*-questions, an innovative question formation strategy in Fascian, and how this construction relates to the *pa/po*-questions analysed in the present chapter.

Chapter 6

Fascian *wh-che*-questions

Apart from the question formation strategies involving the particle *pa/po*, Fascian exhibits another, more recent, construction, in which the *wh*-expression is directly followed by the complementizer *che* and direct word order (henceforth: *wh-che*) and in which the particle *pa/po* is not present.

- (1) Olà *che* tu vas? (Fascian Brach & Cazet)
 where COMP you go-2SG
 ‘Where are you going?’

The *wh-che*-construction is an innovative structure and limited to the Cazet and Brach subvarieties of Fascian. Moenat exclusively uses the traditional *wh-SCI-pa/po*-construction. The presence of this innovative question formation strategy in Fascian, which does not appear in the other varieties, gives rise to several research questions:

- (2) Research questions
- a. What is the difference regarding the syntax and semantic interpretation between traditional *wh-SCI-pa/po*-questions and the *wh-che*-construction?
 - b. What is the historical origin of the *wh-che*-construction?
 - c. Why is *wh-che* limited to the Cazet and Brach subvarieties of Fascian and does not appear in Moenat?
 - d. Why does *wh-che* not occur in the other Dolomitic Ladin varieties Gherdëina and Badiot?
 - e. How can the *wh-che*-construction be analysed from a cartographic perspective and how does this analysis relate to the analysis of *pa/po*-questions proposed in chapter 5?

I discuss these research questions in turn in the following sections.

First, section 6.1 gives an overview of the distribution of the *wh-che*-construction in Romance varieties and beyond. In section 6.2, I examine the use of the traditional and the innovative question formation strategies in present-day Fascian with respect to their

syntactic properties, their semantic interpretation and their conditions of use (cf. 2a). After that, section 6.3 discusses the theories proposed in the literature concerning the origin of the *wh-che*-construction in several Romance varieties. On the basis of a diachronic analysis of Fascian theatre plays, I evaluate these theories with respect to Fascian and, building on these theories, propose a new approach for Fascian (2b). I also provide an explanation for why the *wh-che*-strategy is not used in Moenat and in the other varieties of Dolomitic Ladin (cf. 2c–d). In section 6.4, I discuss previous analyses of *wh-che*-questions in Romance and, on the basis of new data, offer a syntactic analysis of Fascian *wh-che*-questions based on the split-CP structure proposed in chapter 4 (2e). Section 6.5 concludes the chapter with a summary of the main results.

6.1 The distribution of the *wh-che*-construction

The *wh-che*-construction is not a phenomenon limited to Fascian but is observed in embedded (section 6.1.1) and main *wh*-questions (6.1.2) in several Romance and Germanic languages and language varieties.

6.1.1 *Wh-che* in embedded *wh*-questions

Embedded *wh*-questions show much less variation than main *wh*-questions and usually, only two different structures are observed in northern Italian varieties (Poletto & Vanelli 1997:107ff.; Poletto 2000:84). The first type of varieties, schematised in (3a), exhibits a so-called *doppio introduttore* (a ‘double introductory element’), i.e. the *wh*-expression is followed by the complementizer *che* which also introduces other subordinate

clauses (Poletto & Vanelli 1997:107ff.).¹⁴ As we will see below, this type splits up into various subtypes depending on the use of the complementizer *che*. In the second type of varieties, schematised in (3b), in contrast, embedded wh-questions are introduced as in Standard Italian, i.e. there is no (overt) complementizer.

- (3) a. main clause wh-expression *che* direct word order (Type 1)
 b. main clause wh-expression \emptyset direct word order (Type 2)

Type 2 embedded wh-questions are found in Ligurian varieties (4a), in Lombard varieties (4b) except for the Alpine ones, some Ticinese varieties, Veronese varieties (4c) and most of the varieties in Emilia-Romagna (Poletto & Vanelli 1997:107).

- (4) a. Nu so **chi** segge arrivou (Ligurian of Chiavari)
 not know-1SG who be-SBJV.3SG arrive-PTCP
 b. Su mia **en doe** la sies nada Maria (Lombard)
 know-1SG not where she be-SBJV.3SG gone Maria
 ‘I don’t know where Maria went.’
 c. No so mia **ci** lavarà i piati. (Veronese)
 not know-1SG not who wash-FUT.3SG the dishes
 ‘I don’t know who will wash the dishes.’

Moreover, also in Standard Italian, there is no (overt) complementizer in embedded wh-questions. Beyond Italy, this holds also for Standard French and beyond Romance, for Standard German and Standard English.

Type 1 structures featuring the complementizer *che* are found in varieties spoken in Piedmont, Trentino (5a), and in parts of Ticino, Veneto (5b), Friuli and Emilia Romagna (Poletto & Vanelli 1997:107ff.) and in northern Lombardy (Poletto 2000:153) (6).

- (5) a. No so **chi che** l à parlà con la Maria. (Trentino)
 not know-1SG who COMP SCL have-1SG spoken with the Maria
 ‘I don’t know who spoke with Maria.’

¹⁴ The structure (3a) featuring the double introductory element should normally be ruled out by the ‘Doubly-Filled COMP Filter’. I discuss this issue in section 6.4.1.1.

- b. Di=me **cando** torna el Giani.
 tell-IMP=me when return-3SG the Giani
 ‘Tell me when Giani returns.’

- (10) a. Jeu damondel **tgei che** vus scheis. (Sursilvan)
 I ask-1SG what COMP you say-2PL
 ‘I ask what you are saying.’
 b. Jeu sedemondel **cu** el fa tut quei.
 I REFL-ask-1SG when he do-3SG all this
 ‘Ich wonder when he is going to do all this.’

For other varieties such as Triestino (11) or the variety of Cesiomaggiore near Feltre, Poletto & Vanelli (1997:108) report that the use of the complementizer depends on the syntactic position of the subject: the complementizer occurs only with postverbal subjects, but is omitted if the subject is preverbal.

- (11) a. Di=me **cossa che** magna Maria (Triestino)
 tell-IMP=to-me what COMP eat-3SG Maria
 ‘Tell me what Maria eats.’
 b. Non so **cossa** mama ga comprà de zena.
 not know-1SG what mother have-3SG buy-PTCP for dinner
 ‘I don’t know what mother has bought for dinner.’

In varieties such as Ferrarese (12), *che* is optional (Poletto & Vanelli 1997:108).

- (12) a. An so minga **cus c** al faga Giani. (Ferrarese)
 SCL know-1SG not what COMP SCL do-SBJV.3SG Giani
 ‘I don’t know what Giani does.’
 b. An so brisa **cus** l abia cumprà par zena la mama.
 SCL know-1SG not what SCL have-SBJV.3SG buy-PTCP for dinner the mother
 ‘I don’t know what mother has bought for dinner.’

In the Dolomitic Ladin varieties, embedded wh-questions always involve *che* irrespective of the wh-expression (Anderlan-Obletter (1991:208) for Gherdëina (13); Gasser (2000:195) for Badiot (14); Chiocchetti & Iori (2002:60) for Fascian (15); Pellegrini (1974:30) for Fodom (16); *Corpuslad* (17a) and *ALD-II* (17b) for Ampezzan (17)). The same also holds also for Friulian (18) (Poletto & Vanelli 1997:107; Benincà 2005:68).

- (13) Gherdëina
 L à damandà **canche** la vën.
 he have-3SG ask-PTCP when-COMP she come-3SG
 ‘He asked when she came.’
- (14) Badiot
 a. I oress ion savéi, **canche** al zed da plovëi.
 I like-COND.1SG gladly know-INF when-COMP it stop-3SG to rain-INF
 ‘Ich would like to know when it stops raining.’
 b. I ne sa nia **che ch’** al podess ester stè.
 I not know-1SG not what COMP it can-COND.3SG be-INF been
 ‘Ich weiß nicht, was das gewesen sein könnte.’
- (15) Fascian
 a. La volea saer **che che** l’ era dò a fèr.
 she want-PFV.3SG know-INF what COMP he be-IPFV.3SG behind to do-INF
 ‘She wanted to know what he was doing.’
 b. L no me à amò dit **colun che** l vel anter
 he not to-me have-3SG still told which-one COMP he want-3SG among
 chi trei.
 these three
 ‘He has not already told me which one of these three he wants.’
- (16) Fodom
 a. Voi savéi **chi che** l é veñú.
 want-1SG know-INF who COMP SCL be-3SG come-PTCP
 ‘I want to know who came.’
 b. No sè **ci che** l i’ á dé.
 not know-1SG what COMP he to-them have-3SG given
 ‘I don’t know what he has given to them.’
- (17) Ampezzan
 a. No ei mai sapù **parcé che** chel por vecio el me
 not have-1SG never known why COMP this poor old-man he me
 vorese coscita ben.
 want-PFV.3SG so-much well
 ‘I have never known why this poor old man loved me so much.’
 b. no saç=o **çi ke** l ę šta a kopá keļ pōr diǰo?
 not know-2PL=SCL who COMP it be-3SG been to kill-INF this poor devil
 ‘Don’t you know who killed this poor devil?’
- (18) Central Friulian (*ASIt*)
 a. Non sai là **che** la mama à crompat li rosis.
 not know-1SG where COMP the mother have-3SG buy-PTCP the flowers
 ‘I don’t know where mother has bought the flowers.’
 b. Disi=mi **parce che** al partesc doman.
 tell-IMP=to-me why COMP he leave-3SG tomorrow
 ‘Tell me why he leaves tomorrow.’

Note that the *wh-che*-construction in embedded *wh*-questions is not limited to Romance. It appears also in varieties of German such as South Thuringian (Schleicher 1858:63), Egerland Bohemian German (Schiepek 1899), Bavarian of the Bavarian Forest (Steininger 1994), Middle and Lower Bavarian (Bayer & Brandner 2008a:88) (19), Lake Constance Alemannic (Bayer & Brandner 2008a:88) (20), Kaiserstuhl-Alemannic (Noth 1993), Bernese Swiss German (Bader & Penner 1988), Swiss German of Lucerne and St. Gallen (Schönenberger 2006), in Dutch, West Flemish (Haegeman 1992:57) (21), in Belfast English (Henry 1995:107) (22) and in informal registers of English (Zwicky 2002).

- (19) I frog me, fia **wos dass** ma an zwoatn Fernseher braucht. (Bavarian)
 I ask-1SG REFL for what COMP one a second TV need-3SG
 ‘I wonder what one needs a second TV for.’
- (20) I frog mich **wege wa** dass die zwei Autos bruchet. (Alemannic)
 I ask-1SG REFL for what COMP they two cars need-3PL
 ‘I wonder why they need two cars.’
- (21) Kweten nie, **wannièr da** Valère goa werekommen. (West Flemish)
 know-1SG not when COMP Valère go-3SG return-INF
 ‘I don’t know when Valère will come back.’
- (22) I wonder **which dish that** they picked. (Belfast English)

In the standard languages such as Standard German (Bayer & Brandner 2008a:87) (23), Standard English (24), Standard Italian (Benincà 2001:50) (25) and Standard French (Benincà 2001:50) (26), in contrast, the *wh*-expression and the complementizer are in complementary distribution.

- (23) Standard German
 Ich weiß nicht, wie viel (*dass) er für das Auto bezahlt hat.
 I know-1SG not how much (*COMP) he for the car pay-PTCP have-3SG
 ‘I don’t know how much we paid for the car.’
- (24) He asks her, where (*that) she goes. (Standard English)
- (25) Non so quando (*che/*se) Mario arriverà. (Standard Italian)
 not know-1SG when (*COMP) Mario arrive-FUT.3SG
 ‘I don’t know when (*that/*if) Mario will arrive.’

- (26) Je ne sais pas quand (*que / *si) Mario arrivera. (Standard French)
 I not know-1SG NEG when (*COMP) Mario arrive-FUT.3SG
 ‘I don’t know when (*that/*if) Mario will arrive.’

Finally, in embedded *wh-che* questions, the sequence *wh-che* generally seems to be followed by direct word order. This is the case in Dolomitic Ladin and all the other northern Italian varieties. The Romagnolo variety spoken in Forlì (Poletto 2000:44) (27) appears to represent a counterexample to this general rule as it seems to exhibit SCI.

- (27) I m a chiest **chi ch** a fasi=v. (Romagnolo of Forlì)
 they me have-3PL asked who COMP SCL do-2SG=SCL
 ‘They asked me what you were doing.’

Given that the “apparent inverted forms” in (27) also occur in declaratives (28), and Romagnolo is not a V2-language, Poletto (2000:44) assumes that we are not dealing here with an instance of subject-verb-inversion in the sense of verb movement to C but in fact with direct word order.

- (28) A n lisi-v mai di livar. (Romagnolo of Forlì)
 SCL not read-2SG-you never of books
 ‘You never read books.’

Hence, the general rule that embedded *wh-che*-questions exhibit direct word order can be maintained. Table 6.1 provides a typology of varieties with respect to the use of the complementizer *che* in embedded *wh*-questions.

| Type | Use of the complementizer in embedded questions | Varieties |
|---------------|--|--|
| Type 1 | Complementizer used | |
| 1a | Dependent on the wh-expression | Bavarian varieties, Egerland Bohemian German, Kaiserstuhl-Alemannic, Middle and Lower Bavarian, Nònes, Sursilvan, Swiss German of Lucerne and St. Gallen, Ticinese of Brione, Trentino |
| 1b | Dependent on the syntactic position of the subject | Cesiomaggiore Triestino |
| 1c | Optional | Ferrarese |
| 1d | Always | Dolomitic Ladin varieties, Friulian |
| Type 2 | Complementizer not used | Standard languages: English, French, German, Italian; Ligurian, Lombard, Ticinese, Veronese varieties and most varieties of Emilia-Romagna |

Table 6.1: Typology of varieties with respect to the use of the complementizer *che* in embedded wh-questions

6.1.2 Wh-*che* in main wh-questions

The wh-*che*-construction is not only observed in embedded wh-questions but also appears in main wh-questions in many varieties spoken in northern Italy. As a general rule, Poletto & Vanelli (1997:111f.) note that wh-*che* occurs in main wh-questions only in those varieties which show the sequence also in embedded wh-questions. These are Piedmontese varieties (29a) (Goria 2004:221), Ticinese varieties of the Lugano area (Poletto & Vanelli 1997:112) (29b), northern Lombard varieties, Veneto varieties of the Liventino and Agordino areas (*idem*:11) (29c) and Romagnolo varieties. Within Rhaeto-Romance, only the Dolomitic Ladin variety Fascian (30) and Western and Carnic Friulian (Benincà 2005:68) (31) show wh-*che* in main wh-questions.

- (29) a. **Chi ch'** a mangia 'l patati? (Piedmontese of Torino)
 who COMP SCL eat-3SG the potatoes
 'Who eats the potatoes?'
 b. **Chi c** à mangià i pom de tera? (Ticinese of Brione)
 who COMP have-3SG eaten the apples of earth
 'Who ate the potatoes?'
 c. **Cossa che** te fa? (Veneto of Portogruaro)
 what COMP you do-2SG
 'What are you doing?'

(30) **Chi che** magna l formai a Roma? (Fascian)
 who COMP eat-3SG the cheese in Rome
 ‘Who eats the cheese in Rome?’

(31) **Tje ku** tu as dit? (Friulian)
 what COMP you have-2SG say-PTCP
 ‘What did you say?’

In almost all varieties, the sequence *wh-che* is followed by direct word order on a par with what we have seen for embedded *wh*-questions (cf. section 6.1.1). However, in some varieties of Piedmontese spoken in the province of Torino main *wh-che*-questions are reported to involve SCI (Poletto & Vanelli 1997:113) and, according to the authors, cases like (32) are true cases of SCI unlike the apparent inverted form in (27).

(32) **Antè c** a va=lo? (Piedmontese of Torino)
 where COMP SCL go-3SG=SCL
 ‘Where is he going?’

Table 6.2 provides a typology of varieties with respect to the use of the complementizer *che* in main *wh*-questions.

| Type | Use of the complementizer in embedded questions | Varieties |
|--------|---|---|
| Type 1 | Complementizer used | Piedmontese varieties, Ticinese varieties of the Lugano area, northern Lombard varieties, Veneto varieties of the Liventino and Agordino areas, Romagnolo varieties, Fascian, Western and Carnic Friulian |
| Type 2 | Complementizer not used | Gherdëina, Badiot, Fodom, Anpezan |

Table 6.2: Typology of varieties with respect to the use of the complementizer in main *wh*-questions

Within the varieties of Dolomitic Ladin, the Fascian *wh-che*-construction can be considered a particular phenomenon as only Fascian exhibits this construction in main *wh*-questions. Yet, this section has shown that from a broader perspective, *wh-che* is not so unusual cross-linguistically given that it appears in embedded *wh*-questions in the other

Dolomitic Ladin varieties, in many Northern Italian dialects and in Germanic varieties and in main wh-questions in other northern Italian varieties as well.

In the light of these facts, the question arises as to what the relation is between the wh-*che*-construction and the traditional wh-question formation strategy involving SCI and the particle *pa/po*. In the following section, I examine the use of these two wh-question-formation strategies in Fascian.

6.2 Two competing question formation strategies in Val di Fassa

This section is concerned with the relation between wh-*che* and wh-SCI-*pa/po* both from a diachronic and a synchronic perspective and examines their use and function. Our starting point is Chiocchetti's (1992) study on question formation in Val di Fassa.

6.2.1 Chiocchetti (1992)

Chiocchetti (1992) compares the syntax of Fascian wh-questions in a 19th century manuscript, *J. B. Zacchia*, to contemporary question formation – i.e. 150 years after the publication of the manuscript. He reports that all wh-questions in the manuscript involve the traditional question formation strategy involving SCI and the particle *pa/po*.

(33) Question formation in 19th century Fascian (*Manoscritto "J.B. Zacchia"*)
(cf. Chiocchetti 1992)

- a. Olà vas=tu **po** cun tantô preschô?
where go-2SG=SCL PO with so-much hurry
'Where are you going in such a hurry?'
- b. Cotant dö lat dassô=la **pô**?
how-much of milk give-3SG=SCL PA
'How much milk does she give?'
- c. Olà jon=e **pa** a beiver sta mesa?
where go-1PL=SCL PA to drink this half
'Where are we going to have this half-litre (of wine)?'

In order to compare these findings to contemporary question formation in Fascian, Chiocchetti (1992) presented the Italian version of the three *wh*-questions in (33) to nine native speakers of Fascian from different age groups and different localities of Val di Fassa and asked them to provide the Fascian version of the questions. Figure 6.1 shows the results of this study.

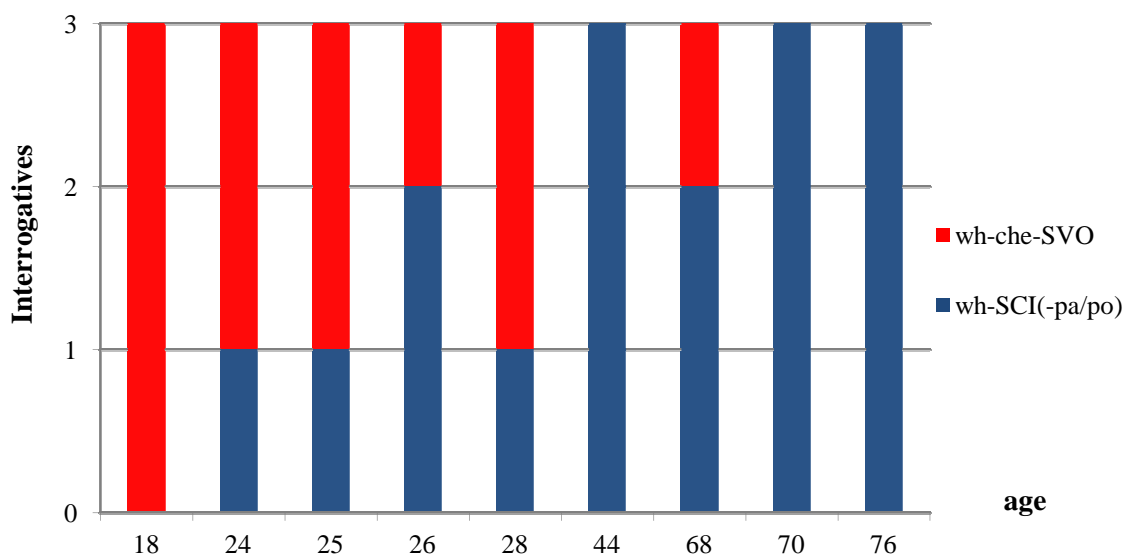


Figure 6.1: The results of Chiocchetti's (1992) study on question formation in Val di Fassa

As we can clearly deduce from Chiocchetti's (1992) data, at the beginning of the 1990s, the *wh-che*-construction has become established in Val di Fassa and is mainly used by the younger generations. The youngest informant even exclusively uses innovative *wh-che*. According to Chiocchetti (1992:212), the *wh-che*-construction is now widely used in everyday speech and has even entered formal registers, e.g. in the media.

The distribution of the novel question formation strategy does not only have a diachronic, but also a diatopic dimension: *wh-che* is only used by speakers of the Brach and Cazet subvarieties of Fascian, but not by speakers of the southernmost subvariety Moenat.

The spread of the innovative question formation strategy in Val di Fassa was received with a critical eye. Chiocchetti (1992:115), for instance, fears that a growing diffusion of *wh-che* might involve the loss of traditional subject-verb-inversion in interrogatives and by this

detach Fascian from the other varieties of Dolomitic Ladin, above all Gherdëina and Badiot, which maintain inversion in questions. Therefore, normative measures were applied to preserve the traditional wh-SCI-(*pa/po*)-construction and to prevent a further spread of the wh-*che*-structure. To give an example, in schoolbooks such as Dantone Florian & Zanoner Pastore (1979), the innovative construction was systematically replaced with the traditional structure (cf. Chiocchetti 1992:216, FN 13).

In the light of this development, the question arises as to what question formation is like in present-day Fascian: did the normative measures succeed in suppressing the innovative construction or did wh-*che* spread further in Val di Fassa?

6.2.2 Hack (2009)

In order to examine the state of affairs as to question formation in Val di Fassa 17 years after the publication of Chiocchetti's (1992) study, another study (Hack 2009) was conducted with 16 native speakers of Fascian of different age groups and from different parts of the valley. The participants were presented with seven Italian stimulus wh-questions which they were asked to translate into their local variety. The translation task was used to ensure the comparability of results with Chiocchetti's (1992) study. Figure 6.2 shows the outcome of this study and table 6.3 reports age and subvariety of Fascian of the individual participants.

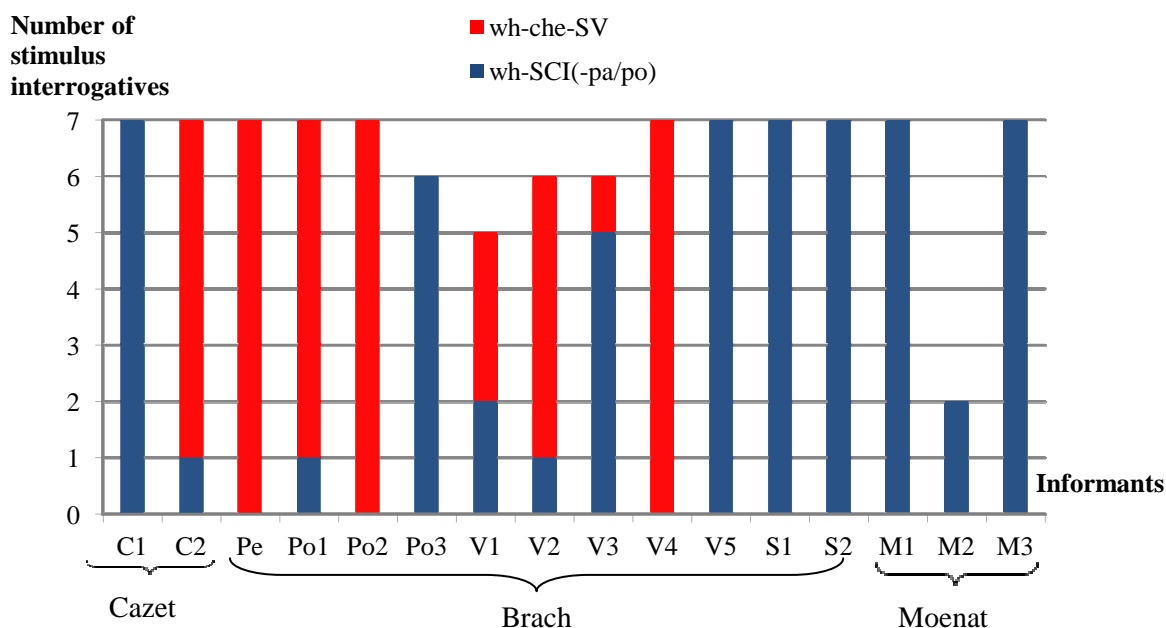


Figure 6.2: Diatopic-dialectal variation in question formation in Val di Fassa (Hack 2009:84)

| Cazet | | Brach | | | | | | | | | | | Moenat | | |
|-------|----|-------|----|----|----|----|----|----|----|----|----|----|--------|----|----|
| C | C | Pe | Po | Po | Po | V | V | V | V | V | S | S | M | M | M |
| 1 | 2 | | 1 | 2 | 3 | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 1 | 2 | 3 |
| 55 | 59 | 32 | 30 | 49 | 47 | 84 | 40 | 60 | 39 | 36 | 20 | 34 | 55 | 55 | 40 |

Table 6.3: Subvariety of Fascian and age of the informants participating in the study

As can be deduced from the considerable share of *wh-che*-constructions, the normative measures to restrict or prevent the innovative question formation strategy have not been successful. On the contrary: the *wh-che*-construction has even gained ground and is now used by all age groups; for many speakers it is now the preferred strategy for *wh*-questions.¹⁵ Yet, the geographic-dialectal restriction of *wh-che* to the Brach and Cazet subvarieties of Fascian still persists; *wh*-questions in Moenat exclusively involve traditional SCI (and the particle *po*).

¹⁵ Strikingly, the youngest informant in this study, S1, exclusively uses *wh-SCI(-pa/po)*. This is probably due to the fact that speaker S1 comes from Soraga, a small village 2,5 kilometres to the north of Moena. Soraga is closer to Moena than to the other villages of lower Val di Fassa and it has been argued already by Elwert (1943) that this proximity manifests itself also in language. Hence, also as regards the use of the *wh*-question formation strategies, Soraga seems to behave more like Moenat than like the rest of the Brach area.

In the light of these results, we need to discuss the following two issues: first, which conditions determine the use of the traditional and the innovative question formation strategies and second, why is *wh-che* not observed in Moenat?

6.2.3 Wh-SCI-*pa/po* vs. *wh-che*

In order to determine the conditions governing the choice of the traditional or the innovative question formation strategies, let us consider the results of task 4 of the Fascian questionnaire (cf. section 2.3.3.1). In this task, the informants saw a Fascian declarative clause on a PowerPoint slide. On the next slide, they saw the same sentence, but one constituent was highlighted. The informants then had to phrase a *wh*-question asking for this highlighted constituent. The same declarative clause was used several times with always another constituent being highlighted. Altogether, the informants got 3 different sentences with a total of 17 stimuli.¹⁶ Table 6.4 shows the total number of instances for the traditional and for the innovative question formation strategies but does not indicate other question formation strategies used (e. g. cleft constructions). This study was carried out twice, first in 2009 and a second time in 2010. While the methodology was exactly the same at both times, the stimulus sentences presented to the informants differed. Some speakers were interviewed twice as can be seen from the indications in the table.

¹⁶ For more details on this type of questionnaire task see section 2.3.2.

| Speaker | Subvariety | wh-SCI(-pa/po) | wh-che | |
|-------------|--------------|----------------|-----------|----------------------|
| 2009 | | | | |
| 1 | Brach | | 7 | |
| 2 | Brach | | | |
| 3 | Brach | | 35 | |
| 4 | Brach | | 2 | |
| 5 | Brach | | 35 | |
| 6 | Brach | 18 | | |
| 7 | Brach | | | |
| 8 | Brach | 2 | 18 | |
| 9 | Moenat | | | |
| 10 | Cazet | 39 | | |
| 11 | Brach | 16 | 18 | |
| 12 | Moenat | 20 | | |
| 13 | Moenat | 2 | | |
| 14 | Moenat | 31 | 1 | |
| 15 | Brach | 14 | 31 | |
| 16 | Cazet | 1 | 43 | |
| 17 | Cazet | | 1 | |
| 18 | Brach | 6 | 43 | |
| 19 | Brach | 35 | | |
| 20 | Brach | 26 | | |
| 21 | Brach | 36 | | |
| 22 | Moenat | | | |
| 2010 | | | | |
| 23 | Cazet | | 12 | |
| 24 | Brach | 7 | 4 | |
| 25 | Brach | 10 | | (= speaker 19, 2009) |
| 26 | Brach | 12 | | (= speaker 20, 2009) |
| 27 | Brach | 15 | | (= speaker 21, 2009) |
| 28 | Cazet | 11 | 3 | |
| 29 | Moenat | 14 | | (= speaker 9, 2009) |
| 30 | Cazet | 16 | | (= speaker 10, 2009) |
| 31 | Brach | 3 | 8 | |
| 32 | Moenat | 17 | | |
| 33 | Brach | | | |
| 34 | Moenat | 11 | | |

Table 6.4: The results of the ‘question formation task’ (questionnaire task 4) (2009–2010)

As to their use of these two different question formation strategies, the speakers can be classified into three groups as shown in table 6.5: the first group of speakers used exclusively one question formation strategy with 14 out of 29 choosing the traditional one. The innovative *wh-che*-construction was used as the only strategy by 6 speakers out of 29. Speakers of the second group showed a clear preference for one question formation

strategy although they also used the other strategy in some rare cases ('deviations'). Two speakers used SCI with some rare exceptions of *wh-che* whereas two other speakers used *wh-che* with some rare exceptions of SCI. Finally, the third group is characterised by five speakers making mixed use of both question formation strategies. Note that the innovative *wh-che*-construction is used only by speakers of the Cazet and Brach subvarieties. Speakers of Moenat always show the traditional structure.

| Group | Use of question formation strategies | wh-SCI(- <i>pa/po</i>) ('traditional') | wh- <i>che</i> ('innovative') |
|-------|--------------------------------------|---|-------------------------------|
| | | Speakers | Speakers |
| 1 | Clear use | 6, 10, 12, 13, 19, 20, 21, 25, 26, 27, 29, 30, 32, 34 | 1, 3, 4, 5, 17, 23 |
| 2 | Preferred use | 14, 28 | 8, 16 |
| 3 | Mixed use | 24 | 11, 15, 18, 31 |

Table 6.5: Typology of speakers according to their use of the traditional or the innovative question formation strategy

While the use of the question formation strategy is obvious in the case of group 1 speakers, a detailed analysis of group 2 and group 3 speakers might help us to understand (i) which restrictions govern the use of the two question formation strategies and (ii) why and in which way traditional wh-SCI(-*pa/po*) is being replaced by innovative *wh-che*.

Let us first consider group 2 speakers showing a clear preference for question formation strategy A and only rare deviations to B: speakers 8, 14, 16 and 28. Table 6.6 shows for these speakers the dominant strategy and the cases, in which they used the other strategy.

| Speaker | Dominant strategy | Deviations |
|---------|-------------------------|--|
| 8 | <i>wh-che</i> | Che velel <i>po</i> Marco? ('What does Marco want?') Che él <i>pa</i> Vich? ('What is Vich?') |
| 14 | wh-SCI(- <i>pa/po</i>) | Che che l è sozedù sa Vich? ('What happened in Vich?') |
| 16 | <i>wh-che</i> | Che àles fat Marianna e Francesca? (('What did Marianna and Francesca do?')) |
| 28 | wh-SCI(- <i>pa/po</i>) | Chi che les magna la nòres a Roma? (('What do the daughters-in-law eat in Rome?')) Olà che les magna l minestron la nòres? (('Where do the daughters-in-law eat the soup?')) Olà che siede pa jic angèrn a Moena? (('Where did you go yesterday in Moena?')) |

Table 6.6: Deviations from the dominant question formation strategy in group 2 speakers

As shown in table 6.6, speakers deviate from their standard question formation strategy above all in wh-questions featuring the wh-expression *che* ('what') and strikingly, this is the case in both directions: wh-SCI(-*pa/po*) > wh-*che* and wh-*che* > wh-SCI(-*pa/po*). The wh-expression *che* seems hence to be a pivot regarding the choice of question formation strategy.¹⁷

Moreover, speakers with wh-*che* as their usual question formation strategy deviate to wh-SCI(-*pa/po*) in wh-questions featuring right-dislocated subjects. However, right-dislocated subjects are observed in wh-*che*-questions as well (cf. speaker 28), also within one and the same speaker (35).

- (34) Right-dislocated subjects in wh-SCI(-*pa/po*)-questions (a) and wh-*che*-questions (b)
- a. Che à=les fat Marianna e Francesca? (speaker 28)
 what have-3PL=SCL.F done Marianna and Francesca
 'What did Marianna and Francesca do?'
- b. Che **che** l vel Paolo?
 what COMP he want-3SG Paolo
 'What does Paolo want?'

Let us next consider group 3 speakers with mixed use of the two question formation strategies. As seen before for group 2 speakers, group 3 speakers also deviate from their usual question formation strategy in questions with the wh-expressions *che* ('what'), *olà* ('where') and *co* ('how') (and *cal* ('which')).

| Speaker | Dominant strategy | Deviations |
|---------|-------------------------|------------------------------------|
| 11 | wh- <i>che</i> | <i>che, co</i> |
| 15 | wh- <i>che</i> | <i>che, olà</i> |
| 18 | wh- <i>che</i> | <i>che, che + noun, cal + noun</i> |
| 24 | wh-SCI(- <i>pa/po</i>) | <i>che</i> |
| 31 | wh- <i>che</i> | <i>che, olà</i> |

Table 6.7: Deviations from the dominant question formation strategy in group 3 speakers

¹⁷ The wh-expression 'what' exhibits a particular behaviour in the Romance languages in general (cf. Munaro & Obenauer 1999).

Turning back to the opposition between wh-SCI(-*pa/po*) and wh-*che*, also here we do not find evidence that the type of wh-expression matters for the question formation strategy used given that both strategies occur with the same wh-expressions (37–38).

- (37) ‘What happened?’ (‘out-of-the blue’) (speaker 15)
- a. Che è=**l** **pa** sozedù?
 what be-3SG=SCL PA happen-PTCP
- b. Che **che** l=é sozedù?
 what COMP SCL=be-3SG happen-PTCP
- (38) a. Che vel=**el** **po** venjer Marco? (speaker 11)
 what want-3SG=SCL PO win-INF Marco
 ‘What does Marco want to win?’
- b. Che **che** l völ far Marco?
 what COMP he want-3SG do-INF Marco
 ‘What does Marco want to do?’

Furthermore, we can see from tables 6.6 and 6.7 that although the deviations from the dominant question formation strategy normally occur always with the same (restricted set of) wh-expressions, the deviations occur in both directions, i.e. wh-SCI(-*pa/po*) > wh-*che* and wh-*che* > wh-SCI(-*pa/po*). Hence, we cannot establish an implication of the type: if a speaker uses wh-SCI(-*pa/po*) as their dominant question formation strategy, they will use wh-*che* in wh-questions featuring the wh-expression *che*.

If the wh-expression does not play a role, another hypothesis we could put forward is that the choice of the question formation strategy depends on the discourse context and is determined by information structure. We have seen in chapter 3 that the particle *pa/po* originally exhibited modal values, one of which is to establish connection with the preceding context. Moreover, according to native speaker intuitions, wh-*che*-questions are more “flat”, i.e. non-committal, with respect to wh-SCI(-*pa/po*)-questions. In the light of this situation, we could expect that in contexts requiring reference to the previous discourse, wh-SCI-*pa/po* questions are used instead of wh-*che*-questions. Questionnaire task 5 (cf. section 2.3.3.1) was explicitly designed to examine whether and if so, in what

way, information structure conditions the choice of the question formation strategy. In this task, informants were presented with a discourse situation such as (39) which includes an information gap.

- (39) Anna is getting ready to go out and you ask her where she is going. Anna answers but you don't understand her answer and hence ask her (a second time) where she is going.

Informants had to imagine that they were in this situation and were asked to phrase a question. If the hypothesis is correct that wh-SCI-*pa/po*-questions are used to establish reference to the previous discourse, then we could expect to observe them with a much higher frequency than wh-*che*-questions in this task.

However, although the discourse situations in this task were constructed in a way as to favour the use of wh-SCI-*pa/po*, we observe wh-SCI-*pa/po*-questions of the type in (40a) and wh-*che*-questions of the type in (40b) alike. Even of those speakers using SCI, not all also used the particle *pa/po*.

- (40) Questions in reponse to (39)
- a. Olà vas=te **pa** Anna? (wh-SCI-*pa/po*)
 where go-2SG=SCL PA Anna
 'Where are you going, Anna?'
- b. Olà **che** tu vas, Anna? (wh-*che*)
 where COMP you go-2SG Anna

These findings suggest that (i) the particle *pa/po* has lost its clause-combining function in Fascian and (ii) the choice of the question formation strategy (wh-SCI-*pa/po* vs. wh-*che*) does not depend on the discourse function or information structure.

We have seen, thus, that – apart from the dialectal variation between Fascian Brach/Cazet on the one hand and Moenat on the other – there is no clear-cut principle behind the use of the two competing question formation strategies. Instead, there is reason to assume that the choice of the question formation strategy depends on the speaker. Several independent

factors may lead to the use of the traditional strategy with some speakers and to the use of the innovative strategy with others. Take the wh-expression *che*, for instance. The homophony of the wh-expression *che* and the complementizer *che* might lead speakers using predominantly wh-SCI(-*pa/po*) to choose wh-*che* instead, while the same factor might inhibit the use of wh-*che* with the wh-expression *che* in other speakers.

Moreover, speaker 11, who uses the traditional and the innovative strategies almost alike, is the only speaker whose use of the two question formation strategies seems to be associated with different contexts. This speaker always uses the wh-SCI(-*pa/po*)-construction and never the wh-*che*-structure in the following contexts:

- in wh-questions involving a left-dislocated element (LD) or a so-called ‘hanging topic’ (HT) (41a vs. 41b),
- in wh-questions which contextually continue a preceding line of thought (42),
- in wh-questions featuring complex predicates (predicates consisting of more than one lexeme) such as *aer inom* (‘to be called’) (44).

(41) a. Angérn Tone che à=I fat *po*? (LD)
 yesterday Tone what have-3SG=SCL done PO
 ‘What did Tone do yesterday?’

b. Che **che** à fat angérn Tone? (no LD)
 what COMP have-3SG done yesterday Tone

(42) Me recorde che l à inom Vich chel paìsc, ma che
 REFL remember-1SG that it have-3SG name Vich that village, but what
 aon=e *po* fat?
 have-1PL=SCL PO done
 ‘I remember that the village is called Vich, but what did we do there?’

(43) Che à=I *po* inom l paìsc olache s=aon
 what have-3SG=SCL PO name the village where-that REFL=have-1PL
 scontrà la pruma outa?
 meet-PTCP the first time
 ‘What is the name of the village where we met for the first time?’

The choice of wh-SCI-*pa/po* in wh-questions such as (41–42) might not primarily be due to the syntactic structure of the question (LD), but rather to the need to contextually relate

the wh-question to the preceding context. Given the results with respect to (39), however, this is subject to speculation.

In conclusion, we have seen in this section that in the last decades, the wh-*che*-construction has spread in Fascian main questions to the extent that nowadays wh-*che* and wh-SCI(-*pa/po*) are used almost alike in neutral focus ‘out-of-the-blue’ wh-questions. The use of these two competing question formation strategies in Fascian is a case of multidimensional variation given that we observe (i) dialectal variation between the Brach and Cazet subvarieties on the one hand and Moenat on the other, (ii) variation between speakers (inter-speaker variation) and (iii) variation within one and the same speaker (intra-speaker variation).

The findings and the observations made in this section on the use of wh-SCI(-*pa/po*) vs. wh-*che* can be summarised as follows: first, younger speakers are more prone to use wh-*che* than older speakers. Second, the use of the two question formation strategies is subject to dialectal variation: wh-*che* is limited to the Cazet and Brach subvarieties of Fascian and does not occur in Moenat. Third, with regard to the choice of question formation strategy the wh-expression *che* (‘what’) plays a particular role which can be expressed in terms of the implicational hierarchy in (44):

- (44) There are two main question formation strategies: wh-SCI(-*pa/po*) (A) and wh-*che* (B). If a speaker normally uses A, but may also use B, then B will involve the wh-expression *che*. The same holds in both directions.

Moreover, information structural factors and the manner in which information is organised in the sentence can but need not matter for the choice of the question formation strategy. Long wh-questions featuring left- or right-dislocated elements or complex verbs tend to involve traditional SCI.

The observation that in Fascian, wh-questions requiring reference to the preceding discourse context, exhibit wh-SCI(-*pa/po*) but also wh-*che* suggests that the particle *pa/po* has lost its modal value as a clause-combining element. However, some speakers do tend to use wh-SCI-*pa/po*-questions when the wh-question involves a strong continuation of a topic or a strong connection with the preceding context.

Finally, unlike Parry (2003:156), who observes that “[t]he availability in the Piedmontese repertoire of more than one interrogative construction allows for pragmatic differentiation”, this is not the case with respect to Fascian wh-SVI(-*pa/po*) vs. wh-*che*-questions and both structures can hence be considered as neutral focus wh-question formation strategies with a standard interpretation.

The next section will be concerned with the origin of the wh-*che*-construction in Fascian.

6.3 The origin of the wh-*che*-construction in Fascian

In this section, I first discuss the approaches on the origin of wh-*che* put forward in the literature with respect to different Romance varieties (section 6.3.1). Then, I evaluate these approaches with respect to Fascian and building on diachronic evidence from Fascian theatre plays (6.3.2), I propose an account as to the origin of wh-*che* in Fascian main wh-questions (6.3.3).

6.3.1 Theories on the origin of the wh-*che*-construction in main wh-questions

Three main theories have been proposed so far in the literature as to the origin of the wh-*che*-construction in main interrogatives, the ‘copy’-approach (section 6.3.1.1), the ‘pragmatic’ approach (6.3.1.2) and the ‘ellipsis’-approach (6.3.1.3).

6.3.1.1 The ‘copy’-approach

As regards Northern Italian dialects, Poletto & Vanelli (1997:112) assume that *wh-che*-structures in main interrogatives are “copies” of *wh-che* in subordinating constructions, in other words, *che* in main *wh*-interrogatives is seen as an extension of its use in subordinate clauses. The authors provide two main pieces of evidence for this view based on data examined for the *ASIt* project²⁰:

First, *wh-che* occurs in main *wh*-questions only in those varieties which show the sequence also in embedded *wh*-questions (Poletto & Vanelli 1997:111f.), suggesting an implication from embedded to main *wh*-questions: only if *wh-che* is possible in embedded questions it is also possible in main questions (cf. section 6.2).

The second piece of evidence derives from the observation that the mechanisms by which the structure spread in main *wh*-interrogatives seem to replicate the mechanism in embedded interrogatives. In varieties such as the Ticinese dialect of Brione, Trento or Nònes, the complementizer occurs in embedded questions only with some *wh*-expressions (cf. section 6.2.1, (7–9)). Poletto & Vanelli (1997:112) observe that the diffusion of the *wh-che*-structure in main questions corresponds to the pattern observed in embedded questions, which can be stated in terms of the implication in (46):

(46) If the complementizer *che* appears with at least one *wh*-expression, then it occurs with the *wh*-expression *chi* (‘who’).

(47) *wh-che* with the *wh*-expression *chi* (‘who’) in main questions (Poletto & Vanelli 1997:112)

- a. Chi c à mangià i pom de tera? (Ticinese di Brione)
who COMP have-3SG eaten the apples of earth
‘Who ate the potatoes?’
- b. Cos a fe=i?
what SCL do-3PL=SCL
‘What are they doing?’

²⁰ The former *ASIS* “Atlante Sintattico dell’Italia Settentrionale” (‘Syntactic Atlas of Northern Italy’) became *ASIt* “Atlante Sintattico d’Italia” (‘Syntactic Atlas of Italy’).

Note that the ‘copy’-approach is assumed also by Chiocchetti (1992) regarding Fascian *wh-che*-questions.

(48) Generalisation of *wh-che* from embedded to direct questions in Fascian (Chiocchetti 1992:212)

| | | | | | | | | | |
|------------|------------|------------|-----|---------|---|------------|------------|-----|---------|
| Di=me | ola | che | tu | vas? | → | Ola | che | tu | vas? |
| say-IMP=me | where | COMP | you | go-2SG | | where | COMP | you | go-2SG |
| ‘Tell me | where | you | are | going.’ | | ‘Where | are | you | going?’ |

Although the evidence for the ‘copy’-approach is compelling, this theory fails to account for the diachronic facts as to question formation in Romance varieties such as Piedmontese.

On the basis of diachronic data from Piedmontese, Parry (2003:162) identifies three main problems with the ‘copy’-approach concerning (i) the influence of embedded interrogatives, (ii) the function of *che* in embedded questions and (iii) the mechanism of the change.

Parry’s first criticism relates to the fact that if the influence of embedded interrogatives really was the crucial factor as assumed under the ‘copy’-approach, one might expect embedded interrogatives to exhibit right from the start a much higher occurrence of *wh-che* than main *wh*-interrogatives. Yet, Parry (2003:162) observes that towards the end of the 18th century, when the *wh-che*-construction became predominant in Piedmontese while continuously replacing subject-verb-inversion, embedded *wh*-questions lacking *che* appear next to main *wh*-questions featuring *che*. Second, the extension of the complementizer *che* from embedded to main clauses contradicts the very reason for the generalisation of *che* in embedded clauses – namely its function as a marker of complementation or subordination. The third problem with the ‘copy’-approach concerns the mechanism of change. According to Parry (2003:158), the “incidence of the complementizer in embedded interrogatives appears not to be significantly higher than in main clauses” but increased in a parallel way in both main and embedded interrogatives. Under the ‘copy’-approach, however, this development would be unexpected. Moreover, according to Parry (2003:162), the fact that

in Piedmontese, the complementizer is first observed together with the wh-expression *chi* in both main and embedded wh-questions suggests that “there is more to the spread of *che* than explicitly marking subordination”, i.e. the extraction site of the wh-expression might play a crucial role.²¹

6.3.1.2 The ‘pragmatic’ approach

In the light of the drawbacks of the ‘copy’-approach and the diachronic evidence from Piedmontese, Parry (1997, 2003) suggests a different account of the origin of wh-*che* in main wh-questions. According to Parry, other clause types which are both structurally and semantically similar to interrogatives such as exclamatives or relative clauses have contributed to the occurrence of *che* in wh-questions. Parry (2003:163) observes that the wh-*che*-construction first appeared in wh-exclamative clauses such as (49b) which previously involved subject-verb-inversion (49a) and then spread from interrogatives used as exclamatives (50) to rhetorically marked wh-interrogatives like rhetorical questions (51a) or echo questions (51b), to ambiguous interrogatives (52) and finally to all unmarked interrogative clauses.

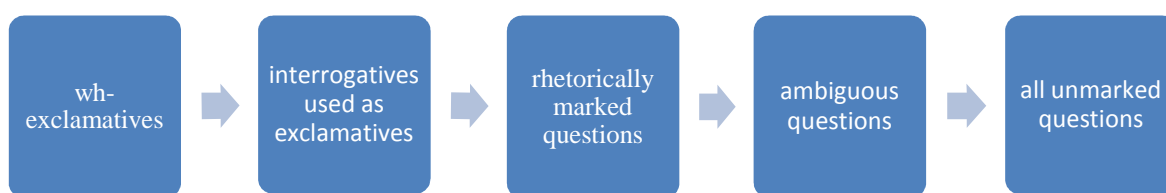


Figure 6.3: The spread of the wh-*che*-structure in Piedmontese (cf. Parry 1997, 2003)

(49) Piedmontese wh-exclamatives: wh-SCI (a) and wh-*che*-SV (b)

(cf. Parry 2003:159, 163)

- a. Quant affan eu=i pôrtà per vôi! (*Alione*, early 16th c.)
 how-much trouble have-1SG=SCL carry-PTCP for you
 ‘How much suffering have I endured for you!’

²¹ Further factors that might condition the spread of *che* are the internal structure of the wh-expression and the semantic interpretation of the question (e.g. information-seeking questions vs. rhetorical or modal questions).

- b. Quante cose **ch'** i=j=direu! (Il Conte Pioletto, late 17th c.)²²
 how-many things COMP I=to-him=will-tell
 'How many things I will tell him!'
- (50) Piedmontese wh-interrogatives with exclamative force (Parry 2003:165)
 Oh! Còsa **ch'** i disi mai? (La Cichin-a 'd Moncalé, p. 17)
 oh what COMP SCL say-2PL ever
 'Whatever are you saying?' (dismay and fear)
- (51) Rhetorically marked wh-interrogatives: rhetorical questions (a); echo questions (b)
 (Parry 2003:165f.)
- a. Cosa **ch'** a l' è sta scena? (Guera o pas, p. 27)
 what COMP SCL SCL is this scene
 'What's going on?'
- b. Che **ch'** i son nen stà mi? (Èl nodar onorà, p. 68)
 what COMP SCL am not been me
 'What have I not been?'
- (52) Ambiguous interrogative clauses in Piedmontese (Parry 2003:167)
- a. Cosa **ch'** i veule voi? (Marioma Clarin, p. 88)
 what COMP SCL want-2PL you
 'What on earth do you want?' (surprise and annoyance)
- b. Chi **ch'** a l' ha ciamà-lo chiel? (ibid.:126)
 who COMP SCL SCL have-3SG called=OCL you (polite)
 'Who on earth called you?' (surprise and annoyance)

Parry assumes a pragmatic motivation for the spread of *che*, namely marking emphasis on the wh-expression. In this respect, Parry's (1997) account is built on Laka's (1990) claim that emphasis is represented in the syntax by a functional projection whose head either serves as landing site for verb movement or hosts an overt complementizer.

In fact, in exclamatives such as (49b), foregrounding of the wh-expression results from the complementizer separating it from the remainder of the utterance. The subsequent spread of the complementizer to wh-interrogatives was then, in Parry's view, encouraged by (a) the similarity both in structure (the separation of the sentence in two parts through the complementizer) and in function ("anchoring" of the focus constituent to the actual discourse situation) between exclamatives, relative clauses and interrogatives and (b) the semantic and formal similarity of relative and interrogative pronouns. Further evidence for

²² Crucially, according to Parry (2003:159), in this play, "exclamative WH-structures involving an NP may have an overt complementizer, whereas all WH-interrogatives have the traditional form [WH+inv]".

this process derives from the observation that *wh-che*-interrogatives involve main stress on the *wh*-expression just as *wh*-exclamatives.

Moreover, exclamatives such as (49b) are believed to have been encouraged by the sequence *DP-che*, which is characteristic for restrictive relative clauses in which the DP is identified by a presupposed proposition introduced by *che*.

- (53) Piedmontese (Parry 2003:160)
 E cola Brigada c' a l' é ancora nen tornà (Le Miserie, p. 59)
 and that Brigada COMP SCL CL be-3SG yet not return-PTCP
 da 'an piassa!
 from the square
 'And that Brigada that has not yet returned from the square!'

Besides, the relation between *DP-che* in restrictive relative clauses and *wh-che* in exclamatives and interrogatives is corroborated by the observation that the first type of *wh*-expression followed by *che* were DPs such as *còs/còsa che* (Parry 1997; Gorla 2004:223). Then, it is assumed that due to high frequency use of the pragmatically marked structure the 'pragmatic force' of the *wh-che*-construction got gradually lost. As a consequence, *wh-che* generalised to all unmarked *wh*-questions. Further evidence for Parry's theory that *wh-che* originated in pragmatically marked structures comes from Friulian dialects, where *wh-che* is restricted to pragmatically marked contexts, i.e. utterances expressing disappointment or surprise.

- (54) Interrogative *wh-che* in Friulian (Poletto 1997:78f.)
 [du'la k a l 'vedi mi' tu:t kel 'libri]
 where COMP SCL SCL have-3SG put that book
 'Where on earth can he have put that book?'

Finally, for Parry (1997), the crucial factor for the diffusion of *wh-che* in Piedmontese *wh*-questions is the fact that *wh-che* represents a more economical option to *SCI*, given that *wh-che* helps to retain direct word order *SV*. Note that also in Roberts & Roussou's (1999, 2003) framework (cf. section 4.3), *wh-che* would represent the more economical

alternative to wh-SCI given that wh-*che* can be implemented in terms of *merge* (insertion of the complementizer *che*) while wh-SCI would be *move* (verb movement to C) and *merge* is more economical than *move*.

6.3.1.3 The ‘ellipsis’-approach

According to a third hypothesis, the wh-*che*-construction originates from cleft constructions. Although Munaro (1997) does not explicitly mention this kind of hypothesis, his observation that in the variety of Rocca Pietore (Valle Agordina) wh-cleft questions (55a) alternate with structures lacking the copula verb (55b) (1997:66, FN 7) points in this direction.

- (55) Alternation between cleft constructions and structures lacking the copula verb in Rocca Pietore (Valle Agordina) (Munaro 1997:66, FN 7)
- a. è=lo ki **ke** a ma’<a la ‘torta?
 be-3SG=SCL who COMP have-3SG eaten the cake
 ‘Who ate the cake?’
- b. ki **ke** a ma’<a la ‘torta?
 who COMP have-3SG eaten the cake
 ‘Who ate the cake?’

Similarly, Noonan (1992) proposes that wh-*che*-questions in French (56a) are in fact “hidden clefts” (56b) from which the copula is missing.²³

- (56) French
- a. Qui est-ce qui a tapé à la porte? (wh-cleft)
 who is-it who have-3SG knocked at the door
 ‘Who knocked at the door?’
- b. Qui **qu’** a tapé à la porte?
 who COMP have-3SG knocked at the door

²³ Moreover, Parry (1997:93) does not exclude the influence of cleft constructions in the evolution of wh-*che*-questions in Piedmontese.

6.3.2 Question formation in Val di Fassa from a diachronic perspective

In the previous section, I have reviewed three approaches to the origin of *wh-che* in main *wh*-questions in Romance varieties. In the following, we shall now evaluate, which of these theories could best account for the Fascian facts.

To this end, we will examine a corpus of Fascian theatre plays which includes mainly plays from the Cazet and Brach subvarieties given that Moenat does not exhibit *wh-che* in main *wh*-questions. The choice of theatre plays for such a corpus analysis is motivated by the fact that theatre plays best reflect spoken language and can thus give a reliable picture of natural language use in the past. Moreover, theatre plays have a great tradition in the Dolomitic Ladin valleys, especially in Val di Fassa, and for this reason, there are enough texts available. Table 6.8 provides an overview of the plays taken under consideration.²⁴

| | Date | Theatre play | Author | <i>wh-che</i> |
|----|-----------|---|--|---------------|
| 1 | 1869 | <i>Grottol</i> | Giosef Brunel de Zepon (1826–1892) | – |
| 2 | 1887 | <i>Pitores</i> | | – |
| 3 | 1902/1903 | <i>Na Cambra Šbalgada</i> | Giovanni Antonio Bernard (1870–1949) | – |
| 4 | 1905 | <i>Ko ke la é stada ke son ruà sul Ball dei Dolomiten-Ladiner</i> | Hugo De Rossi (1875–1940) | – |
| 5 | 1920–30 | <i>L'ost mbrojà o La skomeša fatala</i> | | – |
| 6 | ca. 1946 | <i>Fotografo e martire</i> | Francesco Dezulian Del Garber (1898–1986) | – |
| 7 | 1948 | <i>El Moliné e sia fia</i> ²⁵ | Giovanni Battista Costa (1884–1968) | √ |
| 8 | 1981 | <i>Auter che n'outa</i> | Simon De Giulio (1912–1987) | √ |
| 9 | 1982 | <i>La ciaseta sa mont</i> | | √ |
| 10 | 1982 | <i>Stenterelo vel se maridèr</i> | | √ |
| 11 | 1984 | <i>Na cèsa de strambes</i> | | √ |
| 12 | 1985 | <i>L dî de sègra</i> | | √ |
| 13 | 1988 | <i>I doi lères</i> | Fabio Dantone (1949–2004) | – |

Table 6.8: Corpus analysis based on Fascian theatre plays²⁶

In the following, I examine the plays with respect to the following research questions:

²⁴ The first play stated in the table, *Grottol*, is the earliest available theatre play in Fascian.

²⁵ This is not an original text but a translation from the German play *Der Müller und sein Kind* ('The miller and his child') by Ernst Raupach (first performed in 1830).

²⁶ I am indebted to Dr. Rut Bernardi for help with choosing the theatre plays.

- (57) a. Which question formation strategies are used in the plays?
 b. When was *wh-che* used for the first time?
 c. In which type of *wh*-question did *wh-che* appear first?
 d. In which clause types and contexts did *wh-che* appear before being used in *wh*-questions?

The earliest Fascian theatre plays exclusively feature the traditional *wh*-question formation strategy *wh-SCI(-pa/po)* in main *wh*-questions; *wh-che* is not observed at all. The first occurrence of *wh-che* in main *wh*-questions appears in the play *El Moliné e sia fia* ('The miller and his daughter') in 1948. Although *wh-SCI(-pa/po)* is still the predominant question formation strategy in the play, *wh-che* occurs already with all *wh*-expressions.

- (58) a. Ben vegnù, ma da **olache** te vegnes? (Moliné, 221)
 well come-PTCP, but from where-COMP you come-2SG
 'Wellcome, where do you come from?'
 b. **Che che** volede? (Moliné, 237)
 what COMP want-2PL
 'What do you want?'
 c. **Chi che** sarà? (Moliné, 262)
 who COMP be-FUT.3SG
 'Who could that be?'
 d. Ma **coche** la é? (Moliné, 241)
 but how-COMP it be-3SG
 'How is it? (tell me)'
 e. Corrado, **percheche** no te me vèrdes? (Moliné, 256)
 Corrado why-COMP not you me look-2SG
 'Corrado, why don't you look at me?'

Interestingly, *wh-che* almost exclusively occurs in the speech parts of young characters in the play, whereas *wh*-questions in the speech parts of older people exhibit the traditional structure *wh-SCI(-pa/po)*. This differentiation might have been used purposefully by the author in order to contrast the language of young people with that of old people.

Of course, we cannot conclude from these observations that *wh-che* did not occur before this theatre play in Fascian main *wh*-questions. An innovation such as the *wh-che*-construction in main *wh*-questions might probably have occurred first in spoken language and then it might have taken some time to get into written language as well. What is more,

given the inter-speaker variation observed in section 6.2, the choice of the question formation strategy may very well depend on the personal preference of the author. Hence, the fact that Brunel de Zepon, the author of *Grottol*, did not use *wh-che*-constructions in his play does not preclude the existence of the construction at that time in Fascian.²⁷

Note that from its first occurrence in *Moliné* onwards, the use of *wh-che* is not consistent. In the theatre play *I doi lères* from 1988, i.e. 40 years after *Moliné*, for instance, *wh-che* is not observed at all in main *wh*-questions. This finding recalls the observation we made in section 6.2.3: the use of *wh-che* depends very much on the speaker or the author. In the light of these facts, it is very difficult to determine when *wh-che* really entered Fascian main *wh*-questions. The authors of the first plays might simply not have used the construction – maybe because of a personal preference for *wh-SCI(-pa/po)* – although the innovative *wh-che*-construction was already around in Val di Fassa. Furthermore, there is also the possibility that the authors of these plays did not use the innovative *wh-che*-structure because of prescriptive reasons (cf. section 6.2.1).

Let us now consider the three theories on the origin of the *wh-che*-construction in main *wh*-questions in Fascian in the light of the Fascian facts.

The ‘copy’-approach as put forward by Poletto & Vanelli (1997) (cf. section 6.3.1.1), makes the following predictions: (i) the *wh-che*-construction should occur in embedded *wh*-questions before its first appearance in main *wh*-questions. (ii) The pattern, by which *wh-che* spread in main *wh*-questions should be the same as in embedded questions, i.e. *wh-che* should appear with the same *wh*-expressions in main and in embedded *wh*-questions. Furthermore, the diffusion pattern should be in line with the implication in (46) according to which *wh-che* should first occur with the *wh*-expression *chi* (‘who’) and from there on spread to other *wh*-expressions.

²⁷ In fact, there are some rare attestations of *wh-che* in the variety of the neighbouring valley, Marèò, already in the 19th century (Paul Videsott, p. c.), but in present-day Marèò, *wh-che* is not observed at all in main *wh*-questions.

The first prediction is borne out in Fascian: already in the first theatre plays, embedded wh-questions always exhibit the *wh-che*-construction.

- (59) a. Sas=to **che che** me ve gn tel tgi af e? (*Grottol*, 207)
 know-2SG=SCL what COMP a-me come-3SG in-the head PRT
 ‘Do you know what come to my mind?’
 b. [...] gio no t’ é domanà **olà che** tu vas. (*Ladiner*, 187)
 I not to-you have-1SG ask-PTCP where COMP you go
 ‘[...] I did not ask you where you are going.’

The second prediction made by the ‘copy’-approach, however, can neither be verified nor falsified on the basis of our Fascian data given that *wh-che* occurs in embedded wh-questions with all wh-expression already in *Grottol*, the very first theatre play. Hence, we do not have any evidence suggesting that *wh-che* first appeared with one particular wh-expression and then successively spread to other wh-expressions, as Poletto & Vanelli (1997:112) observe with respect to the diffusion of *wh-che* in northern Italian varieties (cf. section 6.3.1.1). In the absence of any counterevidence, the ‘copy’-approach seems a plausible account for the Fascian data.

Moving on to the ‘pragmatic’ approach, we would expect to find pragmatically marked *wh-che*-constructions before the first occurrence of *wh-che* in main wh-questions – as observed by Parry (1997, 2003) for Piedmontese. This is indeed the case: first, early theatre plays in Fascian exhibit wh-exclamatives similar to the ones found in Piedmontese (Parry 1997, 2003; cf. (49)), which – according to the ‘pragmatic’ approach can be taken as a first step towards true *wh-che*-questions.

- (60) a. Oh Dio mio, oh **che pera fémena arbandonada che** son! (*Ost*, 50)
 oh God my, oh what poor woman abandoned COMP be-1SG
 ‘Oh my God, oh what poor abandoned woman I am!’
 b. Maladeta **che spavent che** m’ ède fat ciapèr ... (*Fot.*, 123)
 damn what fright COMP to-me have-2PL make-PTCP feel-INF
 ‘Damn, how you have frightened me!’

Moreover, we also find instances of rhetorically marked *wh-che*-questions such as (61), which can be considered interrogatives used with exclamative force or rhetorical questions.

- (61) **Chi che** mai l'='é sta[t]! (Grottol, 203)
 who COMP ever SCL=be-3SG been
 'Who ever could have been that!'

Further evidence for a pragmatic progression of *wh-che*-questions derives from *Moliné*, the first play in which *wh-che* appears in a regular way with all *wh*-expressions. In this play, *wh-che*-questions are observed with two kinds of interpretations: with a rhetorical interpretation (62) but also as true requests for information in the sense of 'out-of-the-blue'-questions (63).

- (62) Ma a **che che** doesse pissèr canche da sera (Moliné, 231)
 but to what COMP must-COND.1SG think-INF when at evening
 o la domegnes son chiò soula [...].
 or at Sundays be-1SG here alone
 'What should I think of when I am here alone in the evening or on Sundays [...].'

- (63) **Che che** volede? (Moliné, 237)
 what COMP want-2PL
 'What do you want?'

Hence, there is evidence for a pragmatic motivation behind the evolution of *wh-che*-questions in Fascian.

As far as the 'ellipsis'-approach (cf. section 6.3.1.3) is concerned, we would expect to find *wh*-cleft questions before the first occurrence of *wh-che*-constructions in Fascian main *wh*-questions. This prediction is borne out indeed: *wh*-cleft questions are used already in the earliest theatre plays.

- (64) a. Chi e=l **pa** stat a dir de ste asenade? (Grottol, 221)
 who be-3SG=SCL PA been PREP say-INF of these follies
 'Who told you these stupidities?'
 b. ki é=l **pa** ke ven a sonár? (Cambra, I:451)
 who be-3SG=SCL PA COMP come-3SG to play-INF
 'Who comes to play?'

Interestingly, Poletto & Vanelli's (1997) implication regarding the diffusion pattern of the complementizer in *wh*-questions with different *wh*-expressions (cf. 46) is respected by *wh*-cleft questions in early theatre plays: these *wh*-cleft questions occur exclusively with the *wh*-expressions *chi* ('who') and, to a lesser extent, *che* ('what'). The limitation of the *wh*-cleft construction to questions featuring the *wh*-expression *chi* (and *che*) seems to persist even when *wh-che* occurs regularly with all *wh*-expressions in *Moliné*.

- (65) a. Chi é=l che ven? (Moliné, 257)
 who be-3SG=SCL COMP come-3SG
 'Who is coming?'
 b. Chi é=l che chiama? (Moliné, 262)
 who be-3SG=SCL COMP call-3SG
 'Who is calling?'

This observation casts some doubt on the hypothesis that *wh-che* in main *wh*-questions results from ellipsis of the copula verb of *wh*-cleft questions. Under the 'ellipsis'-approach, we would expect to find *wh*-cleft questions with all *wh*-expressions before the first occurrences of *wh-che*. However, even in plays by Simon de Giulio from the 1980s, *wh*-cleft questions exclusively occur with the *wh*-expression *chi* ('who'). Moreover, in present-day Fascian, *wh*-cleft questions are observed with all *wh*-expressions (66a–b) on a par with *wh-che* (66a'–b'). Hence, *wh-che* does not replace *wh*-cleft questions as predicted by the 'ellipsis'-approach, but instead, the *wh*-cleft construction spread to other *wh*-expressions on a par with *wh-che* so that both constructions show a parallel development.

- (66) a. Olà é=lo **po** che le nore le magna n minestron?
 where be-3SG=SCL PO COMP the daughters-in-law SCL eat-3PL a soup
 'Where are the daughters-in-law having a soup ?'
 a'. **Olà che** le magna n minestron le nòre?
 where COMP SCL eat-3PL a soup the daughters-in-law
 b. Can è=l **pa** che le va a Moena?
 when be-3SG=SCL PA COMP SCL go-3PL to Moena
 'When do they go to Moena?'
 b'. **Can che** le va a Moena?
 when COMP SCL go-3PL to Moena

In sum, the diachronic data from Fascian theatre plays provide evidence for both the ‘copy’-approach and the ‘pragmatic’ approach, whereas the ‘ellipsis’-approach can be dismissed.

Fascian exhibits already in the first theatre plays from the 19th century some properties suggesting that the occurrence of *wh-che* in main *wh*-questions is not only due to a copy process from embedded *wh*-questions. In fact, the complementizer appeared before its first occurrence in main *wh*-questions not only in embedded *wh*-questions (cf. 59), but also in object clauses (67), relative clauses (68) and in embedded statements introduced by a conjunction (69). This is due to the fact that in Fascian, relative pronouns correspond to *wh*-expressions and most conjunctions consist of a *wh*-word and the complementizer *che* (e.g. *coche* ‘when’).²⁸

(67) *wh-che* in object clauses

Lasha sentir **che che** tò cial fin à danef (Ost, 42)
 let-IMP hear-INF what COMP your head clever have-3SG again
 invent-PTCP.
 invented
 ‘Let me hear what your clever head has invented again.’

(68) *wh-che* in relative clauses

Dutg **chi che** grigna arà pa rexong; [...]. (Grottol, 189)
 all who COMP smile-3PL have-FUT.3PL PA reason
 ‘All those who smile will be right; [...].’

(69) Conjunctions with the complementizer *che*

a. **Canche** fajène la mèscres dessema, [...]. (Pitores)
 when-COMP do-1PL the masks together
 ‘When we dress us up together [...].’

b. Sta mia mare, **dò che** la se à (Ladiner, 155)
 this my mother after COMP she REFL have-3SG
 perdù la faela [...].
 lose-PTCP the speech
 ‘My mother, after having lost her speech, [...].’

c. **Apena che** l camerier auza l sprizen [...]. (Ost, 50)
 as-soon-as COMP the servant raise-3SG the watering-can
 ‘As soon as the servant raises the watering can [...].’

²⁸ This holds also for the other varieties of Dolomitic Ladin where, however, *wh-che* does not occur in main *wh*-questions.

Given that the sequence *wh-che* occurs in different clause types in Fascian, we might be dealing here not only with the mere extension of *wh-che* from embedded to main *wh*-questions, but with a more general process originating in embedded clauses: the immediate adjacency of the *wh*-element in embedded contexts (67–69) might have led to the reanalysis of these two elements as one single unit.²⁹ Example (70) illustrates this process for the *wh*-expression *co* ('how').

(70) embedded contexts: [co] [che] → [co che] → [coche]

Further evidence for this assumption derives from the observation that many authors and textbooks of Fascian (e.g. *Cors Fascian ladinofons 2*) write the pronoun and the complementizer as one word.³⁰

- (71) a. Da l' ultima corsa a Roma **olache** é vadagnà [...]. (*Ost*, 46)
 since the last race in Rome where-COMP have-1SG win-PTCP
 'Since the last race in Rome, where I won [...].'
 b. Ma **coche** la é? (*Moliné*, 241)
 but how-COMP it be-3SG
 'How is it?'
 c. Corrado, **percheche** no te me vèrdes? (*Moliné*, 256)
 Corrado why-COMP not you me see-2SG
 'Corrado, why don't you see me?'

After the reanalysis of the two elements as one unit in embedded clauses such as embedded *wh*-questions, relative clauses etc., the *wh-che*-structure might have been taken over by analogy to main clauses and finally to main *wh*-questions and *wh*-exclamatives. In the absence of more diachronic evidence, we have to leave the exact details as to this process to speculation.

²⁹ Poletto & Vanelli (1997:110) make similar assumptions as to the *wh*-expression *perché* ('why') in embedded *wh*-questions in some northern Italian varieties.

³⁰ Strikingly, the *wh*-expressions *chi* ('who') and *che* ('what') are never written as one word with the complementizer *che*.

Finally, another factor which might have contributed to the presence of *wh-che*-structures in Fascian main *wh*-questions is language contact. Val di Fassa has a particular geographic position in a contact area between Dolomitic Ladin varieties and Northern Italian dialects. As seen in section 6.1, *wh-che* occurs in many Northern Italian dialects, for instance in Val di Fiemme (72), which borders Val di Fassa on the south.

(72) Che **che** te as fat? (Predazzo)
 what COMP you do-2SG done (ALD-II)
 ‘What did you do?’

The *wh-che*-construction might have spread from northern Italy through Val di Fiemme until Val di Fassa. Note that this ‘borrowing’-hypothesis can account for the fact that in Fascian, *wh-che* seems to have appeared simultaneously with all *wh*-expressions. However, if borrowing from neighbouring Northern Italian dialects has contributed to the spread of *wh-che* in Val di Fassa, why is *wh-che* not observed in Moenat, the variety spoken in the southernmost village of Val di Fassa directly at the border with Val di Fiemme? It is in these areas of language contact where we would expect borrowings to manifest themselves first. This issue will be the topic of the following section.

6.3.3 The ban on *wh-che* in main *wh*-questions in Moenat and Gherdëina/Badiot

The diatopic/dialectal variation as to the use of the *wh-che*-construction between the Cazet and Brach subvarieties of Fascian on the one hand and the Moenat subvariety on the other has already been noticed in the literature (cf. Chiochetti 1992:215), but no explanation has hitherto been proposed to account for these facts. Before addressing this issue with respect to Moenat, let me first propose an account for the fact that *wh-che* is excluded in the other Dolomitic Ladin varieties Gherdëina and Badiot. Gherdëina and Badiot show the same basic properties as Fascian and exhibit the complementizer in embedded *wh*-questions (73), relative clauses (74) and with subordinating conjunctions (75).

- (73) a. Gherdëina (ALD-II)
 Ne savëis=*a* nia **chi che** a mazà chel puere coscio?
 not know-2PL=PA not who COMP have-3SG kill-PTCP that poor devil
 ‘Don’t you know who killed that poor devil?’
- b. Badiot (Gasser 2000:195)
 I oress ion savéi, **canche** al zed da plovëi.
 I like-COND.1SG gladly know-INF when-COMP it stop-3SG to rain-INF
 ‘Ich would like to know when it stops raining.’
- (74) a. Gherdëina (Anderlan-Obletter 1991:90)
 L nonn, cun **chël che** son jit al teater, [...].
 the godfather with whom COMP be-3SG gone to-the theatre
 ‘The godfather, with whom I went to the theatre, [...].’
- b. Badiot (Gasser 2000:189)
 Le compagn cun **chël ch’** i sun jü a London, [...].
 the friend with whom COMP I be-3SG gone to London
 ‘The friend with whom I went to London, [...].’
- (75) a. Gherdëina (Bernardi 1999:98)
 Ie scrije **ntan che** ël cujina.
 I write-1SG while COMP he cook-3SG
 ‘I am writing while he is cooking.’
- b. Badiot (Gasser 2000:190)
 I t’ à telephone **por che** te vëgnes.
 I you have-1SG call-PTCP for COMP you come-SBJV.2SG
 ‘I have called you so that you come.’

I would like to suggest that the fact that the complementizer did not spread to main wh-questions in Gherdëina and Badiot is to be attributed to the V2-property of these latter varieties which Fascian does not exhibit (cf. Elwert 1943:137; Siller-Runggaldier 1999:120) (cf. section 2.2.3.1). As we shall see in more detail in section 6.4.1.2, the complementizer *che* occupies the syntactic position targeted by verb movement. Given that this position is already filled by the complementizer *che*, verb movement to C° is banned, which is, however, required by the V2-grammar of Gherdëina and Badiot main wh-questions.^{31 32}

³¹ Under a split-CP framework, this analysis needs to be refined. Given that the split-CP analysis opens up several C-positions, the complementizer and verb movement in subject-verb-inversion could in principle be accommodated in different head positions. I will discuss this issue in more detail in section 6.4.1.2.

³² According to Cecilia Poletto (p.c.), the Badiot variety spoken in Corvara does use wh-*che* in main and embedded interrogatives despite of showing the V2-property. I have to leave a closer investigation of this phenomenon to further research.

Most modern Romance languages such as modern French or Fascian have lost the V2-property and exhibit, as shown in section 2.2.3.1, just a ‘residual’ V2-property (cf. Rizzi 1991/1996), i.e. subject-verb-inversion occurs only in questions. According to this theory, subject-verb-inversion in Romance *wh*-questions is considered as a residue of an originally general V2-property in these languages.

In the following, I argue that the differences between Brach and Cazet on the one hand and Moenat on the other as to the possibility of *wh-che* can be attributed to the strength of the ‘residual V2-property’ in these varieties. To begin with, the possibility of *wh-che* (76) in the Fascian subvarieties Brach and Cazet can be interpreted as a further weakening of the ‘residual’ V2-property: *wh-che* is followed by direct word order and hence, in these varieties, SCI is not even obligatory in *wh*-questions any more.

(76) Olà *che* tu vas? (wh-*che*)
 where COMP you go-2SG
 ‘Where are you going?’

Moenat, in contrast, still exhibits a strong residual V2-property (cf. chapter 5) and this could be the reason for why *wh-che* is blocked. On a par with the situation in the general V2-varieties Gherdëina and Badiot, the complementizer *che* would prevent verb movement to C, which, however, is obligatory in the strong residual V2-grammar of Moenat. Consequently, *wh-che* is excluded in this variety. In sum, the relation between the V2-property and the possibility to have *wh-che* in main *wh*-questions can be schematised as follows:

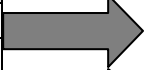
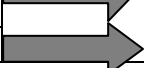

| Variety | Kind of V2-property | | <i>wh-che</i> |
|----------------------|-----------------------------|---|---------------|
| Gherdëina, Badiot | V2-property |  | excluded |
| Fascian Moenat | Strong residual V2-property |  | excluded |
| Fascian Brach, Cazet | Weak residual V2-property |  | allowed |

Table 6.9: The relation between the V2-property and *wh-che* in main *wh*-questions

Apart from these purely syntactic facts, I assume that there is another factor involved in blocking *wh-che* in Moenat, namely its particular geographical position at the contact point between Val di Fassa and Val di Fiemme. Although geographically, Moena is situated in Val di Fassa, it has long belonged politically to the neighbouring Val di Fiemme. Consequently, Moenat has taken over linguistic traits of the Fiemmese dialect and these traits spread upwards into Val di Fassa. This is why Elwert (1943:253) attributes much interest to Moenat as a variety on the border between Fascian and Fiemmese. In the light of the role of Moenat as a transmitter of northern Italian traits into Fascian, we would expect *wh-che* to occur above all in Moenat, however, it is just in this variety that the innovative construction does not appear. I suppose that we are dealing here with a case of “Überentäußerung” (‘over-renunciation’) in the sense of Elwert (1943): in order to preserve the typical character of the local variety towards the penetration of external forms, borrowings, which are adopted further up in the valley, are rejected just at the linguistic boundary (Elwert 1943:59). In conclusion, the introduction of *wh-che* in Fascian main *wh*-questions seems to be the result of several factors:

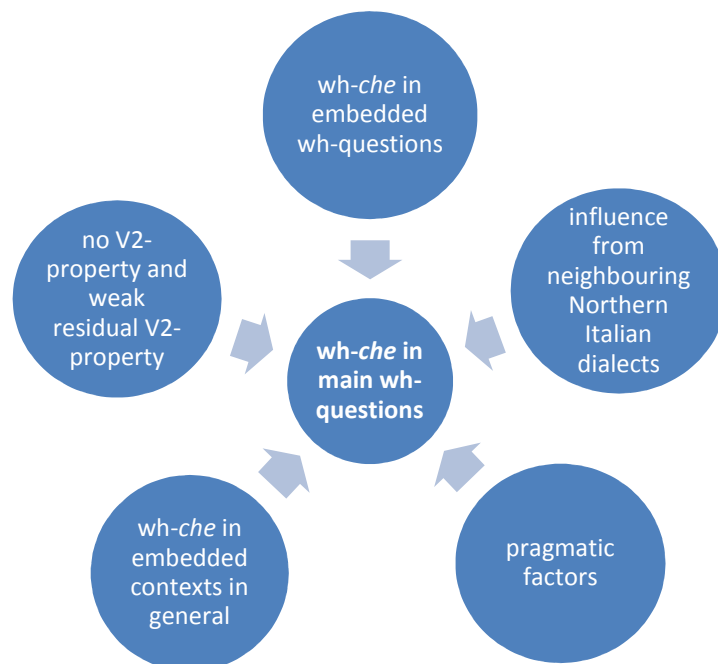


Figure 6.4: The factors favouring the spread of *wh-che* to main *wh*-questions in Fascian Caset and Brach

6.4 Analyses of *wh-che*-questions

The goal of this section is to provide a syntactic analysis of Fascian *wh-che*-questions. To this end, section 6.4.1 first sketches out some building blocks for the analysis of *wh-che*-questions such as the ‘Doubly-Filled Comp Filter’ and reviews Poletto’s (2000) approach as to *wh-che* in Northern Italian dialects and Goria’s (2004) account of Piedmontese *wh-che*-questions, respectively. Building on these approaches and new data from Fascian, I propose an analysis of Fascian *wh-che*-questions in section 6.4.2.

From a syntactic point of view, Fascian *wh-che*-questions such as (77a) differ in three main points from traditional *wh-SCI(-pa/po)* (78): (i) the *wh*-expression is followed by the complementizer *che*; (ii) word order is direct (SV) instead of inverted (SCI) (77b); (iii) the particle *pa/po* cannot be used in the *wh-che*-construction (77c–f) (cf. also Poletto 2000:47).

- (77) a. Olà ***che*** tu vas? (Fascian)
 where COMP you go-2SG
 ‘Where are you going?’
 b. *Olà ***che*** vas=to?
 where COMP go-2SG=SCL
 c. *Olà ***che*** vas=to ***pa***? (Poletto 2000:47)
 where COMP go-2SG=SCL PA
 d. *Olà vas=to ***che pa***?
 where go-2SG=SCL COMP PA
 e. *Olà ***che pa*** tu vas?
 where COMP PA you go-2SG
 f. *Olà ***pa che*** tu vas?
 where PA COMP you go-2SG
- (78) Olà vas=to ***pa***? (Fascian)
 where go-2SG=SCL PA

In the light of these structures, the following research questions arise:

- (79) Research questions
- How can we account for the sequence *wh-che*?
 - Why does *wh-che* involve direct word order instead of SCI?
 - Why are the complementizer *che* and the particle *pa/po* not compatible?
 - Which functional projections are involved in *wh-che*-questions under a cartographic analysis?

We will address these issues in turn in the following sections.

6.4.1 Premises for an analysis of Fascian *wh-che* questions

6.4.1.1 *Wh-che* and the Doubly Filled COMP Filter

In order to account for the the *wh-che*-construction, let us first consider embedded *wh*-questions. We have seen in section 6.1.1, that Romance and Germanic varieties can be classified into two types with respect to the use of the complementizer in embedded *wh*-questions. In type 1 languages such as Fascian, embedded *wh*-questions feature an overt complementizer after the *wh*-expression ('*wh-che*-questions' in Northern Italian dialects), whereas in type 2 languages, the complementizer is not permitted.

As to type 1 languages featuring an overt complementizer, it is commonly assumed that the *wh*-expression occupies the specifier position of a functional projection in the C domain and that the complementizer occupies the head position of the same projection, giving rise to the simultaneous filling of both the specifier and the head position of the same C projection.

In order to account for the variation between type 1 languages and type 2 languages, the so-called 'Doubly-Filled COMP Filter' (henceforth DFCF) (Chomsky & Lasnik 1977) in the sense of $*[_{CP} \text{wh COMP}]$ was proposed. The difference between type 1 languages and type 2 languages as to the use of the complementizer can now be captured in the following way: in type 1 languages such as Standard Italian, the DFCF is active and prohibits simultaneous filling of the specifier and the head position of the same functional C projection. In type 2 languages such as Fascian, in contrast, the DFCF is not active and embedded *wh*-questions can or must exhibit an overt complementizer.

In sum, the difference between type 1 and type 2 languages can be attributed to a parameter governing whether the DFCF is active or not.

Given that in Fascian, *wh-che* appears in both embedded and main *wh*-questions, the DFCE is never active and hence, simultaneous filling of the specifier and the head of the relevant C projection is permitted in this variety.

6.4.1.2 The complementizer *che* and subject clitic-verb-inversion

It has often been observed in the literature that in main *wh*-questions featuring the complementizer *che*, subject clitic-verb-inversion (SCI) does not occur and instead, we observe direct word order. Apart from Fascian, this is the case, for instance, also in the Bellunese variety of Cencenighe Agordino (80) (Poletto & Vanelli 1997:112f.).

- (80) a. Chi **a=lo** magnà? (Cencenighe Agordino)
 who have-3SG=SCL eaten
 ‘Who has eaten?’
 b. Chi **che** à magnà?
 who COMP have-3SG eaten
 c. *Chi **che a=lo** magnà?
 who COMP have-3SG=SCL eaten

The variation in (80) and the facts in (77b–d) suggest that the complementizer *che* and SCI are in complementary distribution (cf. Poletto & Vanelli 1995, 1997 and Poletto 2000 on Northern Italian dialects in general; Parry 1997 on Piedmontese etc.) and this has been taken as evidence that the complementizer and SCI target the same syntactic position, a C head. Poletto & Vanelli (1997:113) illustrate this point on the basis of the Piedmontese-Provençal variety of Rodoretto di Prali, where in coordinated yes/no-questions, the first conjunct involves SCI, whereas the second conjunct features the complementizer *che*. Given that coordination involves two symmetric structures, i.e. the same part of sentence structure, SCI and the complementizer should occupy the same position.

- (81) L’ achetà=tu ou qu’ tu l’ achate pa? (Rodoretto di Prali)
 it buy-2SG=SCL or that you it buy-SBJV not
 ‘Will you buy it or will you buy it not?’

The standard analysis for the complementary distribution of SCI and the complementizer *che* is that inversion is blocked by the presence of *che* in the C head targeted by V-to-C-movement. Under a split-CP analysis, such an account is less straightforward, given that an articulated CP would theoretically make several head positions available to accommodate both SCI and the complementizer. This issue can be resolved in an alternative account (cf. Poletto 2000:63) building on the head movement constraint: even if the complementizer does not occupy the head position targeted by SCI, it still blocks V-to-C-movement as the complementizer occurs lower than inversion, and by this interferes with successive-cyclic head-to-head movement of the verb. We can hence assume that the relevant portion of split-CP includes a higher projection which is targeted by SCI and which I shall call for the moment CP₁, and a lower one, CP₂, hosting the complementizer *che*.³³

(82) [CP₁ [C₁° SCI [CP₂ [C₂° *che*]]]]

6.4.1.3 The incompatibility of the particle *pa/po* and the complementizer *che*

A priori, the incompatibility of the particle *pa/po* and the complementizer *che* in Fascian wh-questions (77c–f) can be accounted for in two ways: first, Poletto (2000:48) locates both elements in the same functional projection with the particle *pa/po* occupying the specifier position and the complementizer *che* the head position.

(83) [CP₁ [C₁° V+SCL [CP₂ *pa* [C₂° *che*]]]] (Poletto 2000:48)

Poletto ultimately attributes the complementary distribution of these two elements to the DFCE which can only be circumvented by a complete spec-head agreement relation requiring compatibility of all features of both the head and the specifier. However, according to Poletto (2000:74f.), this agreement relation cannot be established due to a

³³ Note that in certain varieties of Piedmontese, wh-*che* and subject-verb-inversion do not conflict (Goria 2004).

“mismatch of features between the two elements, as *pa* is a sort of adverbial while the complementizer is a nominal element” and hence, the DFCF excludes the simultaneous presence of the two elements.

Second, building on the head analysis of the particle *pa/po* suggested in section 3.7, the incompatibility of the two elements could also be accounted for by assuming that the particle and the complementizer occupy one and the same position, a C head. Further evidence in support of such an assumption derives from two observations: First, there is a certain parallelism between *wh-che-* and *wh-pa/po-*questions: in *wh-pa/po-*questions such as (84a), the particle follows the *wh*-expression like the complementizer in (84b) and – as suggested by the occurrence of direct word order – seems to block V-to-C-movement on a par with the complementizer *che*.

- (84) a. Olà ***pa*** tu vas? (Fascian Brach/Cazet)
 where PA you go-2SG
 ‘Where are you going?’
 b. Olà ***che*** tu vas?
 where COMP you go-2SG

Moreover, the analysis that both elements occupy one and the same head position could account in a straightforward way for the fact that the particle *pa/po* is banned in embedded *wh*-questions: given that embedded *wh*-questions obligatorily require the presence of the complementizer *che*, *pa* is excluded. We can hence modify the structure in (85) in the following way:

- (85) [_{CP} [_{C°} [_{CP} [_{C°} *pa/po* / *che*]]]]

In the next section, we look at how Poletto (2000) accounts for *wh-che*-constructions.

6.4.1.4 Poletto's (2000) analysis

Poletto (2000) splits the interrogative portion of the CP into four distinct functional projections (86) and argues that in northern Italian varieties, up to three of these four projections can be simultaneously activated in a wh-question (cf. section 4.2.3). According to Poletto, the wh-expressions move to the specifier positions of different projections depending on the interpretation of the wh-question that has to be achieved. The fine structure of Poletto's (2000:170) "interrogative field" within CP along with the elements sitting in the individual projections and the semantic interpretation associated with these projections is repeated from section 4.2.3 for convenience.

- (86) [_{CP1} *che* [_{CP2} deictic subject clitic [_{CP3/AgrCP} SCI [_{CP4} [_{SpecC4} *pa*] [_{C°4} *ch/lo*]]]]]
- modal

 surprise

 true request
for information

 rhetorical

Let us now consider how Poletto (2000) accounts for the two main question formation strategies in Fascian (87):

- (87) a. Olà *che* tu vas? (Fascian)
 where COMP you go-2SG
 'Where are you going?'
 b. Olà vas=to *pa*?
 where go-2SG=SCL PA

In Poletto's analysis, Fascian wh-*che*-questions (87a) and wh-SCI-*pa/po*-questions (87b) involve two different C projections. The complementizer *che* in wh-*che*-questions occupies the head of the lowest CP projection in her system (CP4) whose specifier also hosts the particle *pa/po*. As discussed before in section 6.4.1.3, the complementary distribution of the particle *pa/po* and the complementizer *che* is attributed to the DFCF (cf. section 6.4.1.1), which excludes the simultaneous filling of both the specifier and the head of the same projection if the two elements do not undergo spec-head agreement. Moreover,

Poletto (2000:63) accounts for the complementary distribution of the complementizer and SCI by arguing that the complementizer *che* occupies a C head lower than the one targeted by SCI (AgrC°) blocking in this way successive cyclic verb movement to AgrC°. In sum, the two projections activated in Poletto's (2000) analysis of Fascian wh-questions are a higher one, AgrCP, whose head position is the landing site of SCI, and a lower one, CP4, whose specifier hosts the particle *pa/po* and whose head hosts the complementizer *che* in wh-*che*-questions.

(88) [AgrCP [AgrC° SCI [CP4 [C° *che* [IP]]]]] (cf. Poletto 2000:63)

Another crucial difference between Fascian SCI- and wh-*che*-questions, according to Poletto (2000:56, 68), is the difference in interpretation of the two types of questions: AgrCP, which is activated in wh-SCI(-*pa/po*)-questions (87b), involves the “default interrogative interpretation” given that, if it is activated, it always encodes an interpretation in terms of a true request for information. CP4, in contrast, is assumed to encode the [+/- rhetorical]-interpretation, where ‘rhetorical’ means an “interpretation that does not require a true answer but simply expresses the point of view of the speaker” (Poletto 2000:65). Poletto illustrates this point on the basis of the interpretational differences related to the particle *pa/po* in the Dolomitic Ladin varieties Fascian and Badiot on the one hand and the interpretational differences as to the use of the complementizer *che* in the varieties of Portogruaro and Venice on the other.

As far as *pa/po* is concerned, Poletto (2000:65f.) argues that in Fascian, the particle triggers a rhetorical interpretation, whereas in Badiot, the interpretation contributed by *pa/po* is exactly reversed with respect to Fascian, given that in Badiot, *pa*-questions are true requests for information with an ‘out-of-the-blue’-interpretation. The conclusion Poletto draws from these observations is that in the varieties of Dolomitic Ladin, the

particle *pa/po* – and hence CP4 – encodes opposing values of the same kind of interpretation ([+/- rhetorical]).

Similar conclusions are derived from *wh-che*-questions which are also assumed to involve CP4 in Poletto's analysis. While *wh-che*-questions in Portogruarese trigger an 'out-of-the-blue'-interpretation (Poletto 2000:58) (89a), in Venetian, the same construction has a rhetorical interpretation (*ibid.*, 68) (89b). Poletto does not comment, however, on the interpretation of *wh-che* in Fascian.

- (89) a. Cossa **che** te fa? (Portogruaro)
what COMP you do-2SG? ('out-of-the-blue')
'What are you doing?'
b. (Ou) Coss' **che** ti fa? (Venetian)
(hey!) what COMP you do-2SG? (rhetorical)
'What on earth are you doing?'

Another point that needs to be clarified is whether the complementizer *che* can bear an interrogative feature or not. Poletto (2000:56) notes that under a purely morphological conception of spec-head agreement, the complementizer does not seem to agree with the *wh*-expression given that *che* does not appear in any specialised interrogative form in most northern Italian varieties. Under the assumption that the interrogative feature may also be abstract, however, spec-head agreement between the complementizer and a *wh*-expression should be possible. This is an important point to bear in mind when it comes to the analysis of Fascian *wh-che*-questions.

Although Poletto's account proposes an elegant way of capturing the dialectal variation found in question formation strategies in northern Italian varieties in a cartographic perspective, her approach is not without problems. My criticism concerns two main points: (a) the syntactic and interpretational properties of the particle *pa/po* in Fascian and (b) the semantic interpretation attributed to CP4 and hence the motivation for this C projection.

First, as the syntactic status of the particle *pa/po* is concerned, Poletto (2000) assumes that it is a syntactic phrase located in the specifier position of the lowest CP projection in the interrogative field. In section 3.7, however, I have shown that in varieties such as Fascian, the particle should be analysed as a syntactic head instead of a phrase. Under a head analysis of *pa/po*, though, we will have to reconsider the relation between *pa/po* and the complementizer *che* as well as the number and types of CP projections included in the “interrogative field”. If both *pa/po* and *che* are syntactic heads, then we could explain the mutual incompatibility of these two elements by assuming that they compete for the same syntactic position.

Moreover, as to the semantics of the particle, Poletto (2000:58f.) claims that the interpretation it triggers varies depending on the dialect. While in Badiot, *pa* triggers an ‘out-of-the-blue’-interpretation of the question and its absence makes the question rhetorical, in Fascian the situation is reversed: the presence of the particle is said to make the wh-question rhetorical while the wh-question is a true request for information when the particle is lacking.

As argued earlier, my data do not show any evidence that *pa/po per se* triggers a rhetorical interpretation in Fascian wh-questions. Instead, I showed in chapter 3, that the use of the particle in wh-questions is conventionalised in Fascian in the sense that it contributes to a standard interpretation of a wh-question. However, it was shown that if the particle does not appear in its default position after SCI (90a) but directly after the wh-expression (90b), the focus properties of the sentence change and instead of neutral focus on the whole sentence we get narrow focus on the wh-expression. Hence, it is the different syntactic positions of the particle that can trigger different focus properties and by this, possibly different semantic interpretations of wh-questions.³⁴

³⁴ Poletto (2000) alludes to the idea that the particle can be considered as a focus marker but does not elaborate on this in more detail with respect to Fascian.

- (90) Fascian
- a. Olà vas=to *pa*? (neutral focus, ‘out-of-the-blue’)
 where go-2SG=SCL PA
 ‘Where are you going?’
- b. Olà *pa* tu vas? (narrow focus)
 where PA you go-2SG
 ‘WHERE are you going?’

We have also seen in section 3.8 that Fascian *wh-pa/po*-questions such as (90b) can be used in two different contexts: first, they can be used as clarification questions asking for more specific information. In this case, the *wh-pa/po*-question remains a true request for information but with a reinforced interrogative force triggered by the *wh*-expression being in narrow focus. The second possible interpretation of a *wh-pa/po*-question such as (90b) is the interpretation in terms of a ‘special’ question, i.e. an echo-question or an SDQ (cf. chapter 3.8.2).³⁵ In sum, Fascian *wh-pa/po*-questions do exhibit a ‘special’ interpretation which, however, does not correspond to a rhetorical interpretation. Given this, it is thus not straightforward to assume that *pa/po* sits in a CP projection involving a rhetorical interpretation as Poletto (2000) proposes. There is nothing to be said against the idea that there is a projection encoding the rhetorical interpretation, it just seems not to be the case that such a projection involves the particle *pa/po*.

The second criticism for Poletto’s (2000) analysis concerns the way in which she conceives different kinds of semantic interpretations to be related to projections in the “interrogative field”. In a cartographic perspective, which relates different semantic interpretations to different functional projections, it might not be straightforward to assume that one and the same projection can trigger two different semantic interpretations although these may well be the outcomes of two opposing value specifications as assumed by Poletto (2000) for Fascian and Badiot *pa/po*-questions. Poletto suggests that when CP4 is activated, it encodes the rhetorical interpretation in some varieties, while in others it

³⁵ For more details on these different interpretations see section 1.1.3.

encodes the ‘out-of-the-blue’-interpretation.³⁶ Hence, both interpretations are couched in one and the same projection, which is not desirable in the cartographic approach.

What is more, in Poletto’s (2000) “interrogative field”, the ‘out-of-the-blue’-interpretation seems to be represented twice: on the one hand, there is CP3, i.e. AgrCP, activated through SCI and assumed to be the “default interrogative interpretation” encoding the interpretation as a true request for information. Moreover, there is CP4 hosting the particle *pa/po* which, depending on the variety, is assumed to trigger an ‘out-of-the-blue’ or a rhetorical interpretation of the question ([+/- rhetorical]). In the case of the variety Badiot, where the particle *pa* is obligatory for an ‘out-of-the-blue’-interpretation of a wh-question, these assumptions lead to the following scenario: AgrCP is activated through SCI and CP4 is activated due to the presence of the particle *pa*. Hence, two projections are activated for the sake of the interpretation as a true request for information. Again, this is undesirable both from a minimalist and from a cartographic perspective: two projections for the same kind of interpretation are redundant and a given interpretation should be encoded in one specific syntactic projection only.

Turning back to wh-*che*-questions, a point still to be clarified remains the exact position of the complementizer in the sentence structure. Poletto locates *che* in the head position of CP4, the lowest CP projection in her “interrogative field”. Mainly on the basis of the focus properties related to the particle *pa/po* which occupies the specifier position of this projection, Poletto (2000:67) identifies this CP projection as FocusP.

In the next section, I address wh-*che*-questions in Piedmontese comparing Poletto’s (2000) and Goria’s (2004) analyses.

³⁶ In Poletto’s (2000) analysis, also other projections, e.g. CP1, can encode two different interpretations.

6.4.1.5 Piedmontese *wh-che*-questions

Piedmontese exhibits four main *wh*-question formation strategies (Goria 2004:210): (a) “simple *wh*-questions” (91a); (b) *wh*-questions involving “interrogative inversion” with an interrogative clitic attaching to the right of the verb (verb=ICL) (91c), and *wh*-questions in which the *wh*-expression is followed by the overt complementizer *che*. These ‘*wh-che*-questions’ may (91d) or may not (91b) involve inversion. Moreover, all four *wh*-question strategies may or may not exhibit preverbal subject clitics (SCL).

- (91) a. *wh* + (SCL) + verb
b. *wh* + *che* + (SCL) + verb
c. *wh* + (SCL) + verb=ICL³⁷
d. *wh* + *che* + (SCL) + verb=ICL

In the following, I first consider Poletto’s (2000) analysis of Piedmontese interrogatives before turning to Goria’s (2004) account.

In Poletto’s (2000) analysis, Piedmontese *wh-che*-questions such as (91b) can be treated on a par with the corresponding *wh-che*-structures in Fascian, Portogruarese and Venice: the *wh*-expression moves to SpecCP4 and the complementizer *che* is located in the head position of the same projection representing a barrier for verb movement. Therefore, direct word order is observed.

As to Piedmontese *wh-che*-questions exhibiting SCI (91d), in contrast, the assumption is that the complementizer is generated in a head higher than AgrC°, so that the complementizer cannot prevent verb movement and the verb can raise to AgrC° giving rise to SCI (Poletto 2000:85).

- (92) [CP *wh* [C°] [CP [C° *ch*] [CP [C° SCL] [AgrCP SCI]]]] (Poletto 2000:64)

³⁷ ICL: interrogative clitic

Goria (2004) follows Chomsky (1998, 2000) and Roberts & Roussou (1999, 2003) in assuming that two separate features, [Q] and [wh], are involved in wh-questions (cf. section 4.3.3.2). These features head two different projections and trigger two independent movement operations, i.e. movement of the wh-expression and verb movement.

Building on Rizzi's (1997) split-CP structure and Roberts & Roussou's approach, Goria (2004) assumes that wh-movement targets SpecFocP, while verb movement targets FinP. A local relation between the Focus- and the Fin head assures the satisfaction of the wh-criterion although the wh-expression and the verb are not in one and the same projection (Roberts & Roussou 1999).

In her pragmatic approach to the origin of wh-*che*, Parry (1997) suggests that the spread of the complementizer to main wh-questions was motivated by the addition of emphasis to the wh-expression. Building on this, Goria (2004:229) proposes that *che* originally served to mark emphasis on the wh-expression separating the emphatic wh-expression from the rest of the sentence by lexicalising Focus. When wh-*che*-structures became grammaticalized in Piedmontese, the pragmatic force of this construction was lost and it spread to unmarked wh-questions retaining its original structure. Hence, according to Goria (2004:220), in main wh-*che*-questions, the complementizer is to be considered a "residue of the lexicalisation of the original pragmatically marked FocusP". On the basis of these assumptions, Goria arrives at the following structure for Piedmontese wh-*che*-questions such as (91b).

- (93) a. wh + *che* + (SCL) + verb (Piedmontese)
 Cosa **ch'** it veule?
 what COMP SCL want-2SG
 'What do you want?'
- b. [_{FocP} wh [_{Foc/[+wh]} *che*] [_{FinP} (SCL) V_i [_{TP} t_i]]]? (cf. Goria 2004:230)
 c. [_{FocP} Cosa [_{Foc/[+wh]} **ch'**] [_{FinP} it veule_i [_{TP} t_i]]]?

As to Piedmontese *wh-che*-questions involving SCI (cf. 91d) exemplified in (94), Gorja proposes the following structure:

- (94) a. *wh + che + (SCL) + verb-ICL*
 Antè **ch'** a va=lo?
 where COMP SCL go-3SG=ICL
 'Where does he go?'
 b. [_{FocP} *wh* [_{Foc/[+wh]} *che* [_{FinP} (SCL) *V_i-ICL* [_{TP} *t_i*]]]]? (cf. Gorja 2004:230)
 c. [_{FocusP} Antè [_{Focus/[+wh]} *ch'*] [_{FinP} *a* *valo_i* [_{TP} *t_i*]]]?

Evaluating these two approaches, it should be noted that Poletto's (2000) structure aims to provide a unified account for question formation strategies in NIDs in general whereas Gorja's (2004) analysis is restricted to Piedmontese. The differences in scope between the two works might account for some complexities in Poletto's system which are undesirable for an account of only Piedmontese *wh*-questions.

Poletto's (2000) analysis is intriguing for two main reasons: first, given that it is based on data from numerous northern Italian varieties, it sheds light on the make-up of the interrogative portion of the universal sentence structure. The second strong point of Poletto's account is that the hierarchy of functional projections inside the "interrogative field" is based on both syntactic and interpretational properties of *wh*-questions. Necessarily, when trying to offer a unified analysis based on so many different pieces of evidence, some inconsistencies arise (cf. above).

In contrast to Poletto's complex make-up of the "interrogative field" of Northern Italian dialects, Gorja (2004) argues for a more minimalist analysis in the sense that in her theory, all four Piedmontese question formation strategies activate the same number and type of projections inside the left periphery and these projections are Rizzi's (1997) *FinP* and *FocusP*. Hence, no other projections need to be postulated, which is a desirable result from a minimalist perspective.

As to the Piedmontese data, Goria's account offers two advantages: first, the very restricted number of functional projections involved allows in a better way to account for the fact that the four question formation strategies in Piedmontese allegedly do not show any difference as to their semantic interpretation or pragmatics (Goria 2004:220). In Poletto's approach, in contrast, the activation of her four different functional projections triggers different interpretations and hence *wh-che*-questions such as (91b), which involve CP4 in Poletto's (2000) analysis, are expected to have a different semantic interpretation from *wh-che-SCI*-questions involving CP1. However, according to Goria (2004:220), these four question formation strategies do not differ in their semantic interpretation or pragmatics and the choice of the question formation strategy is unrelated to syntactic factors. This observation leads to a considerable simplification of structure in Goria's (2004) analysis.

Finally, Goria manages to capture the diachronic development discussed by Parry (1997) as to the pragmatic motivation underlying the spread of the complementizer to main *wh*-questions in Piedmontese.

However, Goria's analysis is also not without problems: in her approach, *wh-che-SCI*-structures such as (94) can be accounted for assuming that *wh*-movement is triggered by a strong [wh]-feature associated to Foc° and verb-movement is triggered by a strong [Q]-feature in Fin° . However, her framework does not offer a straightforward explanation for (a) why V-to-C-movement does not occur in *wh-che*-questions such as (93) and (b) why *wh-che-SCI*-questions of the Piedmontese type (94) are ungrammatical in other Northern Italian dialects.

The following section compares the facts related to *wh-che*-question formation in Piedmontese and Fascian in order to evaluate which parts of Goria's (2004) analysis of Piedmontese can be applied to Fascian as well.

6.4.1.6 Comparison between Fascian and Piedmontese

Piedmontese and Fascian share similar diachronic facts as to wh-question formation strategies: in both varieties, traditional subject-verb-inversion in questions is more and more replaced by the innovative *wh-che*-construction. However, while in Piedmontese, this spread was attributed to a pragmatic motivation (Parry 1997, 2003), there seem to be several factors involved in Fascian. Hence, in Fascian, the complementizer *che* cannot be simply considered the remainder of some special focus marking on the wh-expression as proposed for Piedmontese by Gorla (2004).

Another common point between the two varieties is that the main question formation strategies (*wh-SCI-pa/po* and *wh-che* in Fascian and the four question formation strategies in (91) in Piedmontese) do not differ in semantic interpretation and pragmatics and are not conditioned by syntactic factors, e.g. by the (type of) wh-expression (cf. Gorla 2004:220 for Piedmontese).

Apart from the two common characteristics and the difference as to the motivation of the introduction of *che* in main wh-questions, Piedmontese and Fascian differ in two main respects concerning the syntactic structure of *wh-che*-questions: first, while Piedmontese *wh-che*-questions involving the structure (91d) (*wh + che + (SCL) + verb=ICL*) exhibit inverted word order (95), in Fascian, *wh-che* is always followed by direct word order (SV) (96a) while inverted word order is excluded (96b).

(95) Antè **c'** a va=lo? (Piedmontese)
where COMP SCL go-3SG=SCL (CF. Gorla 2004:225; Poletto & Vanelli 1995:153)
'Where does he go?'

(96) a. Che **che** le magna? (Fascian)
what COMP they eat-3PL
'What are they eating?'
b. *Che **che** magne=le?
what COMP eat-3PL=SCL.F

Another difference between Piedmontese and Fascian *wh-che*-questions concerns the syntax of the part of the sentence following the sequence *wh-che*. In Piedmontese (97), no element, neither subject DPs (97a), nor subject pronouns (97b), nor topics (97c), apart from a (deictic) clitic (95) can intervene between the complementizer *che* and the verb (Goria 2004:223ff.). In Fascian, in contrast, topics/left-dislocated elements can intervene between *che* and the verb (98). We will come back to this later.

(97) Piedmontese (Goria 2004:225f.)

- a. *Ante che Mario a va?
 where COMP Mario SCL go-3SG
 ‘Where does Mario go?’
- b. *Lon che lor a beico?
 what COMP they SCL look-at
 ‘What do they look at?’
- c. *Quandi che, a Gianni, a l’=han parla=je?
 when COMP to Gianni SCL CL=have spoken=to-him

- (98) a. Olà che **Marianna** la magna l formai? (Fascian)
 where COMP Marianna she eat-3SG the cheese
 ‘Where does Marianna eat the cheese?’
- b. Chi che **la marena** la magna a Roma?
 who COMP the lunch it eat-3SG in Rome
 ‘Who has lunch in Rome?’

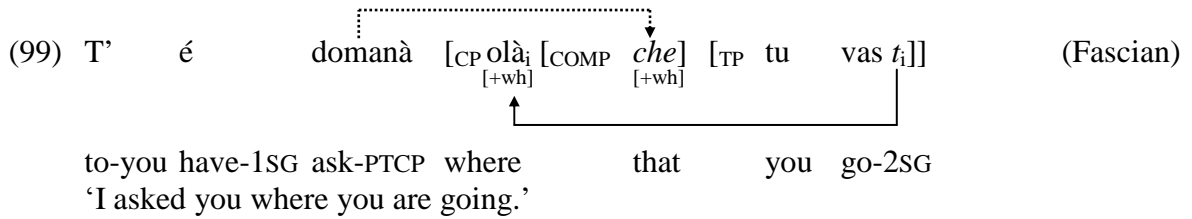
In the following, I develop an analysis of Fascian *wh-che*-questions based on the assumption from section 3.7 that *pa/po* is a syntactic head instead of a phrase.

6.4.2 A syntactic analysis of Fascian *wh-che*-questions

The first step we need to make towards an analysis of Fascian *wh-che*-questions concerns the diachronic development of the complementizer *che* and its spread to main *wh*-questions (cf. section 6.3).

As regards embedded questions, it is generally assumed that the verb of the main clause assigns the [wh]-feature to the COMP-position of the embedded one. In the type 2 varieties of section 6.1, which are subject to the DFCF, the COMP-position remains empty and

hence the [wh]-feature is assigned to a phonetically null element. In type 1 varieties such as Fascian, in contrast, where both COMP-positions (spec and head) can be occupied and embedded wh-questions feature the sequence *wh-che*, the [wh]-feature is assigned to the complementizer *che*. Hence, an embedded wh-question in Fascian is derived as shown in (99).



I take the fact that in Fascian, the DFCF is not active and hence the complementizer *che* gets assigned the [wh]-feature from the verb of the matrix clause as the starting point for the spread of the complementizer to main wh-questions. We can hypothesise that the assignment of [wh] to *che* in embedded wh-questions lead to a reanalysis which resulted in the complementizer being permanently associated with the [wh]-feature. This amounts to saying that similarly to what has been proposed with regard to the grammaticalization process of the particle *pa/po* in the varieties Gherdëina and Badiot in chapter 3.4, in Fascian, the complementizer *che* got stored together with the [wh]-feature in the lexicon. As a result, the complementizer is licensed in main clauses as well and can enter the numeration as a means to satisfy the wh-criterion.

Two notes are in order here: first, the idea that the complementizer bears the [wh]-feature is not new; Poletto (2000:74), for instance, hypothesises that in Friulian, complementizers agree with weak wh-expressions. We can assume then that while this agreement process is visible in Friulian it is abstract in Fascian.

Second, the process just sketched is only one way to formalise the spread of *che* to main wh-questions in Fascian. In section 6.3, we have seen that there was more than one factor involved in this process but I will not go into the details of other factors here.³⁸

Let us now turn to the position of the complementizer *che* in present-day Fascian wh-*che*-questions. Following Poletto (2000:63), we can assume that in Fascian wh-*che*-questions, verb movement to C is blocked by the complementizer *che* and hence, direct word order is observed. *A priori*, verb movement could be blocked because the complementizer and SCI compete for the same position (100a) or, as argued by Poletto for Fascian, *che* might be located in a functional projection lower than the projection targeted by SCI blocking successive-cyclic verb movement through this head positions as it is already filled by *che* (100b).

- (100) a. [_{CP} SCI/*che* [_{IP}]] (cf. Poletto 2000:63)
 b. [_{AgrCP} SCI [_{CP2} *che* [_{IP}]]]

Crucially, Poletto's main motivation for assuming (100b) instead of (100a) is due to her assumption that the different projections in the "interrogative field" encode different semantic interpretations and exhibit different syntactic properties.

In the following, we will examine whether it is necessary to assume that Fascian wh-*che*-questions involve a functional projection distinct from the projection targeted by SCI (cf. 100b) or whether we can take both SCI and the complementizer *che* competing for the same position (cf. 100a). The issue is hence, where wh-*che* is situated with respect to other question formation strategies, especially wh-SCI-*pa/po*.

Recall that Poletto's (2000) claim that there are several distinct projections inside the "interrogative field" is based on evidence from (i) different elements that can appear in

³⁸ See e.g. Gorla (2004) for the 'pragmatic' approach to the spread of the complementizer to Piedmontese main wh-questions.

head positions, (ii) interpretational differences related to different question formation strategies and (iii) different positional properties of weak and strong *wh*-expressions. Adopting a similar approach, if *wh-SCI-pa/po* and *wh-che* involved two different projections as proposed in (100b), we would expect the two strategies to differ in the following respects: (i) the element occupying the respective head position, (ii) the semantic interpretation and (iii) the *wh*-expressions with which they occur. Moreover, we might also find these two question formation strategies to differ as to (iv) their relative order with respect to LD and (contrastive) Focus elements. Let us consider these points in turn.

First, *wh-SCI-pa/po* and *wh-che* clearly differ with respect to the element in the head position: while in *wh-SCI-pa/po*, it is the finite verb, in *wh-che*, it is the complementizer. Yet, as we have argued above, this can also be interpreted in terms of a competition between these two elements for one and the same position.

Moreover, as regards (ii) and (iii), section 6.2 has shown that synchronically, *wh-SCI-pa/po* and *wh-che* are used alike in Fascian: the two question formation strategies neither differ with respect to their semantic interpretation nor as to the *wh*-expressions with which they occur.³⁹ ⁴⁰ This state of affairs recalls Gorla's (2004) observation regarding the four question formation strategies in Piedmontese which do not differ either in interpretation or in the *wh*-expressions with which they occur. In the light of these facts, Gorla – contra Poletto (2000) – suggests to reduce the number of projections involved in Piedmontese question formation to a maximum of two.

³⁹ The preference to use *wh-SCI-pa/po* instead of *wh-che* in situations requiring particular reference to the preceding context might be attributed to some remaining modal value of the particle rather than to a different semantic interpretation encoded by the functional projection related to this question formation strategy.

⁴⁰ Note that Poletto's (2000) argument about differences between question formation strategies with respect to the *wh*-expressions with which they occur is based *inter alia* on the observation that in Fascian, certain *wh*-expressions, the weak ones according to Poletto (2000:76), obligatorily require inversion (*wh-SCI-pa/po*), while others don't (*wh-pa/po-SV*). Contra Poletto, I have shown in chapter 3.7.2.4 that *wh-pa/po-SV*-structures are in fact possible with all *wh*-expressions in Fascian and offer a different analysis of the two constructions *wh-SCI-pa/po* and *wh-pa/po-SV*.

Finally, let us consider the relative position of Fascian wh-SCI-*pa/po* and wh-*che* with respect to LD and contrastive focus elements. Wh-SCI-*pa/po* must be preceded by both, contrastive focus elements (101a) and LD (101b).

- (101) a. L FORMAI olà l magn=ela *pa* (no la polenta)? (Fascian)
 the cheese where it eat-3SG=SCL PA (not the polenta)
 ‘Where does she eat the **CHEESE** (not the polenta)?’
 b. La polenta, chi la magn=elo *po* a Roma?
 the polenta who it eat-3SG=SCL PO in Rome
 ‘Who eats the polenta in Rome?’

As to wh-*che*, the data show a more complex situation. The order LD > wh-*che* is by far the preferred option (102a), but for some informants, the opposite order, wh-*che* > LD, is fine as well (102b).

- (102) a. Marianna, olà che la magna l formai? (Fascian)
 Marianna where COMP she eat-2SG the cheese
 ‘Where does Marianna eat the cheese?’
 b. Olà che Marianna la magna l formai?
 where COMP Marianna she eat-3SG the cheese

By means of task 9 of the questionnaire (cf. section 2.3.3), the ordering options with respect to LD and FOC were studied systematically with respect to different wh-expressions. The order LD > wh-*che* was in all instances rated better than the opposite order.

Similar facts can be reported with regard to the order between wh-*che* and contrastive focus elements. Yet, in this case, the preference for FOC > wh-*che* (103a) is even more pronounced.

- (103) a. LA FÉMENES, can che le va a Moena (no la bezes)? (Fasc.)
 the women when COMP they go-3PL to Moena (not the girls)
 ‘When will **THE WOMEN** go to Moena (not the girls)?’
 b. Can che LA FÉMENES le va a Moena (no la bezes)?
 when COMP the women they go-3PL to Moena (not the girls)

Ignoring for the moment the alternative orderings as to wh-*che*, wh-SCI-*pa/po* and wh-*che* exhibit the same ordering properties: they are both preceded by LD and contrastive focus.

- (106) a. Olà **po** le magna n minestron? (Fascian)
 where PA they eat-3PL a soup
 ‘Where do they have a soup?’
 b. Olà **che** le magna n minestron?
 where COMP they eat-3PL a soup

On a par with the sequence *wh-pa/po*, also *wh-che* can be separated from the rest of the clause by an LD element (cf. 102b, repeated below as 107b) or by a contrastive focus element (cf. 103b, repeated below as 108b).

- (107) a. Olà **po** Marianna la magna l formai? (Fascian)
 where PO Marianna she eat-3SG the cheese
 ‘Where does Marianna eat thw cheese?’
 b. Olà **che** Marianna la magna l formai?
 where COMP Marianna she eat-3SG the cheese
- (108) a. Can **pa** LE FÉMENE le va a Moena (no la bezes)? (Fascian)⁴²
 when PA the women they go-3PL to Moena (not the girls)
 ‘When are the WOMEN going to Moena (not the girls)?’
 b. Can **che** LA FÉMENES le va a Moena (no la bezes)?
 when COMP the women they go-3PL to Moena (not the girls)

I shall account for the *wh-che*-questions in (107b) and (108b) in the following way: the possibility that the sequence *wh-che* can precede LD and contrastive focus elements might be due to the equivalent *wh-pa/po*-structures in (107a–b). Given that *wh-che* is a quite recent question formation strategy in Val di Fassa, *wh-pa/po*-questions have certainly been around before *wh-che*. Hence, *wh-pa/po*-questions with *wh-pa/po* preceding LD (107a) and Foc (108a) might have represented a model for *wh-che*-questions only that in the latter, the slot normally filled by the particle *pa/po* is filled with the complementizer *che*. This amounts to saying that *wh-che*-questions such as (107b, 108b) could be taken as interferences with *wh-pa/po*-questions such as (107a, 108a). Consequently, we need to assume for *wh-che*-LD- (107b) and *wh-che*-Foc-questions (108b) that they target the projection IntP, on a par with *wh-pa/po*-questions.

⁴² In the variety of Fascian spoken in Vigo and Pozza di Fassa (Brach), we both find *la femenes* and *le femene*. The former is actually the version used in the Cazet subvariety of Fascian.

(109) [HT [Scene Setting [Force [LD **Int** [LD [Foc_{contr.} [WH / Foc_{inf.} [Fin]]]]]]]]]]

↑
wh-*pa/po*
wh-*che*

6.5 Conclusion

In this chapter, we have examined the wh-*che*-question formation strategy in Fascian.

We have seen in section 6.1 that the sequence wh-*che* is not a particular phenomenon of Val di Fassa but appears in embedded wh-questions in many Romance and Germanic varieties. Similarly, the occurrence of wh-*che* in main wh-questions is not limited to Fascian but also observed in some Northern Italian dialects.

Examining the use and the function of the wh-*che*-construction in present-day Fascian, section 6.2 has shown that wh-*che* is nowadays used on a par with the traditional wh-SCI-*pa/po*-construction, i.e. with the same ‘out-of-the-blue’-interpretation as a true request for information and across the board with all wh-expressions.

As to the origin of wh-*che* in main wh-questions, several approaches have been proposed in the literature, the ‘copy’-theory, the ‘pragmatic’-approach and the ‘ellipsis’-approach. In order to evaluate these approaches with respect to Fascian, I have conducted a diachronic corpus study of Fascian theatre plays and presented the results in section 6.3. The first occurrences of wh-*che* we found in main wh-questions in Fascian date from 1948, although this construction was probably already around before that. The diachronic data from Fascian provide evidence both for the ‘copy’- and the ‘pragmatic’-approach, but the situation in Fascian has been found to be more complex and the spread of wh-*che* to main wh-questions is probably the result of several factors: (a) the occurrence of wh-*che* in embedded contexts in general and (b) especially in embedded wh-questions (‘copy’-theory); (c) pragmatic factors; (d) the absence of the V2-property in the Fascian

subvarieties Cazet and Brach and (e) linguistic influences from neighbouring Northern Italian dialects, especially Fiemnese.

Moreover, I have provided an explanation for why *wh-che* is neither observed in the Moenat subvariety of Fascian, nor in other Dolomitic Ladin varieties such as Gherdëina or Badiot. First, as regards Gherdëina and Badiot, I have claimed that *wh-che* is not possible due to the V2-property of these varieties which requires the verb to move to the head position of the functional projection whose specifier hosts the *wh*-expression. Given that the presence of a complementizer would represent a barrier for verb movement, *wh-che* is excluded in Gherdëina and Badiot main *wh*-questions. In Moenat, the ban on *wh-che* can be attributed to two independent factors: (i) a strong residual V2-grammar in *wh*-questions (cf. Rizzi 1991/1996) and (ii) the phenomenon of over-renunciation (‘Überentäußerung’) towards incoming linguistic influences in contact areas.

In section 6.4, I have discussed Poletto’s (2000) cartographic analysis of *wh*-questions in Northern Italian dialects and Gorja’s (2004) account of Piedmontese *wh-che*-questions and evaluated these approaches with respect to Fascian *wh-che*-questions. Building on the split-CP structure proposed in chapters 4 and 5, I have formalised the spread of the complementizer *che* to Fascian main *wh-che*-questions and proposed that Fascian *wh-che*-questions involve the same projection as *wh-SCI-pa/po*-questions. Moreover, I have argued that *wh-che-LD* and *wh-che-Foc*-structures, which are marginally possible in Fascian, are interferences with the equivalent *wh-pa/po*-questions and should hence – on a par with *wh-pa/po*-questions – be analysed as involving the projection IntP.

From a syntactic perspective, *wh-che*-questions in Fascian are a striking phenomenon given that they exhibit direct word order instead of traditional SCI and an at least originally declarative complementizer. Under the assumption of a *wh*-criterion à la Rizzi (1991/1996) we are forced to assume that this complementizer bears the [wh]-feature.

Moreover, in the light of the fact that *wh-che* is followed by direct word order, *wh-che*-questions are a promising object of study for the prosodic analysis of *wh*-questions (chapter 10). Do *wh-che*-questions differ prosodically from *wh-SCI-pa/po*-questions? And, given that *wh-che*-questions exhibit direct word order, is the intonation of *wh-che*-questions more “pronounced” (for interrogativity) than that of *wh-SCI*-questions?

These and other issues shall be addressed in the following prosodic part of this dissertation.

Part III

The prosody of questions

After having discussed the variation in Dolomitic Ladin question formation from the perspective of syntax, we now turn to the prosody of questions. The goal of this prosodic part is (i) to provide an analysis of the intonation in statements, yes/no-questions and wh-questions in the four varieties, (ii) to examine what role prosody plays in interrogative clause typing and (iii) how prosody and syntax interact in question formation. The prosodic analyses proposed in chapters 8–10 are couched within the framework of Autosegmental-Metrical Phonology.

Prosody embraces three main components, intonation, rhythm and (sentence) stress. For the following discussion, intonation and sentence stress are of major importance while rhythm plays a minor role. The term ‘intonation’ indicates that suprasegmental phonetic features such as features of fundamental frequency (F_0), intensity and duration are used to convey ‘postlexical’ or sentence-level pragmatic meanings, i.e. meanings that apply to phrases or utterances as a whole, such as sentence type or speech act, focus or information structure (cf. Ladd 2008:4).

Most experimental work on intonation, especially within the framework of Autosegmental-Metrical Phonology (cf. chapter 7), is based on a relatively small number of participants and few has been reported on dialectal, inter-speaker or intra-speaker variation. In recent years, however, it has been shown that there is vast variation in the use of prosodic features not only across languages but also between dialects within one and the same language (cf. Marotta 2008). Diatopic variation in prosody (‘dialectprosody’) has been studied with regard to varieties of English (cf. Grabe & Post 2002), German (cf. Atterer & Ladd 2004), Spanish (cf. Sosa 1991; Prieto et al. 1995; Henriksen 2010) or Italian (cf. Soriano 2006:118ff.). Moreover, it has been shown that question intonation does not only exhibit variation between dialects, but also variation within one and the same dialect, variation on the level of the speaker and according to speech situation (cf. Prieto 2004; Zamora et al. 2005; Henriksen 2009, 2010).

D'Imperio (2002:44) highlights the need for more prosodic research on the varieties of Italian: "Future experimental studies of tonal alignment in the different varieties of Italian are very desirable as a tool for discovering contrasting tonal categories." In the light of this research desideratum, the present work seeks to make a contribution to the study of prosody from a diatopic perspective by discussing new data from four varieties not previously investigated for prosody. I seek to show on the basis of Dolomitic Ladin varieties, that apart from the variation in the syntax of interrogatives we do in fact also find variation in the prosody.

The prosodic part of this dissertation is organised as follows: chapter 7 provides an introduction to Autosegmental-Metrical Phonology, the framework used for prosodic analysis, and discusses the basic principles for the analysis of pitch contours and the specification of tunes. In chapter 8, I examine the prosody of statements in the individual varieties and chapter 9 is dedicated to yes/no-questions and the statement-question contrast. Finally, chapter 10 provides a prosodic analysis of wh-questions both across varieties and across wh-question formation strategies. I study the interaction between the prosody and the syntax in question formation by comparing the pitch contours related to the individual wh-question formation strategies (wh-SCI(-*pa/po*), wh-*pa/po*-SV, wh-*che*-SV, WH-SCI and wh-cleft constructions). The goal of this analysis is to find out (i) whether a difference in syntactic structure involves also a difference in intonational tune and (ii) which role the two components play for interrogative clause typing.

Chapter 7

Autosegmental-Metrical Phonology and the analysis of pitch contours

The present chapter provides a brief introduction to Autosegmental-Metrical Phonology (henceforth: AM) (section 7.1) since the prosodic analysis proposed in the present work is couched within this framework. Furthermore, basic principles of pitch analyses are outlined to enable the reader to understand how pitch contours are analysed and how they relate to the proposed tunes (7.2).

7.1 The Autosegmental-Metrical (AM) theory to intonational phonology

The AM approach to intonational phonology is currently the most widespread phonological framework within which intonational analyses are presented. The origin of the theory lies in three PhD dissertations, Liberman (1975), Bruce (1977) and in particular Pierrehumbert's (1980) analysis of English and was further developed in Gussenhoven (1984) and Ladd (1996). Further influential work includes the revised version of Beckman (1980) proposed in Beckman & Pierrehumbert (1986) and Pierrehumbert & Beckman (1988) and a modified and simplified version of the revision which is also part of the ToBI transcription system for Standard English (Silverman et al. 1992; Pitrelli, Beckman & Hirschberg 1994; Beckman & Ayers Elam 1993; Brugos, Shattuck-Hufnagel & Veilleux 2006).¹ For the last four decades, the AM approach has been modified and used to account for intonational patterns in several languages including,

¹ 'ToBI' refers to the Tones and Break Indices framework (Beckman & Hirschberg 1994, Beckman & Eysers-Elam 1997).

among others, Dutch (Gussenhoven et al. 1999), German (Grice & Benz Müller 1995; Grice et al. 2005a); Italian (Grice et al 2005b), European Portuguese (Frota 2000), and Bengali (Hayes & Lahiri 1991).

AM comprises two components, the autosegmental and the metrical one. The metrical part of the theory, which goes back to the work of Liberman & Prince (1977), establishes relative prominence across syllables and feet within words and assigns relative prominence to elements within a phrase. Thus, the same mechanism which allows for relative prominence within a word applies across words, within a phrase.

The autosegmental aspects of the framework originate in seminal work by Leben (1973) and Goldsmith (1979), who argued that lexical tones should not be viewed as being part of a vowel or a syllable, but rather should be represented on an independent tier which is then associated to prominent syllables. Furthermore, the tones would be discrete units of a combination of H(igh)s and L(ow)s and not degrees of gradated tones. The proposal for intonation is that similar discrete tonal events represented on an independent tier would be aligned to prominent elements of phrases, that is ‘tune-text-association’.

The term ‘autosegmental’ refers to the fact that, just like lexical tones, the intonational tune is considered to be autonomous with respect to the text (phrase) and that tune and text are represented on different tiers. Consequently, one and the same tune can be associated with a variety of texts of different lengths and structural properties (cf. Grice & Baumann 2007). However, this autonomy is restricted in that the tune is anchored to the text at strategic points, i.e. associations between the two tiers.

As mentioned above, the AM theory has since been applied to many languages and has also given rise to a number of Tone and Break Index (ToBI) transcription systems for the intonation of a variety of languages so that it nowadays widely serves as a basis for the discussion of prosodic structure. The goals of AM are both of a phonological and a

phonetic nature. In phonological terms, AM aims at characterising intonation contours consisting of a string of categorically distinct elements, whereas on the phonetic side, it seeks to provide a mapping from phonological elements to continuous acoustic parameters (cf. Ladd 2008:43).

Three basic tenets of AM are important for our discussion: (i) sequential tonal structure, (ii) the distinction between pitch accent and stress, and (iii) the analysis of pitch accents in terms of level tones (Ladd 2008:43ff.).² In the following sections, I briefly discuss these aspects in turn.

7.1.1 Sequential tonal structure

The assumption is that pitch contours are phonologically represented as sequences of discrete intonational events which include pitch accents and edge tones. While pitch accents are associated with stressed syllables, edge tones are associated with the edges of major prosodic boundaries (more on pitch accents and edge tones in section 7.2 below). The stretches of pitch contour between these intonational events are said to be phonologically unspecified and described in terms of transitions from one event to the following one. Crucially, given that in AM, intonation contours are analysed at one level of description in terms of strings of tones, the pitch phonology of all languages can be described in the same terms.

7.1.2 Pitch accent vs. stress

The second tenet of AM is an essential distinction between pitch accents and metrical stress. As mentioned above, an intonational tune consists of pitch accents and edge tones,

² Ladd (2008) proposes a fourth tenet, local sources of global trends, which refers to the issue of how to account for the observation that F_0 may exhibit an overall downward trend over the course of phrases and utterances both in tone languages and in languages like English or Dutch ('declination') (cf. Pike 1945). Given that this aspect is not of major importance for the present dissertation, I will not enter into the details of this issue here.

where pitch accents are discrete intonational tones aligned to stressed syllables. Ladd (2008:48) defines a pitch accent as “a local feature of a pitch contour, usually but not invariably a pitch change, and often involving a local maximum or minimum, which signals that the syllable with which it is associated is prominent in the utterance”. This view of the term ‘pitch accent’, which is now the one generally used, goes back to Bolinger (1958) and Pierrehumbert (1980). It can be referred to more specifically as intonational pitch accent in order to contrast it with a competing sense of the term, namely the lexical pitch accent, i.e. the lexically specified pitch feature of Japanese, some Bantu languages, and some European languages such as Swedish, Norwegian, and Slovenian.

According to AM, ‘stress’ is at least in part based on “an abstract phonological property of a syllable within a prosodic structure” (Ladd 2008:50f.). At each level of metrical structure – foot, word, phrase – the prominence level is determined hierarchically.

As regards phrasal stress, AM proposes a ‘stress pattern’ for utterances involving several different degrees of perceived prominence or abstract prominence relations between the elements of the utterance (cf. Ladd 2008:54). As shown in (1), every phonological domain has one main prominence. For example, every word has several feet, but only one foot carries main stress. Similarly, a phonological phrase may consist of many words, each with their own stress, one of which will bear the main stress of the phrase (Lieberman & Price 1977).

- (1) phrase x
 word x x
 feet x x x
 thirteen examples

7.1.3 Pitch accents, boundary tones and level tones

The third basic tenet of AM is that pitch accents and edge tones are analysed in terms of ‘level’ tones, i.e. they are taken to consist of primitive level tones or pitch targets usually indicated by an asterisk (*), High (H*) and Low (L*) or combined tones as in H*+L and other possible combinations. Boundary tones have the same primitives, the only difference being that the tones are attached to the boundaries of prosodic units rather than to stressed syllables.

The main theoretical debate in intonational phonology research from the early 1950s to the early 1980s was about the issue of whether intonation contours should be analysed in terms of distinct pitch levels or in terms of pitch movements or ‘configurations’ (e.g. ‘rise’ or ‘fall’). During the 1960s, Isačenko & Schädlich (1970) and the IPO researchers independently developed the idea that intonation involves distinct movements between relatively low pitch and relatively high pitch.³ Although AM continues the ‘levels’ view, it diverges from the original idea in two respects, namely in the reduction of the number of distinctive pitch levels to two (i.e. H and L) and in the acknowledgement of the existence of pitch accents. While the original ‘level’ view analysed intonation contours directly in terms of four level ‘pitch phonemes’ (Low, Mid, High, and Overhigh) (cf. Pike 1945; Wells 1945; Trager & Smith 1951), AM uses the two primitives H and L to refer to pitch levels but at the same time also includes a configurationist feature in treating pitch accents as some kind of ‘distinctive pitch configurations’.⁴

An issue that comes to mind in this respect is that of how AM treats phonetic data. In fact, at first sight, the analysis of pitch contours in AM seems to pose the problem that it cannot reflect the phonetic reality as pitch contours are much more varied than could possibly be

³ ‘IPO’ refers to an approach to intonation developed at the Institute for Perception Research in Eindhoven between 1965 and 1995 (cf. *inter alia* ’t Hart, Collier & Cohen 1990).

⁴ The basic distinction between H and L goes back to Bruce’s and Pierrehumbert’s innovative idea to extend the phonologically conditioned variation in the realisation of lexical tones in tone languages to the analysis in terms of level tones of intonation contours in languages like English.

accounted for by means of merely two distinctive primitives. However, this kind of objection is irrelevant given that AM views H and L merely as phonological abstractions. In AM, the phonetic realisation of H and L is influenced by a variety of factors and consequently, an individual occurrence of H or L may be phonetically very different from some other occurrence. The mapping from the abstract H and L tonal targets to the actual F_0 levels in pitch contours ('scaling') is treated in AM as a completely separate issue, which has been addressed by several approaches (cf. *inter alia* Bruce (1977); Bruce & Gårding's (1978) realisation model; Ladd (1992)). An important insight of these works is the concept of what Ladd (1992, 2008) calls 'tonal space' (cf. Clements's (1979) 'tone level frame'; Pierrehumbert & Beckman's (1988) 'transform space'), i.e. "a subset of the overall speaking range which is available for realising tonal distinctions at any given point in the utterance" (Ladd 2008:73). In fact, the approach to the 'scaling' problem taken by AM is to define the phonetic realisation of pitch features relative to the tonal space. Two different F_0 turning points labeled as H tone, for instance, could be seen as being at the top of a speaker's tonal space at a given point in time in an utterance (cf. Ladd 2008:74).

| | |
|---------------------------------------|--|
| Pitch accent | An intonational tonal unit which is aligned to the stressed syllable of the relevant phrasal unit. |
| Phrase accent or boundary tone | An intonational tonal unit which is aligned to the boundary of the relevant phrasal unit. |
| Nuclear pitch accent | The nuclear pitch accent is the most prominent one in the phrase. |

Table 7.1: Accents and boundary tones

After having considered the main theoretical pillars of AM, we can now turn to the issue of how pitch contours are actually analysed within this theory.

7.2 Basic principles for the analysis of pitch contours

This section discusses the inventory of pitch accents and edge tones assumed in the present work (7.2.1), the concept of the ‘nuclear pitch accent’ (7.2.2) and explains how pitch accents can be identified in the pitch contour (7.2.3). After that, I point out the labelling conventions adopted for pitch accents and edge tones (7.2.4) and introduce the concept of an ‘intonational lexicon’ (7.2.5).

7.2.1 Pitch accents and edge tones

As mentioned earlier, pitch accents can consist of a single H or L tone, or can be bitonal, i.e. consist of a combination of two tones, which is used to indicate pitch rises and falls.⁵ Bitonal accents are usually characterised by a rapid local F_0 movement in contrast to a local maximum or minimum of simple tones. In these bitonal accents, one of the two tones is taken to be central which, since Pierrehumbert (1980), is indicated by an asterisk (‘starred tone’: H*, L*). The other tone in the bitonal pitch accent can be either ‘leading’ (preceding the central tone) or ‘trailing’ (following the central tone). To give an example, the bitonal pitch accent L+H*, is referred to as a ‘High starred tone with a leading Low’.

Apart from pitch accents there are also ‘edge tones’, also referred to as ‘boundary tones’, i.e. tones which are associated with the periphery of a prosodic domain larger than a phonological word. Building on Bruce’s (1977) original proposal of phrase accents, Pierrehumbert (1980) uses boundary accents (T^-) to refer to tones observed between the rightmost pitch accent and the final boundary tone in English. In later work, Beckman & Pierrehumbert (1986) reanalyse Pierrehumbert’s (1980) phrase accent as the boundary tone

⁵ In her work on question intonation in Palermo Italian, Grice (1995) introduces new theoretical grounds within AM as regards the issue of how many tones can be organised into a pitch accent. While Pierrehumbert departs from a relatively flat structure of pitch accents involving one obligatorily starred tone and at most one unstarred tone, Grice proposes a more elaborate structure which can comprise three or even four tones in a single pitch accent. In the present work, I will stick to the more widespread assumption that there are just monotonal and bitonal pitch accents.

of what they call an ‘intermediate phrase’. In Beckman & Pierrehumbert’s (1986) approach, one or more intermediate phrases form an intonational phrase (IP), the domain of a full intonational tune. Hence, while the former ‘phrase accent’ is now taken as the boundary tone of the intermediate phrase, the former ‘boundary tone’ has become the boundary tone of the intonational phrase. The result of this claim, supported by Hayes & Lahiri’s (1991) study of Bengali intonational phonology, is that intonational tones comprise just pitch accents and boundary tones (at different phrasal levels, though). Assuming that the intermediate phrase corresponds to the phonological phrase proposed within the theory of the Prosodic Hierarchy (cf. Selkirk 1980; Nespor & Vogel 1986), Hayes & Lahiri (1991) refer to boundary tones occurring at the phonological phrase boundary level as ‘T_P’ and to boundary tones at the intonational phrase boundary level as ‘T_I’. In the present work, I adopt Hayes & Lahiri’s (1991) labelling conventions. Table 7.2 summarises the evolution of the view of the ‘phrase accent’ and gives an overview of the different labelling conventions.

| Bruce (1977), Pierrehumbert (1980) | Beckman & Pierrehumbert (1986) | Hayes & Lahiri’s (1991) labels (adopted in the present work) |
|---|--|---|
| phrase accent T ⁻ | boundary tone of the intermediate phrase | boundary tone of the phonological phrase T _P |
| boundary tone | boundary tone of the intonational phrase T% | T _I |

Table 7.2: Different labelling conventions for boundary tones

In what follows, I assume the inventory of tones displayed in table 7.3.

| | Pitch Accents | Edge tones | |
|------------------|----------------------|---|---|
| | | Phonological phrase boundary tones | Intonational phrase boundary tones |
| Monotonal | L* | L _P | L _I |
| | H* | H _P | H _I |
| Bitonal | L*+H | | L _I H _I |
| | L+H* | | |
| | H*+L | | |
| | H+L* | | |

Table 7.3: Inventory of tones

We will see in section 7.2.3, that differences in tune-text-alignment can be accounted for by differences in starredness between the bitonal tones L*+H and L+H* as well as between H*+L and H+L*.

7.2.2 The nuclear pitch accent

The domain of an intonational tune can be divided up into two parts – the section which carries the nuclear accent and the other sections which are pre-nuclear or post-nuclear.⁶

| | | | | |
|-----|--------------------------------------|------------------------------|--|-----------------------------|
| (2) | pre-nuclear (word) P ⁷ | pre-nuclear (word word) P | Nuclear pitch accent nuclear (word word) | post-nuclear (word word) |
|-----|--------------------------------------|------------------------------|--|-----------------------------|

The nuclear pitch accent has a special status in the sense that it is the only obligatory pitch accent in the phrase and that it is more prominent or more salient than pre-nuclear pitch accents. Within AM, the nuclear pitch accent is usually defined in terms of “the last and most prominent accent of the intermediate phrase” (D’Imperio 2002:38; cf. Pierrehumbert 1980). Hence, in this view, lexical items following the nuclear accented one cannot bear an accent and the post-nuclear portion of the pitch contour is considered as completely deaccented.

However, this positional definition of the nuclear pitch accent has been contested regarding the analysis of intonation in varieties of Italian due to the fact that later accents within the same intermediate phrase (post-nuclear accents) had been identified.

In Italian, the nuclear pitch accent tends to be late in the phrase (Grice 1995a, Ladd 1996), but given that it can also be found elsewhere in an utterance, the issue arises as to whether there are potential accents in post-focal words that express given information (Grice et al. 2005b:379). Unlike in English, where post-focal words are deaccented, it was proposed

⁶ Sometimes, the pre-nuclear section is also referred to as the ‘head’ which is counterintuitive from the syntactic notion.

⁷ P: phonological phrase

for Italian that they can be accented as Italian can place accent on given information (cf. Halliday 1967; Ladd 1980, 1996; Brown 1983; Cruttenden 1993; Avesani 1997).⁸ Hence, according to Grice et al. (2005b), the observation that in Italian, the nuclear pitch accent can be followed by other accents within the same phrase casts doubt on the positional standard AM definition of the nuclear pitch accent. On these grounds, Grice et al. (2005b:380) propose a different definition of the nuclear pitch accent in terms of the “rightmost fully-fledged pitch accent in the focused constituent”.

In this work, I adopt a view of the nuclear pitch accent in terms of the semantically most relevant accent in the utterance. Generally, if the utterance involves neutral focus, it is indeed the last prominent phrasal unit; else the focus phrase gets the nuclear pitch accent. In the analyses developed in chapters 8–10, we will be mainly concerned with the nuclear part of the contour, i.e. the nuclear pitch accent and the edge tones and will not address the pre-nuclear portion of the utterance.

7.2.3 The identification of pitch accents in the pitch contour

We have already seen in section 7.2.1, that one of the essential concepts of AM is that pitch accents are composed of combinations of H and L tones. But how can we identify a tone at a given point in a string and what are the criteria to decide whether a given pitch accent consists of one or two tones?

The first fundamental idea in this respect within AM is due to Bruce (1977) who identifies tones with turning points in the F_0 contour whereby local maxima are taken as H tones and local minima as L tones. However, in subsequent work (e.g. Pierrehumbert, Ladd) it was argued that the equation ‘tone = turning point’ is too restrictive given that tones need not necessarily correspond to turning points and turning points need not necessarily reflect the

⁸ It has been found that in Italian, unlike in English, it is impossible to deaccent part of a syntactic phrase (Swerts et al. 1999), but Italian seems to allow deaccenting of large syntactic constituents in postfocal position (Grice et al. 2005).

phonetic realisation of a tone. In fact, it was shown that the identification of pitch accents requires reference to two basic parameters, (i) temporal alignment (section 7.2.3.1) and (ii) scaling (7.2.3.2), i.e. frequency values of pitch targets.

7.2.3.1 Alignment

AM argues for a formal separation between tune and text, i.e. a distinction between melodic or intonational phenomena ('suprasegmental elements') on the one hand and items at a segmental phonemic level ('text') on the other. Melodic and segmental phonemic items are placed on separate tiers: a 'tonal tier' for 'tonemes' and a 'CV tier' for 'phonemes' (cf. Goldsmith's 1979 seminal work on Autosegmental Phonology).

The items of these separate tiers of phonological representation – i.e. the tones on the tone tier and the vowels on the phoneme tier – have to be associated or synchronised, that is to say *anchored* to the text at strategic points. The terms 'association' and 'alignment' both refer to this process but have to be distinguished conceptually (cf. Ladd 1983) as they differ with respect to the level on which they apply.

In 'association', vowels of metrically strong syllables in the phoneme string are linked to tones in the tonological string.⁹ In this way, the stressed syllable constituting the strongest node of the metrical tree, the so-called 'Designated Terminal Element' (DTE), can associate with the nuclear pitch accent. Thus, the metrical hierarchy ultimately determines the potential anchoring sites for pitch accents. This link established by 'association' may then lead towards the synchronisation of tones and vowels at a realisational level.¹⁰ This synchronisation is referred to as 'alignment'.

⁹ Different models of association are proposed which differ with respect to two main points: (i) in how they deal with the association of tones with vowels, syllables or feet and (ii) in how they deal with the association of tones with higher-level constituents such as the intonation phrase. Goldsmith's original theory, for instance, allowed tones to be associated only with vowels and did not take higher constituents into account.

¹⁰ At least in Pierrehumbert's (1980) original model, association also implies alignment in that a given tone is realised within the boundaries of the syllable with which it is associated.

Note that on the basis of phonological association it is not possible to make detailed predictions about the concrete phonetic alignment. The association of an H tone with a prominent syllable, for instance, makes us expect an F_0 peak near that syllable but the peak could be early in the syllable or late or even outside the syllable boundaries (cf. Ladd 2008:179).

In figure 7.1, I show how the alignment of boundary tones and pitch accents works on the basis of the English surprise contour on words and phrases of different lengths (adapted from Hayes & Lahiri 1991). The tune is essentially $L+H^* L_1$, where the first L appears only if there is an unstressed syllable preceding main stress. The H^* tone aligns to the main stressed syllable, while the final L attaches to the end of the intonational phrase.

| | | | | | | | | | |
|--------|---------------|----|----------------|----------|----------------|-------------|----------------|--------|----------------|
| tune | L+ | H* | L ₁ | L+H* | L ₁ | L+H* | L ₁ | H* | L ₁ |
| phrase | | x | | | | | | | |
| word | x | x | | x | | | x | | x |
| | ten examples) | | | Allison) | | phonology) | | John) | |
| | (i) | | | (ii) | | (iii) | | (iv) | |

Figure 7.1: Alignment of boundary tones and pitch accents

In (i–iii), the initial L tone is aligned with the unstressed syllable while in (iv), there is no unstressed syllable before main stress and hence also no L tone. In all four examples, the H^* tone is attached to the main stressed syllable of the domain. Thus, in (i), it is attached to the main prominence of the second word because the phrasal stress falls there. In all the other examples, the word is a phrase of its own, and therefore the H^* aligns to the stressed syllable of the word. In all instances, the boundary tone aligns to the edge of the word and not to a prominent syllable.

Alignment is a crucial aspect in the study of intonation given that the way in which pitch movements are aligned with the segmental string can give rise to intonational distinctions. Studies on a variety of languages (e.g. Bruce 1977 on Swedish; Kohler 1987 on German;

Pierrehumbert & Steele 1989 on American English; Rietveld & Gussenhoven 1995 on Dutch; D'Imperio & House 1997 on Neapolitan Italian) have confirmed that differences in alignment can reflect pitch distinctions. Crucial for our current research purposes is also the finding that alignment differences can even give rise to distinctions between clause types, e.g. the distinction between questions and statements (cf. D'Imperio & House 1997; Makarova 2007).

Alignment can be influenced by a variety of both phonological and phonetic factors: first, the 'segmental anchoring' of a specific pitch accent can be conditioned by phonological factors such as vowel length (cf. Ladd, Mennen & Schepman 2000; Ladd et al. forthcoming) or syllable structure (Prieto & Torreira 2007). Second, a variety of studies have shown that alignment can also be affected by phonetic pressure from a closely adjacent tone or boundary (cf. Silverman & Pierrehumbert 1990; Prieto, van Santen & Hirschberg 1995; Xu & Sun 2002; Ladd 2008:181). 'Phonetic pressure' refers to the situation in which more than one tone gets associated with a single stressed syllable in a phrase or utterance. Languages have been found to make use of two main strategies in order to deal with this kind of pressure, (i) 'tonal compression' and (ii) 'tonal truncation' (cf. Grønnum 1991).

While 'tonal compression' refers to the realisation of all tones on one single syllable, 'tonal truncation' occurs in languages showing a restriction on the number of tones that can be realised on one single syllable so that consequently, one or more tones may be left unrealised which may even result in a change of tune. Languages like English or Greek have been reported to prefer compression (cf. Arvaniti, Ladd & Mennen 2006a) whereas Hungarian and Palermo Italian (Grice 1995a) prefer truncation. Compression and truncation are most evident while in nuclear accents in final position, but similar effects are observed in other cases where accents cannot be realised in full as they occur too closely

together (cf. Caspers & van Heuven 1993; Xu & Sun 2002; Prieto 2005). We will see in the following chapters that tonal compression and tonal truncation are common phenomena also in the varieties under consideration in the present work.

7.2.3.2 Scaling

‘Scaling’ is concerned with the ‘vertical’ dimension of pitch and the F_0 level at which tones are realised. A problem for the analysis of pitch is that it differs enormously from speaker to speaker (e.g. men vs. women), from occasion to occasion and it may also differ from one part of an utterance to the other (e.g. in ‘declination’) (Ladd 2008:189). These and other observations have led to the insight that pitch features should best be described relative to the speaker’s pitch range, also referred to as ‘tonal space’, i.e. speaker-specific reference points such as upper and lower F_0 values (Ladd 2008:192). Scaling of tonal targets can be affected by both intrinsic and extrinsic factors (Ladd 2008:205f.). Intrinsic factors influence the relative position of tonal targets within the ‘tonal space’. The difference between an H tone and an L tone, for instance, is intrinsic with the former being intrinsically higher than the latter. Extrinsic factors, in contrast, affect the tonal space itself and refer to differences between different speakers’ overall speaking ranges, e.g. between men and women. In the present study, women were chosen as informants because of their larger overall speaking range with respect to men.

7.2.4 Labelling conventions

The ToBI transcription systems proposed for various languages have given rise to detailed labelling conventions for pitch movements. Table 7.4 exemplifies these labelling conventions on the basis of Grice & Savino (1997) on Bari Italian and Frota et al. (2007) on Central Catalan, European Portuguese, Neapolitan Italian and Central Peninsular Spanish.

| Label | Grice & Savino (1997) | Frota et al. (2007) |
|-----------------------|---|--|
| L*+H | - | high target attained within the stressed syllable (at the end of the vowel) |
| H+L* | high pitch target immediately preceding a low stressed syllable | low target in the stressed vowel and high target in the post-stressed syllable |
| H*+L | high target early in the stressed syllable followed by a rapid fall | low target in the stressed vowel preceded by a high target |
| H* | high target on the stressed syllable without specifications as to the preceding and following pitch contour | - |
| L* | low target on the stressed syllable without specifications as to the preceding and following pitch contour | stressed vowel remains low throughout |
| L_I | low pitch value at the end of the utterance | - |
| LH_I | rise up to the end of the phrase | - |

Table 7.4: Labelling conventions for pitch movements
(Grice & Savino 1997; Frota et al. 2007)

In principle, there are two different ways of how to conceive the monotonal H* and L* pitch accents: one could assume that the pitch contour exhibits a flat trajectory throughout the stressed syllable as Frota et al. (2007) do with respect to L* (table 7.5a) or one could assume that the pitch contour attains the maximum or minimum in the middle of the stressed syllable followed by a fall in the case of H* or a rise in the case of L* (7.5b).





| | a | b |
|-----------|---|---|
| H* |  |  |
| L* |  |  |

Table 7.5: Possible conceptions of the monotonal pitch accents H* and L*

In order to make my analyses in chapters 8–10 transparent in the best possible way, I state in tables 7.6 and 7.7 sample pitch contours for the various pitch accent specifications I assume. Table 7.6 is concerned with the pitch movements in the region of the nuclear stressed syllable and provides for each nuclear pitch accent type a sample pitch contour. The stretch of time of the nuclear stressed syllable is marked in grey.

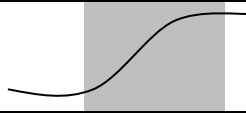
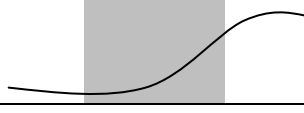
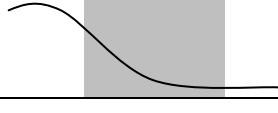
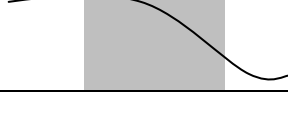


| Nuclear pitch accent | Expected contour |
|----------------------|--|
| L+H* |  |
| L*+H |  |
| H+L* |  |
| H*+L |  |
| L* |  |
| H* |  |

Table 7.6: Nuclear pitch accents and sample pitch contours

By the same token, table 7.7 states the boundary tones and the expected pitch movements in the terminal part of the contour (marked in grey).


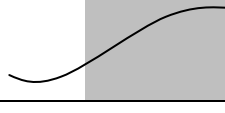
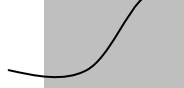
| Boundary tones | Terminal part of the contour |
|-------------------------------|--|
| L _I |  |
| H _I |  |
| L _I H _I |  |

Table 7.7: Boundary tones and the terminal part of the contour

There is one caveat, though: we will see in chapters 8–10 that in contexts of phonetic pressure, e.g. in cases of utterance-final stress, the pitch contour may actually surface in a different way as predicted in tables 7.6 and 7.7 as a consequence of adjustment strategies such as ‘tonal truncation’ or ‘tonal compression’.

7.2.5 An ‘intonational lexicon’

A widespread assumption in intonational phonology is that intonational phenomena can be classified into contour types or ‘tunes’ such as ‘neutral declarative’ intonation, ‘interrogative’ intonation etc. One central research goal in this respect is to identify the tunes of a given language and to provide a detailed phonetic characterisation of these contour types.

Furthermore, apart from this formal classification of intonational phenomena, Bolinger (1986, 1989) and Gussenhoven (1984), among others, have developed the idea of ‘intonational morphemes’ assuming that specific elements of intonational analysis have morpheme-like meanings. This is part of what Ladd (1987a:638) calls ‘The Linguists’s theory of intonational meaning’, referring to the idea that a given tune signals specific communicative functions. Gussenhoven (1984), for instance, proposes for each of the three basic accent types he identifies for English (H*L-fall, L*H-rise and H*LH-fall-rise) a different basic discourse function: ‘fall’ signals the introduction of an entity into the background or shared knowledge of the interlocutors and serves hence as basic statement intonation. In contrast to this, ‘rise’ is used to be non-committal about whether a mentioned entity is part of the background (basic question intonation) and ‘fall-rise’ serves to select an entity from the background.¹¹ Furthermore, Pierrehumbert & Hirschberg (1990), who attempt to provide intonational meanings for the elements established by Beckman &

¹¹ In Gussenhoven’s approach (further developed in Gussenhoven (2004: ch.14) on English and Gussenhoven (2005) on Dutch), the meaning of each of the basic accent types can be further modified by additional pitch accent features.

Pierrehumbert's (1986) analysis of English intonation, claim that intonational meaning is compositional in the sense that similarity of meaning should also be reflected by similarity in the phonological representation. In a similar way, Hayes & Lahiri (1991) decompose the nuclear contours identified in their analysis of Bengali intonation into intonational morphemes with specific meanings.

| Pitch accents (“stems”) | | Boundary tones (“suffixes”) | |
|-------------------------|--------------------|-------------------------------|-------------------|
| L* | question accent | L _I | neutral |
| H* | declarative accent | L _I H _I | continuation rise |
| L* H _P | focus accent | H _I | offering |
| | | H _I L _I | yes/no |

Table 7.8: The intonational morphemes in Bengali nuclear contours (Hayes & Lahiri 1991:77)

Note, however, that there is generally no “simple correspondence” between sentence type and tune (cf. Scherer, Ladd & Silverman 1984; Haan 2001; Lickley, Schepman & Ladd 2005).

With this overview of Autosegmental-Metrical Phonology and the labelling conventions of pitch accents and boundary tones in mind we can now turn to the analysis of the prosodic characteristics of Dolomitic Ladin statements (chapter 8), yes/no-questions (chapter 9) and wh-questions (chapter 10).

Chapter 8

Statement intonation

In the present and the following two chapters, I analyse the prosodic characteristics of statements and questions in the varieties Gherdëina, Badiot, Fascian and Nònes within the framework of AM (cf. chapter 7). The prosodic analysis is guided by three main research goals:

- (1) Research goals
 - a. provide a formal characterisation of statement and question intonation in the four varieties
 - b. point out the prosodic differences between these varieties ('dialectprosody')
 - c. determine the prosodic cues to interrogativity

To my knowledge, the present work is the first attempt ever at describing intonation in varieties of Dolomitic Ladin. In the present chapter, I first provide a brief review of the existing literature on statement intonation, concentrating on work on Italian and Italian varieties which will serve both as a background and as a reference point for the comparative data analysis. Where appropriate, I also make reference to German given that the Dolomitic Ladin varieties are situated in the contact region between varieties of German and Italian. The bulk of the literature on question intonation, or the statement-question contrast, considers varieties of Italian and has made important contributions to the development of AM. However, given that most of the intonation literature on Italian has concentrated on Standard Italian, southern and central varieties, the aim of the present work is to contribute data from the far north of Italy in order to complete the picture.^{12 13}

¹² Note that the variety of Italian usually referred to as 'Standard Italian' originally derives from *fiorentino colto*, i.e. the "cultivated" variety of Florence.

¹³ I wish to clarify here my conception of 'varieties of Italian'. I do not consider Dolomitic Ladin as varieties of Italian; rather, the relation I see between varieties of Dolomitic Ladin on the one hand and Italian and its dialects on the other is (i) the common origin as descendants of Latin and (ii) the geographical aspect of them all being varieties spoken on Italian soil.

The chapter is organised as follows: section 8.1 is concerned with the intonation in neutral focus statements while section 8.2 examines narrow focus statements. Section 8.3 concludes the chapter with a summary of the findings regarding the tune in neutral and narrow focus statements and a note on the neutral focus-narrow focus statement contrast.

8.1 The intonation of neutral focus statements

8.1.1 Neutral focus statement intonation in (varieties) of Italian and beyond

By ‘neutral focus statement’, I understand a statement consisting of all new information (cf. also section 1.3.3.1). Such a statement constitutes the answer to a question like ‘What has happened?’ where all constituents are new to the discourse situation and uttered ‘out-of-the-blue’.¹⁴

In all varieties of Italian examined so far in the literature, the nuclear pitch accent in neutral focus statements has been analysed as a sequence of a high target followed by a low target on the stressed syllable (Avesani 1990; Avesani & Vayra 2000 on Standard Italian; Grice 1995 on Palermo Italian; Caputo 1994 and D’Imperio 1995 on Neapolitan Italian¹⁵; Grice & Savino 1995, 1997 on Bari Italian; Grice et al. 2005b on Florentine Italian).¹⁶ In AM terms, this pitch movement, the ‘declarative fall’, is usually analysed as a bitonal H+L* nuclear pitch accent.

The H+L* nuclear pitch accent has also been proposed in analyses of neutral focus statements in other Romance languages such as European Portuguese (cf. Frota 1997,

¹⁴ Ladd (1980) refers to these cases as ‘broad focus’ and much of the intonation as well as the information structure literature has taken up this term. For my motivation to use the term ‘neutral focus’ instead, see section 1.3.3.1.

¹⁵ Note that D’Imperio’s work is concerned with the Neapolitan *accent* of Italian and not with the Neapolitan *dialetto*, which differs from Standard Italian both in morphological and in syntactic terms.

¹⁶ On the basis of a detailed analysis of the tonal alignment in neutral focus statements in Neapolitan Italian D’Imperio (2002) argues for an H+L* analysis and against an alternative analysis as a fall from an H* accent to an L_p phrase accent.

2000) and French (cf. Beyssade et al. 2007) and, beyond Romance, also for English (cf. Grice 1995 for an overview; Bartels 1999). As regards German, neutral focus statements also exhibit a fall, which, however, has been analysed in terms of H*+L (Uhmman 1991; Féry 1993; Grice et al. 1996). Given the difference in starredness, the declarative fall in German seems to be aligned later than in the other languages.

| The nuclear pitch accent in neutral focus statements | | | |
|---|---------------------|--------------------|-------------|
| Romance | Italian | Standard Italian | H+L* |
| | | Palermo Italian | |
| | | Neapolitan Italian | |
| | | Bari Italian | |
| | | Florentine Italian | |
| | European Portuguese | | |
| | French | | |
| Germanic | English | | |
| | German | H*+L | |

Table 8.1: The nuclear pitch accent in neutral focus statements

8.1.2 Preliminaries

The phonological data in the following sections are presented in the following way. Each data set consists of three parts: (i) the actual utterance in the usual glossed and translated format, (ii) the corresponding metrical grid and (iii) a screenshot of the Praat diagram.

The metrical grid indicates the syllables, the grouping of syllables into phonological phrases ([...]P) and the grouping of phonological phrases into intonational phrases ([...]I) as well as the location of stress in the metrical hierarchy. The nuclear pitch accent is associated to and aligned with the main stressed syllable. I also point out boundary tones, but only the crucial ones for the analysis, i.e. edge tones (intonational phrase boundary tones, T_I) and – where necessary for the argumentation – phonological phrase boundary tones (T_P).

The screenshot of the Praat diagram shows the pitch contour of the utterance. The spectrogram part of the diagram has been omitted in order to make the pitch track more

legible. The caption of the diagram indicates the variety and the speaker to whom the utterance is due. Tier 1 displays the individual syllables and tier 2 the corresponding glosses enabling the reader to consider the pitch movement for each individual syllable. The purpose of these diagrams is to illustrate the nature and the location of the tune consisting of the nuclear pitch accent and the boundary tones. In the light of the fact that only the tune – consisting of the nuclear pitch accent and edge tones – is crucial for the sentence type, we will not be concerned with prenuclear accents in any way.

8.1.3 The neutral focus statement tune in Dolomitic Ladin

Apart from the common properties regarding the prenuclear portion of the contour, Gherdëina, Badiot, Fascian and Nònes also share the same nuclear contour consisting of an H+L* nuclear pitch accent and an L_I tone. As shown for Gherdëina (1, figure 8.1), Badiot (2, figure 8.2), Fascian (3, figure 8.3) and Nònes (4, figure 8.4), the pitch contour is relatively high at the beginning of the main stressed syllable, but falls down within it (H+L*), ending on the speakers' baseline (L_I).

- (1) a. Jon a Roma. (Gherdëina)
go-1PL to Rome
'We are going to Rome.'
b. x
x x
x x x x
[[Jon a]_P [Ro ma]_P]_I
| | |
L+H* H+L* L_I

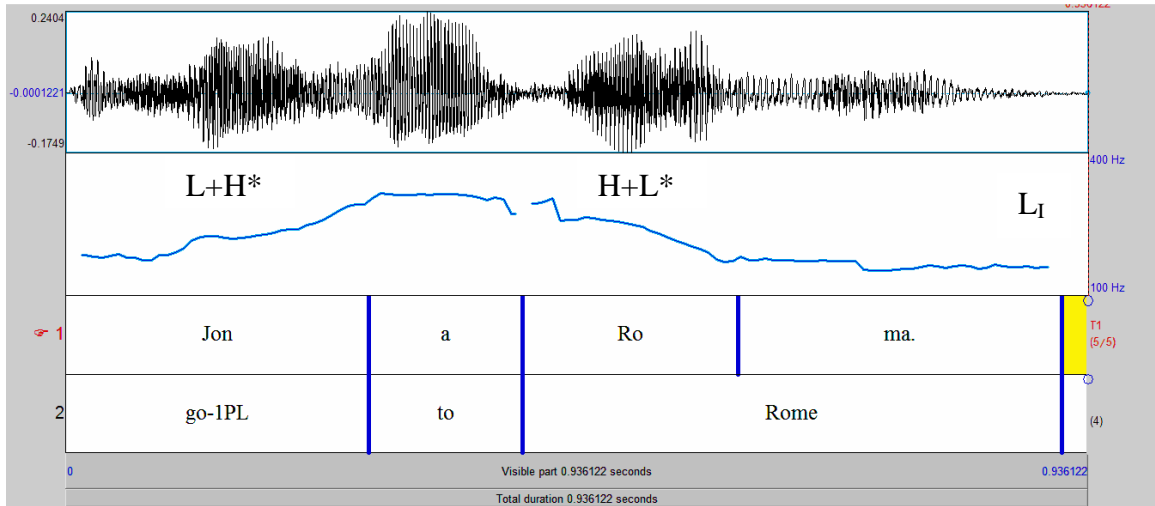


Figure 8.1: Gherdëina 1 Jon a Roma.

- (2) a. I mangiun da marëna a Roma. (Badiot)
 we eat-1PL PREP lunch in Rome
 ‘We are having lunch in Rome.’

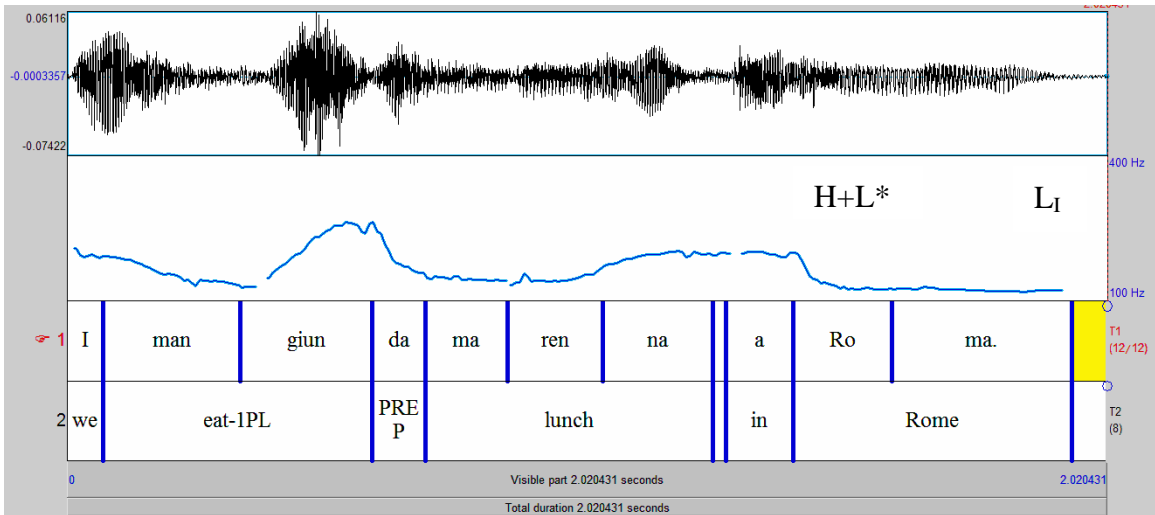
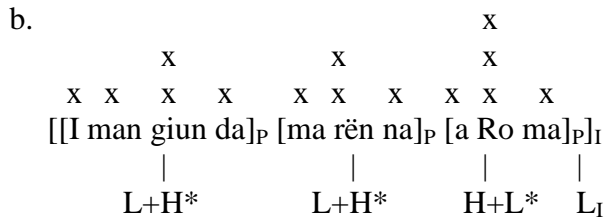


Figure 8.2: Badiot 10 I mangiun da marëna a Roma.

(3) a. Magnon formai a Moena. (Fascian)
 eat-1PL cheese a Moena
 'We are eating cheese in Moena.'

b.

| | | | | | | | | | | | |
|--|-------------------------|---|------|---|--------------------------|---|----------------|------------------------|---|---|----------------|
| | | | | | | | | | | X | |
| | | X | | X | | | | | | X | |
| | X | X | X | X | X | X | X | X | X | X | |
| | [[Magn on] _P | | | | [for mai a] _P | | | [Mo e na] _P | | | I _I |
| | | | | | | | | | | | |
| | L+H* | | H+L* | | H+L* | | L _I | | | | |

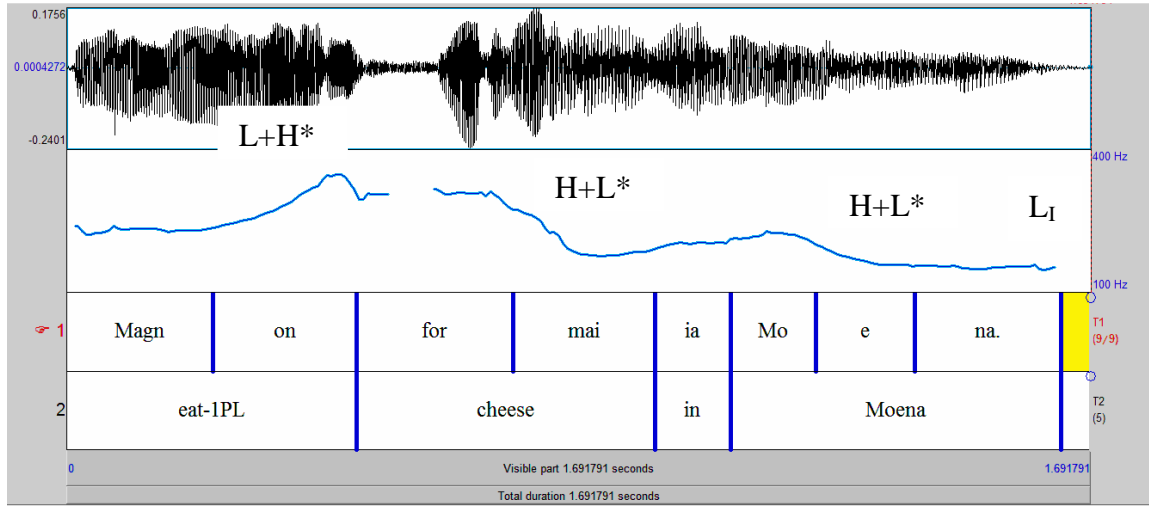


Figure 8.3: Fascian Brach 4 Magnon formai a Moena.

(4) a. La laora a Malé. (Nònes)
 she work-3SG in Malé
 'She works in Malé.'

a'.

| | | | | | | | | | | |
|--|------------------------------|---|------|---|----------------|----------------------|---|--|----------------|---|
| | | | | | | | | | | X |
| | | | X | | | | | | | X |
| | X | X | X | X | X | X | X | | | |
| | [[La la o ra a] _P | | | | | [Ma lé] _P | | | I _I | |
| | | | | | | | | | | |
| | H+L* | | H+L* | | L _I | | | | | |

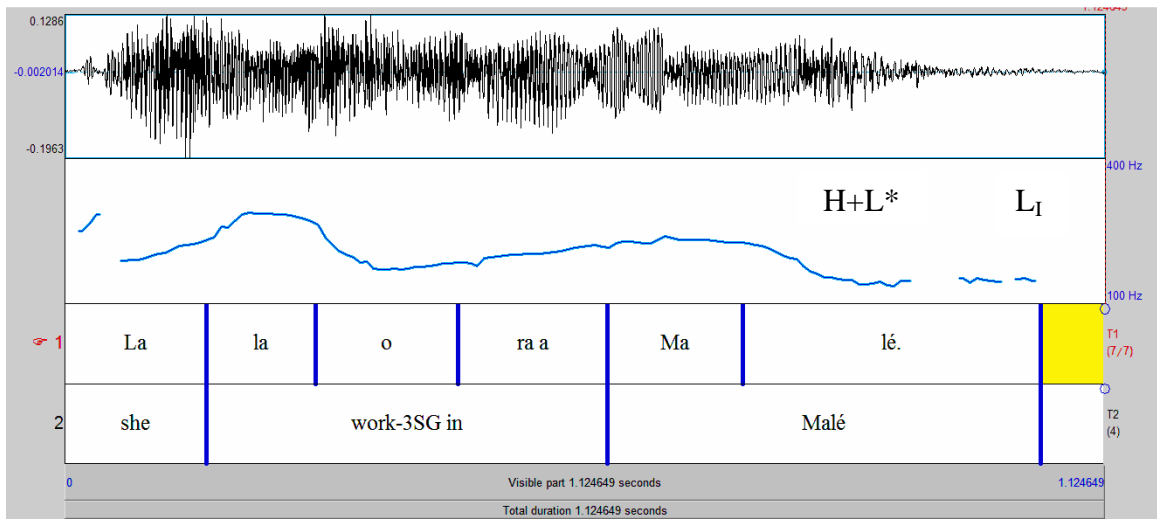


Figure 8.4: Nònes 6 La laora a Malé.

In conclusion, neutral focus statements in all varieties under consideration exhibit the H+L* L_I tune which has also been found in varieties of Italian and other Romance languages (cf. section 8.1.1).

| The neutral focus statement tune | | |
|----------------------------------|----------------------|----------------|
| Variety | Nuclear pitch accent | Edge tone |
| Gherdëina | H+L* | L _I |
| Badiot | | |
| Fascian | | |
| Nònes | | |

Table 8.2: The neutral focus statement tune in the varieties under scrutiny

8.2 The intonation of narrow focus statements

Narrow focus contrasts neutral focus in that at least one constituent comes under focus and is syntactically and/or prosodically prominent. Recall from section 1.3.3.2, that semantic focus and phonological main prominence have to be aligned ('Focus to Stress Alignment', Chomsky 1971; Jackendoff 1972; Nespor & Guasti 2002) and hence, in narrow focus statements, the focus constituent will bear main stress and consequently be associated with the nuclear pitch accent.

8.2.1 Narrow focus statement intonation in (varieties of) Italian

All varieties of Italian examined so far in the literature have been found to distinguish contrastive narrow focus from neutral focus in statements by nuclear pitch accent type. As regards Neapolitan Italian, for instance, the nuclear pitch accent in narrow focus statements has been analysed in terms of an L+H* rise in contrast to the H+L* fall in neutral focus statements (D'Imperio 1999). Apart from the difference as to the direction of the melodic contour, narrow focus statements have been reported to have a more acoustically salient nuclear pitch accent than neutral focus statements (D'Imperio 2002a:57). While F₀

variation is described as “relatively shallow” within the nuclear syllable of neutral focus $H+L^*$, its excursion is found greater within narrow focus $L+H^*$. Table 8.3 gives an overview of the nuclear pitch accent found in narrow focus statements in several varieties of Italian (Grice et al. 2005b) and German (Grice et al. 2005a).

| The nuclear pitch accent in narrow focus statements | | |
|---|--------------------|-----------------------|
| Romance | Neapolitan Italian | $L+H^*$ ¹⁷ |
| | Bari Italian | H^*+L ¹⁸ |
| | Palermo Italian | H^*+L ⁷ |
| | Florentine Italian | H^* |
| Germanic | German | $L+H^*$ |

Table 8.3: The nuclear pitch accent in narrow focus statements in some varieties of Italian and in German (Grice et al. 2005a/b)

8.2.2 The narrow focus statement intonation in Dolomitic Ladin

8.2.2.1 Preliminaries

In the present section, I examine the narrow focus statement tune in Gherdëina (8.2.2.2), Badiot (8.2.2.3), Fascian (8.2.2.4) and Nònes (8.2.2.5) on the basis of the parameters given in table 8.4. The data discussed in the following sections have been elicited by means of questionnaire task 1 (cf. section 2.3.3.1) which was explicitly designed to examine the prosodic differences between neutral focus and narrow focus statements.

| Parameters | Values | |
|---|---------------------|--------|
| Position of the narrow focus constituent in the utterance | early | late |
| Position of the main stressed syllable within the focus constituent | (ante-) penultimate | final |
| Type of the main stressed syllable | open | closed |

Table 8.4: Parameters for the analysis of the narrow focus statement tune

The main stressed syllable of narrow focus constituents is indicated by capital letters.

¹⁷ Note that the nuclear pitch accent of Neapolitan Italian narrow focus statements was initially analysed in terms of H^*+L (D’Imperio & House 1997) like in Bari and Palermo Italian. However, on the basis of a closer examination of the constituent medial valley, D’Imperio (1999) asserted that it is in fact the leading tone of a rising $L+H^*$ pitch accent. For reasons of space we cannot enter into the details of these analyses here.

¹⁸ Strikingly, in Bari and Palermo Italian, the falling bitonal H^*+L accent is used as nuclear pitch accent in both neutral focus and non-contrastive narrow focus, i.e. new information focus, statements. Consequently, in this case, ambiguity arises between the two focus types.

8.2.2.2 Gherdëina

Gherdëina early narrow focus statements

Gherdëina early narrow focus statements exhibit a rising bitonal L+H* nuclear pitch accent followed by an L_I irrespective of whether the main stressed syllable is in penultimate (5, figure 8.5) or in final position (6, figure 8.6) and irrespective of whether the main stressed syllable is open (5, figure 8.5) or closed (6, figure 8.6; 7, figure 8.8).

(5) Penultimate stress on open syllables (Gherdëina)

- a. MaRIa manda la marënda a Nina.
 Maria send-3SG the lunch to Nina
 ‘MaRIa sends Nina the lunch.

a'. x
 x x
 x x x x x x x x x x x x
 [[Ma RI ia]_P [man da la ma rën da]_P [a Ni na]_P]_I
 | | |
 L+H* L_P L_I

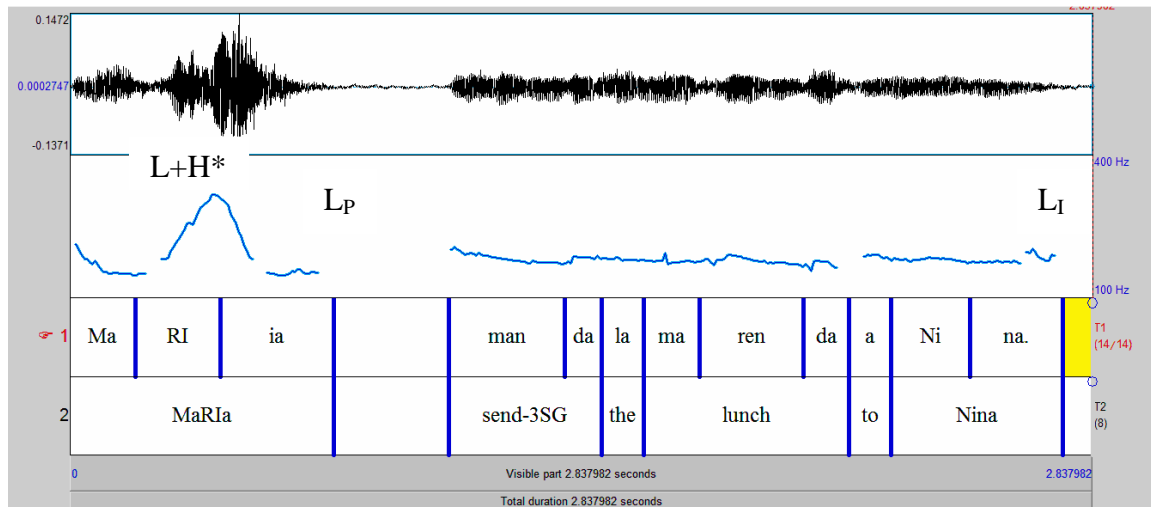


Figure 8.5: Gherdëina 2 MaRIa manda la marënda a Nina.

When the main stressed syllable is closed (6), we either observe a rise (figure 8.6) or a peak (figure 8.7) on the nuclear stressed syllable.

(6) Penultimate stress on closed syllables (Gherdëina)

a. Maria MANda la marënda a Nina.
 Maria send-3SG the lunch to Nina
 ‘Maria SENDS Nina the lunch.’

a'.
 X
 X X X X X X X X X X
 [[Ma ri ia]_P [MAN da]_P [la ma rën da a]_P [Ni na]_P]_I
 L+H* L_P L_I

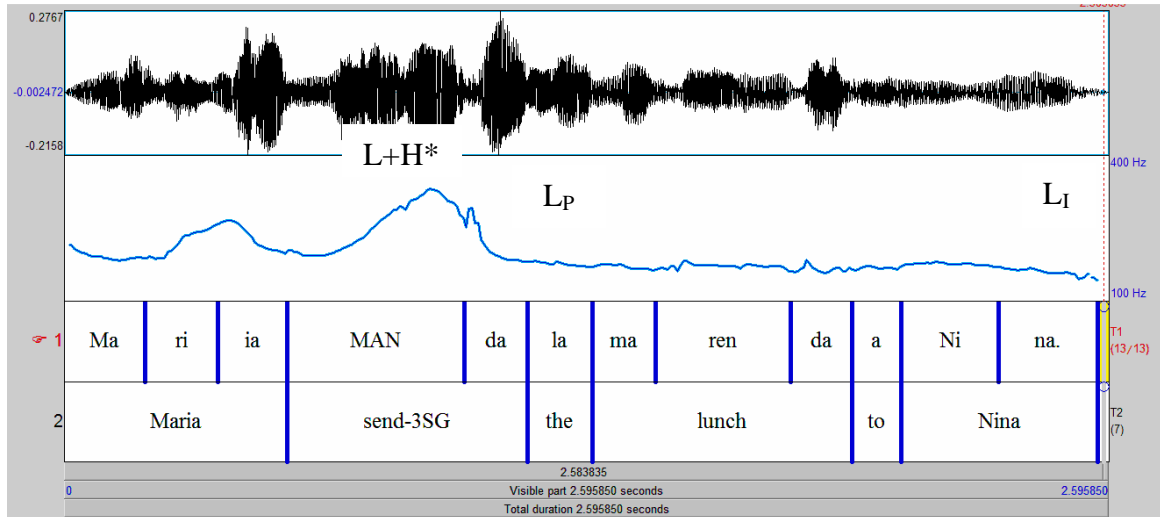


Figure 8.6: Gherdëina 1 Maria MANda la marënda a Nina.

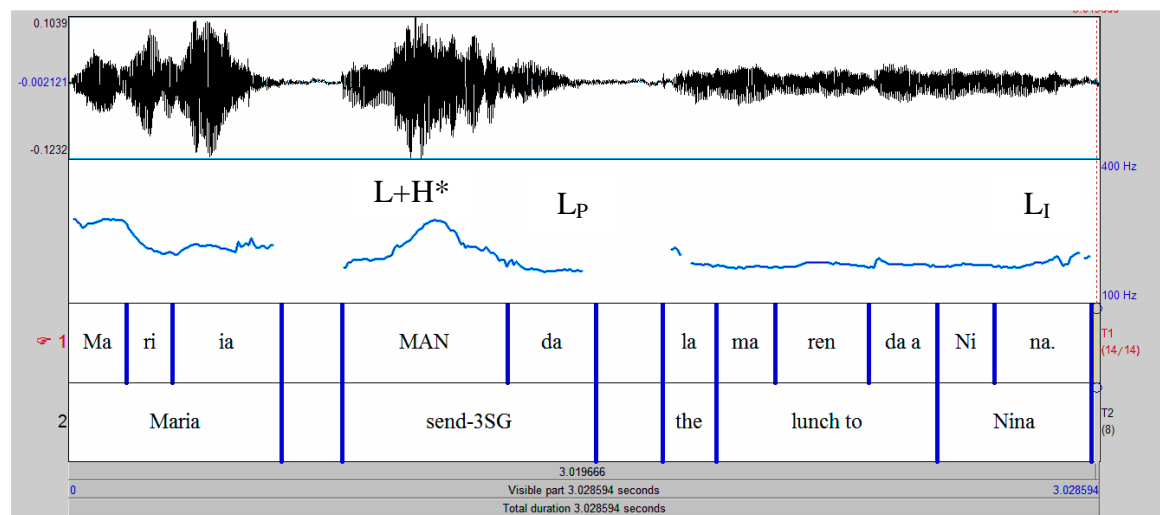


Figure 8.7: Gherdëina 2 Maria MANda la marënda a Nina.

The peak occurs also when main stress falls on a closed final syllable.

(7) Final stress on closed syllables (Gherdëina)

a. Mauro uel BON a Maria.
 Mauro want-3SG good to Maria
 ‘Mauro LOVES Maria.’

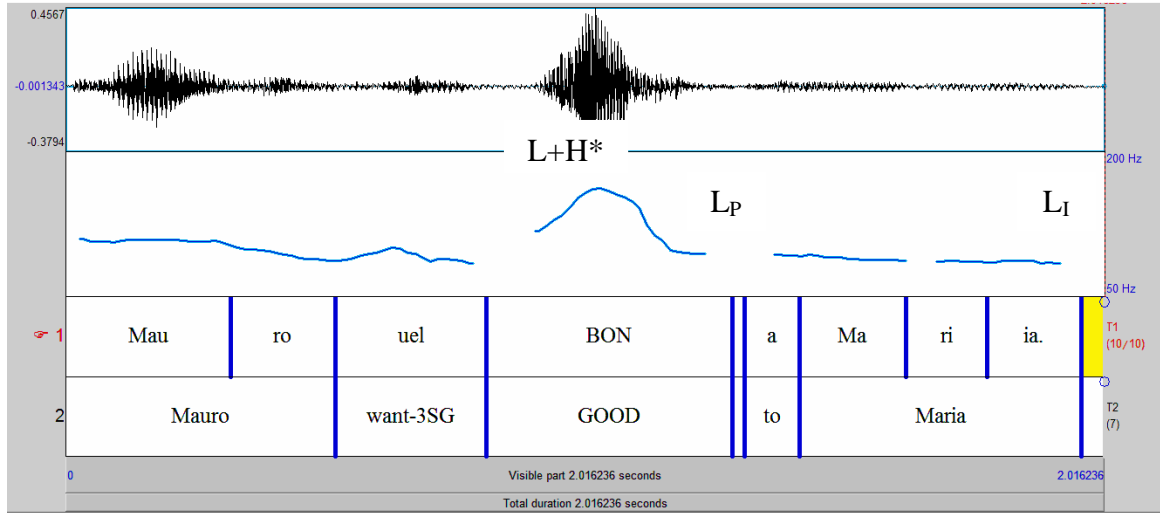
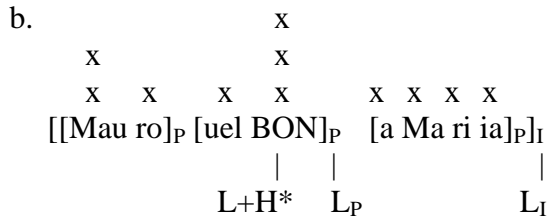


Figure 8.8: Gherdëina 6 Mauro uel BON a Maria.

At first sight, one might be led to analyse this peak in terms of an H* nuclear pitch accent. However, what I would like to suggest is that the peak-shaped pitch contour in the region of the nuclear stressed syllable is rather due to the fact that narrow focus involves the insertion of an L_P tone directly after the phonological word containing the main stressed syllable (cf. section 1.3.3.2 for similar proposals by Hayes & Lahiri (1991) on Bengali and Frascarelli (1997) for Italian). The crucial evidence for this L_P tone comes from the observation that after the maximum on the main stressed syllable, F₀ falls down quite rapidly attaining the speaker's baseline already within the phonological phrase boundary rather than falling gradually and in a shallow way towards L_I. In this way, the sequence of the L+H* rise and L_P creates a peak, which occurs especially when main stress falls on the last syllable of the phonological phrase. When main stress falls on the penultimate syllable (cf. figures 8.5–8.6), in contrast, we may observe the rise and not the peak, given that in this case, the final unstressed syllable of the phonological phrase can provide enough temporal space for the pitch contour to fall down towards L_P. In sum, the nuclear pitch

accent in Gherdëina early narrow focus statements can be generally characterised in terms of an L+H* nuclear pitch accent followed by an L_P tone and an L_I tone.

| The narrow focus statement tune | | | |
|---------------------------------|----------------|----------------------|-------------------------------|
| Variety | Focus position | Nuclear pitch accent | Edge tones |
| Gherdëina | early | L+H* | L _P L _I |

Table 8.5: The early narrow focus statement tune in Gherdëina

Gherdëina late narrow focus statements

In Gherdëina late narrow focus statements, we observe the same pattern as in early narrow focus statements: if main stress falls on an open penultimate syllable, we find the rise (8, figure 8.9), whereas main stress on a final syllable – either open (9a, figure 8.10) or closed (9b, figure 8.11) involves a peak.

(8) Penultimate stress on open syllables (Gherdëina)

a. Mauro uel bon a MaRIa.
 Mauro want-3SG good to Maria
 ‘Mauro loves MARIA.’

a'.
 X X X X X X X X
 X X X X X X X X
 [[Mau ro]_P [uel bon a]_P [Ma RI ia]_P]_I
 | |
 L+H* L_P L_I

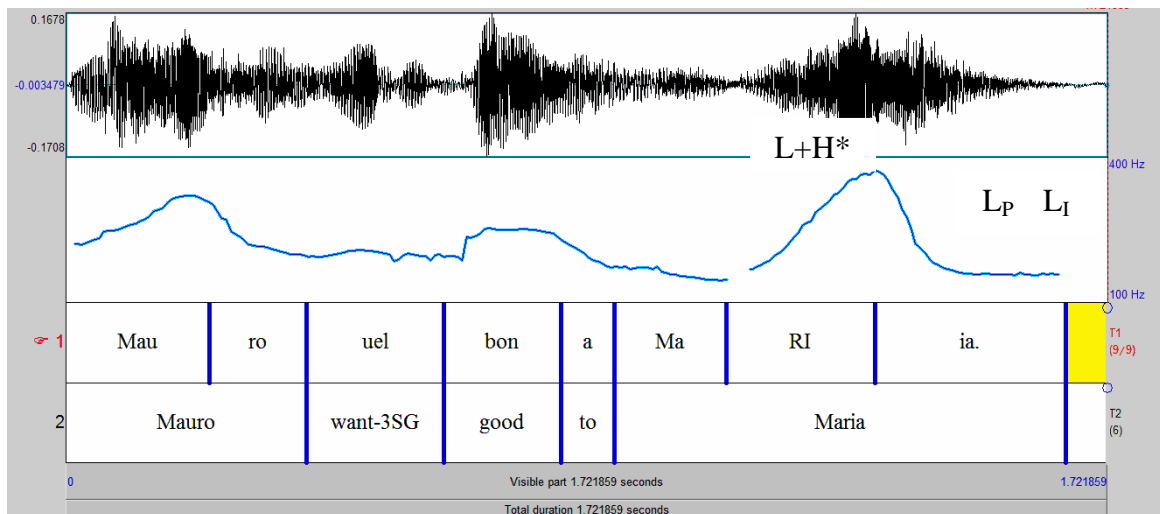


Figure 8.9: Gherdëina 2 Mauro uel bon a MaRIa.

(9) a. Mara va a lauRÉ. (Gherděina)

Mara go-3SG to work
 ‘Mara goes to WORK.’

a'.
 x x x x x x
 x x x x x x
 [[Ma ra va]_P [a lau RÉ]_P]_I
 | | |
 L+H* L_P L_I

b. Mara maia n MËIL.

Mara eat-3SG an apple
 ‘Mara eats an APPLE.’

b'.
 x x x
 x x x x x
 [[Ma ra]_P [mai ia n]_P [MËIL]_P]_I
 | | |
 L+H* L_P L_I

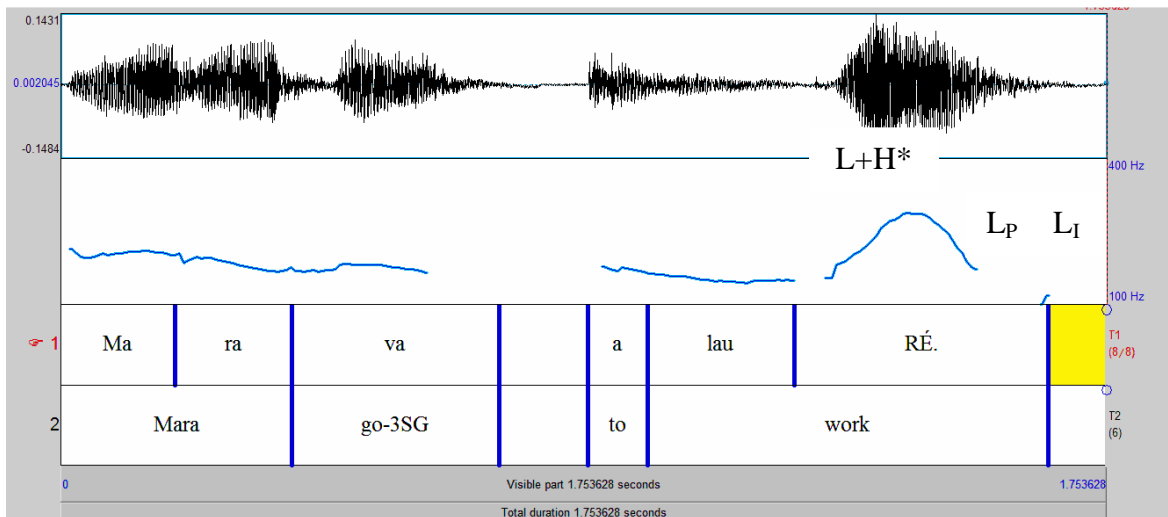


Figure 8.10: Gherděina 2 Mara va a lauRÉ.

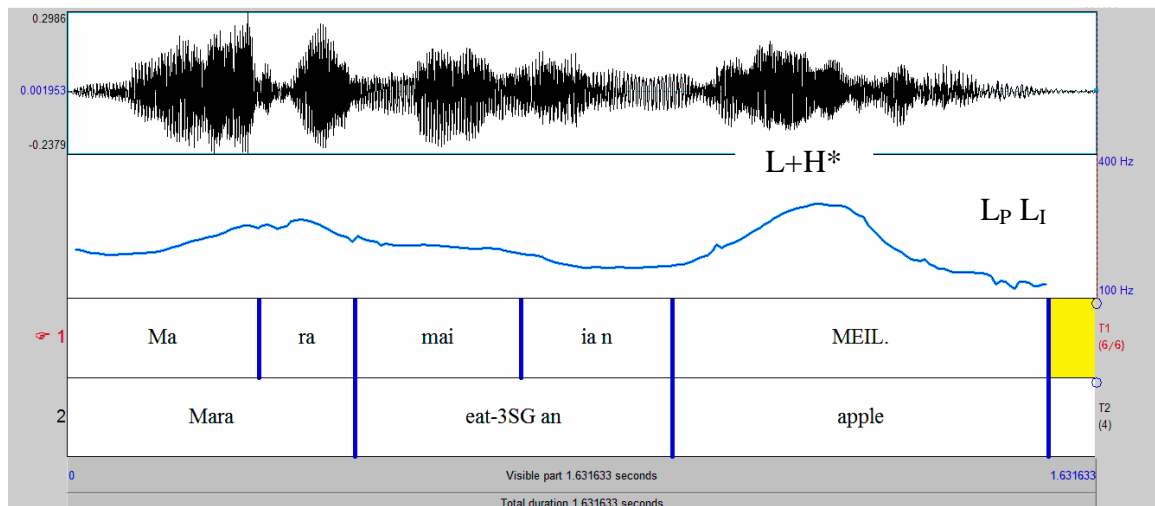


Figure 8.11: Gherděina 1 Mara maia n MËIL.

Here, the peak-shaped contour is due to the fact that the main stressed syllable is in utterance-final position, a ‘final clash’ context: F_0 rises through the main stressed syllable as expected under an $L+H^*$ nuclear pitch accent. However, given that the narrow focus constituent must be followed by an L_P , and, in addition, is situated in utterance-final position, F_0 falls again rapidly to attain the low target at the right edge of the phonological phrase. Given that this $L H L$ movement happens within the boundaries of one single syllable, we get a compressed pitch contour giving rise to a peak instead of the characteristic rise. As discussed in section 7.2.3.1, languages have been found to use two main adjustment strategies in cases of tonal crowding like this: tonal truncation or tonal compression. Gherdëina chooses tonal compression enabling in this way the realisation of all tones.

In sum, on a par with early narrow focus statements also late narrow focus statements exhibit an $L+H^* L_P L_I$ tune. Hence, although early and narrow focus statements differ in the anchoring site of the nuclear pitch accent and in the probability of final clash contexts, the tonal specifications of the tune do not differ depending on the position of the focused constituent in the utterance.

| The narrow focus statement tune | | | |
|--|-----------------------|-----------------------------|-------------------|
| Variety | Focus position | Nuclear pitch accent | Edge tones |
| Gherdëina | late | $L+H^*$ | $L_P L_I$ |

Table 8.6: The late narrow focus statement tune in Gherdëina

We can also formulate the following phrasing rule to account for the effects of focus on phonological phrasing in Gherdëina narrow focus statements:

- (10) Phrasing rule for narrow focus
 - a. Insert a phonological phrase boundary after a focused constituent.
 - b. Associate an L_P tone to this phonological phrase boundary.

Note that rule (10a) corresponds to Hayes & Lahiri's (1991:89) proposal regarding Bengali. It is also similar to what Frascarelli (1997) and Nespor & Guasti (2002) propose for Italian. However, in contrast to the latter accounts of Italian, which assume the insertion of an intonational phrase boundary to the right of the narrow focus constituent, the present data do not provide evidence for such an assumption.

8.2.2.3 Badiot

Badiot narrow focus statements exhibit the same $L+H^* L_P L_I$ tune as Gherdëina and also involve the phrasing rule for narrow focus stated in (10) above for Gherdëina. There is no difference in tune between early and late narrow focus: in both cases, we observe the rise when main stress falls on a penultimate syllable (11, figure 8.12; 13a, figure 8.14) and the peak when main stress falls on a final syllable (12, figure 8.13; 14, figures 8.16–8.17).

Badiot early narrow focus statements

(11) Penultimate stress (Badiot)

a. MAra va a lauré.
 Mara go-3SG to work
 'MARA goes to work.'

b. x
 x
 x x x x x
 [[MA ra]_P [va a lau ré]_P]_I
 | | |
 L+H* L_P L_I

(12) Final stress (Badiot)

a. Mauro ti ô BUN a Maria.
 Mauto DAT want-3SG good to Maria
 'Mauro LOVES Maria.'

b. x
 x x
 x x x x x x x x x
 [[Mau ro]_P [ti ô BUN]_P [a Ma ri ia]_P]_I
 | | |
 L+H* L_P L_I

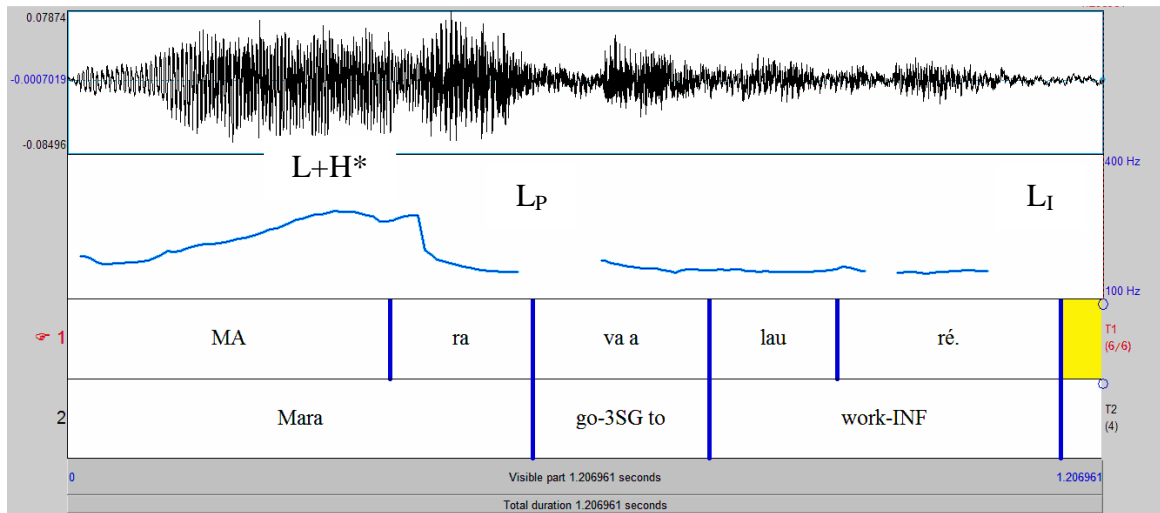


Figure 8.12: Badiot 2 MAra va a lauré.

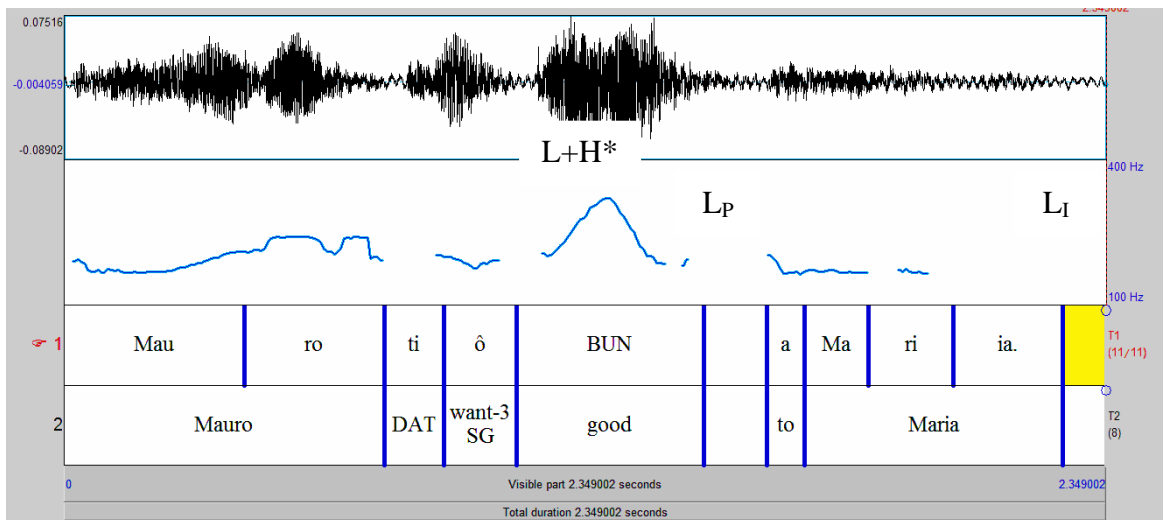


Figure 8.13: Badiot 2 Mauro ti ô BUN a Maria.

| The narrow focus statement tune | | | |
|---------------------------------|----------------|----------------------|-------------------------------|
| Variety | Focus position | Nuclear pitch accent | Edge tones |
| Badiot | early | L+H* | L _p L _l |

Table 8.7: The early narrow focus statement tune in Badiot

Badiot late narrow focus statements

(13) Penultimate stress on open (a) and closed (b) syllables

(Badiot)

a. Maria porta la marèna a NIna.
 Maria bring-3SG the lunch to Nina
 ‘Maria brings the lunch to Nina.’

a'.
 X
 X X X X X X X X X X X
 [[Ma ri ia]_P [por ta la ma rën na(a)]_P [NI na]_P]_I
 | |
 L+H* L_P L_I

b. Mara mangia n maRILe.
 Mara eat-3SG an apricot
 ‘Mara eats an APRICOT.’

b'.
 X X X
 X X X X X X X
 [[Ma ra]_P [man gia n]_P [ma RIL le]_P]_I
 | |
 L+H* L_P L_I

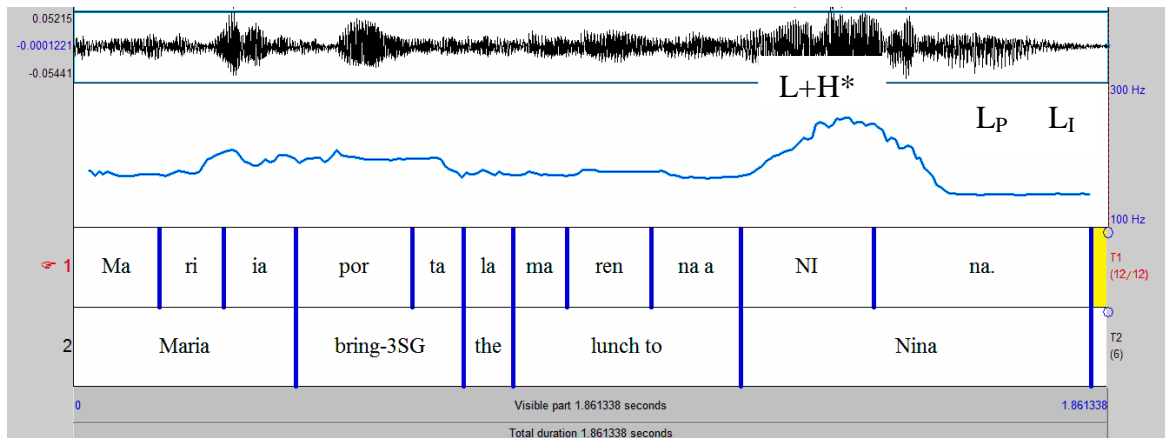


Figure 8.14: Badiot 5 Maria porta la marena a NIna.

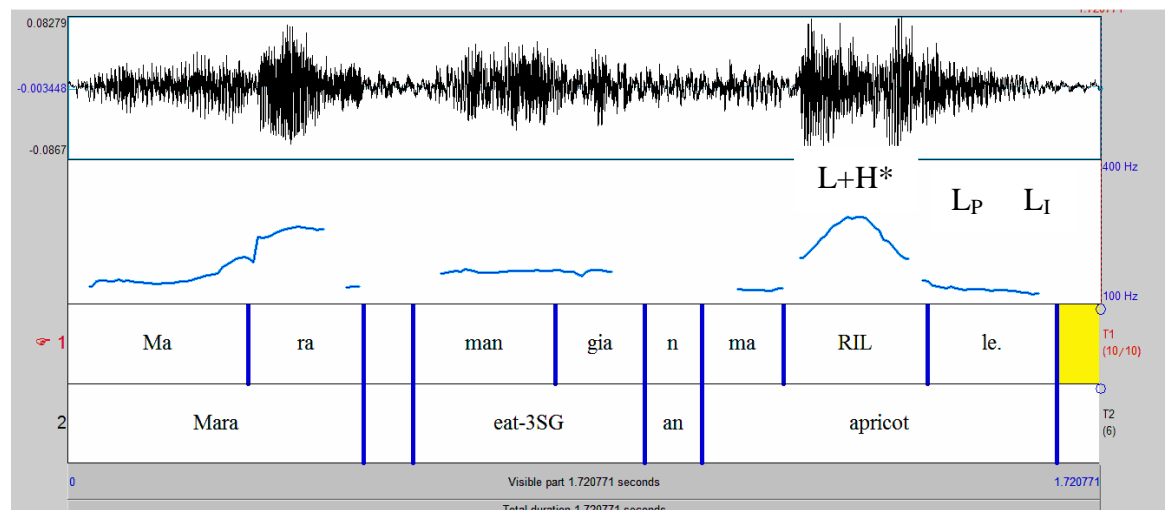
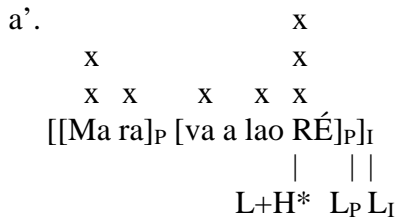


Figure 8.15: Badiot 10 Mara mangia n maRILe.

(14) Final stress on open (a) and closed (b) syllables

(Badiot)

- a. Mara va a laoRÉ.
 Mara go-3SG to work
 ‘Mara goes to WORK.’



- b. Mara mangia maRILN.
 Mara eat-3SG apricots
 ‘Mara eats APRICOTS.’

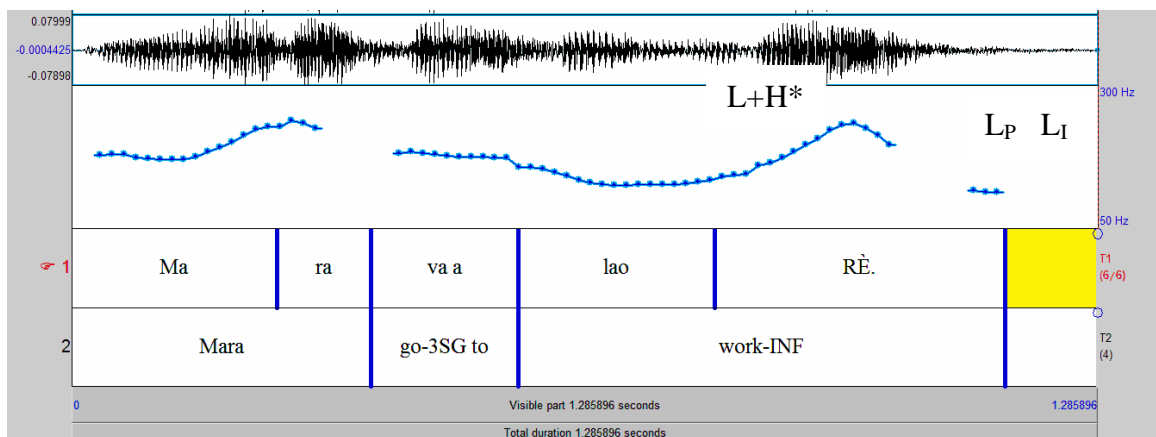
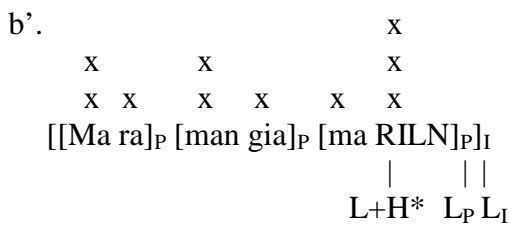


Figure 8.16: Badiot 3 Mara va a laoRÉ.

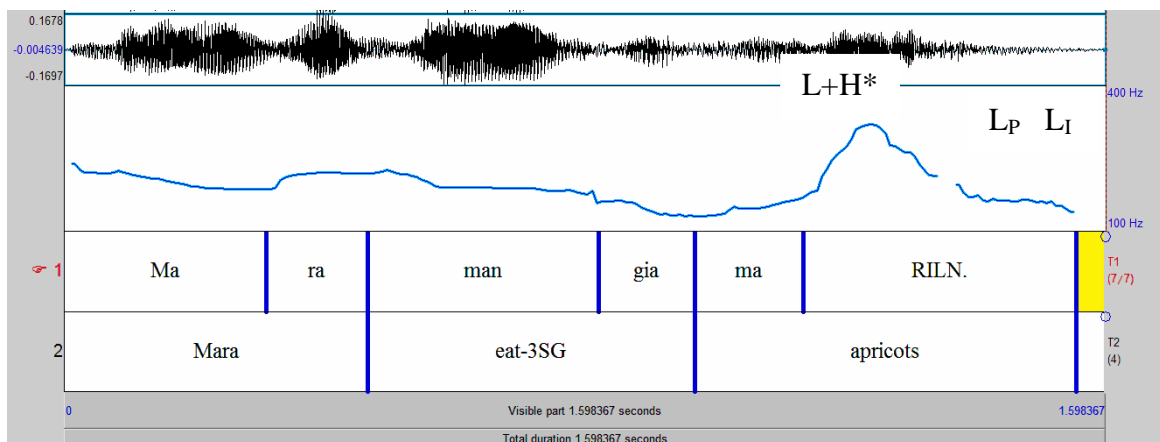


Figure 8.17: Badiot 4 Mara mangia maRILN.

There is evidence suggesting that the syllable type (open vs. closed) matters for how tones are realised: first, while in cases of penultimate stress on open syllables, we always observe the rise, closed syllables often involve a peak, i.e. the compressed pitch contour (13b, figure 8.15), although there is a following unstressed syllable which should provide enough space for all tones to be realised. Moreover, in cases of final stress, the peak is attained earlier in closed syllables (figure 8.17) than in open ones (figure 8.16). I leave a closer investigation of this phenomenon to further research.

| | The narrow focus statement tune | | |
|---------|---------------------------------|----------------------|-------------------------------|
| Variety | Focus position | Nuclear pitch accent | Edge tones |
| Badiot | late | L+H* | L _P L _I |

Table 8.8: The late narrow focus statement tune in Badiot

8.2.2.4 Fascian

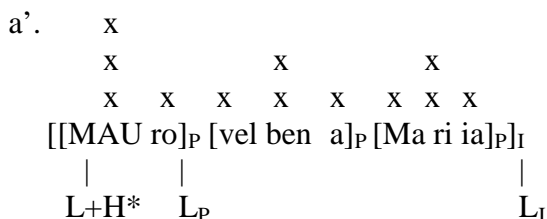
Fascian narrow focus statements share the L+H* L_P L_I tune and rule (10) regarding the insertion of a phonological phrase boundary after the focus constituent.

Fascian early narrow focus statements

Unlike in Gherdëina and Badiot, Fascian early narrow focus statements always show the rise, even when main stress falls on the final syllable (16, figure 8.19).

(15) Penultimate stress (Fascian)

- a. MAUro vel ben a Maria.
 Mauro want-3SG well to Maria.
 ‘MAURO loves Maria.’



(16) Final stress

(Fascian)

a. MagnON formai a Moena.
 eat-1PL cheese in Moena
 ‘We are EATING cheese in Moena.’
 a’.

| | | | | | | | | | |
|--|-------------------------|---|----------------------------------|---|----------------|---|---|----------------|---|
| | X | | | | | | | | |
| | X | | | | | | | | |
| | X | X | | X | X | X | X | X | X |
| | [[Magn ON] _P | | [for mai a Mo e na] _P | | | | |] _I | |
| | | | | | | | | | |
| | L+H* | | L _P | | L _I | | | | |

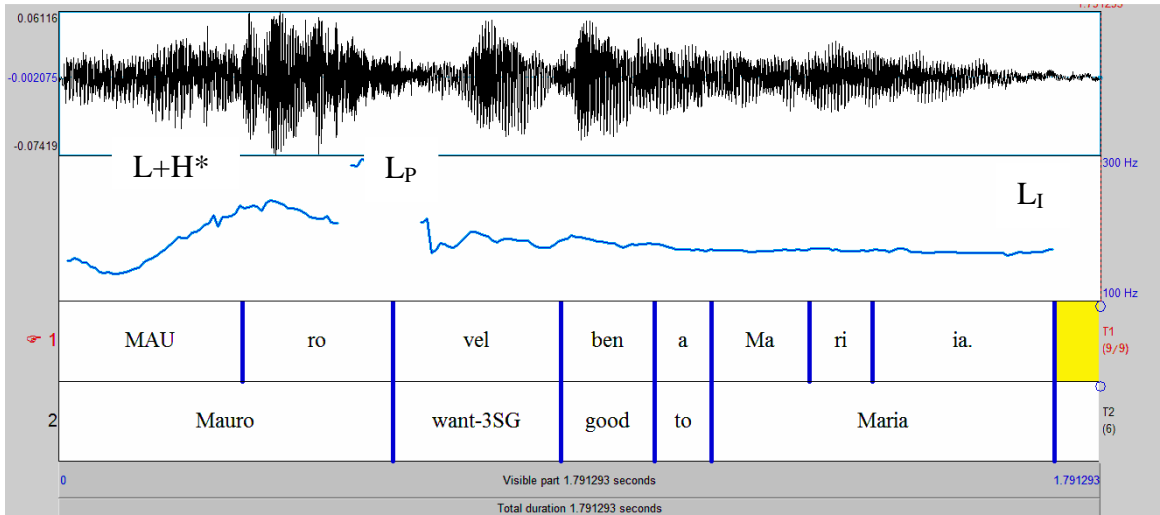


Figure 8.18: Fascian 2 Brach MAUro vel ben a Maria.

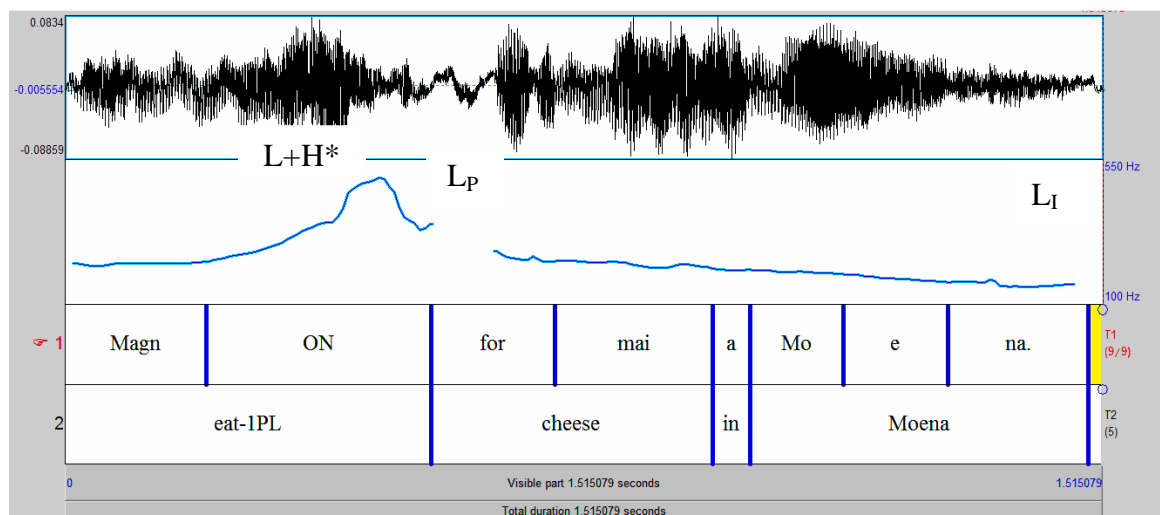


Figure 8.19: Fascian 3 MagnON formai a Moena.

| The narrow focus statement tune | | | |
|---------------------------------|----------------|----------------------|-------------------------------|
| Variety | Focus position | Nuclear pitch accent | Edge tones |
| Fascian | early | L+H* | L _P L _I |

Table 8.9: The early narrow focus statement tune in Fascian

Fascian late narrow focus statements

Fascian late narrow focus statements, in contrast, show variation between the rise and the peak: penultimate stress on an open syllable always involves the rise (17a, figure 8.20), whereas with closed syllables, we find a rise (17b, figure 8.21) or a peak (17c, figure 8.22).

(17) Penultimate stress on open (a) and closed (b–c) syllables (Fascian)

a. Mauro ge vel ben a MaRIa.
 Mauro DAT want-3SG well to Maria
 ‘Mauro loves MARIA.’

a'.
 x x x x x x x x x x
 [[Mau ro]_P [ge vel ben a]_P [Ma RI ia]_P]_I
 | |
 L+H* L_P L_I

b. Mara magna la poLENta.
 Mara eat-3SG the polenta
 ‘Mara eats POLENTA.’

b'.
 x x x x x x x x
 x x x x x x x x
 [[Ma ra]_P [magn a la]_P [po LEN ta]_P]_I
 | |
 L+H* L_P L_I

c. Mara magna poLENta.
 Mara eat-3SG polenta
 ‘Mara eats POLENTA.’

c'.
 x x x x x x x x
 x x x x x x x x
 [[Ma ra]_P [magn a]_P [po LEN ta]_P]_I
 | |
 L+H* L_P L_I

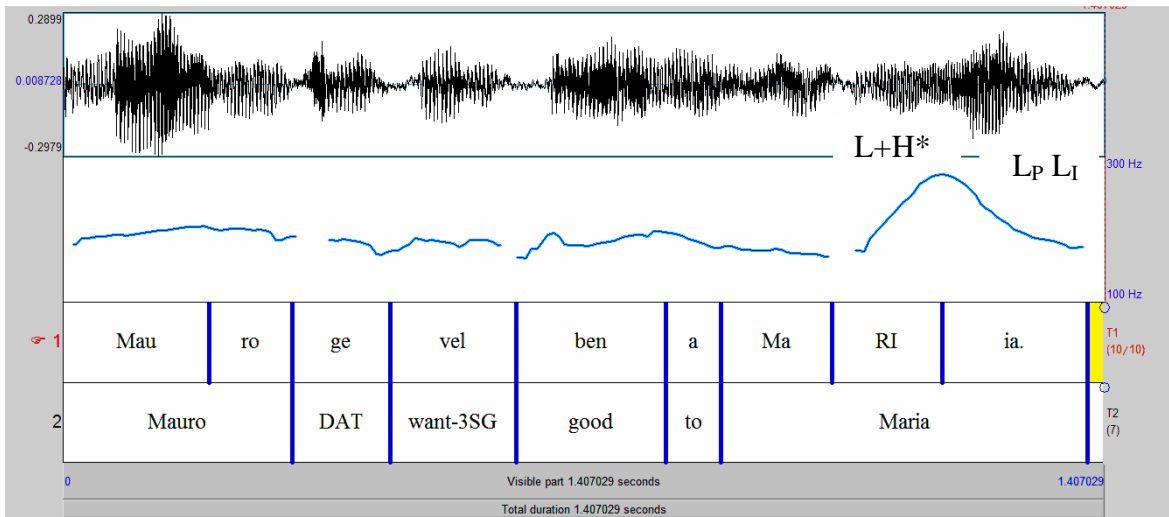


Figure 8.20: Fascian 1 Caset Mauro ge vel ben a MaRIa.

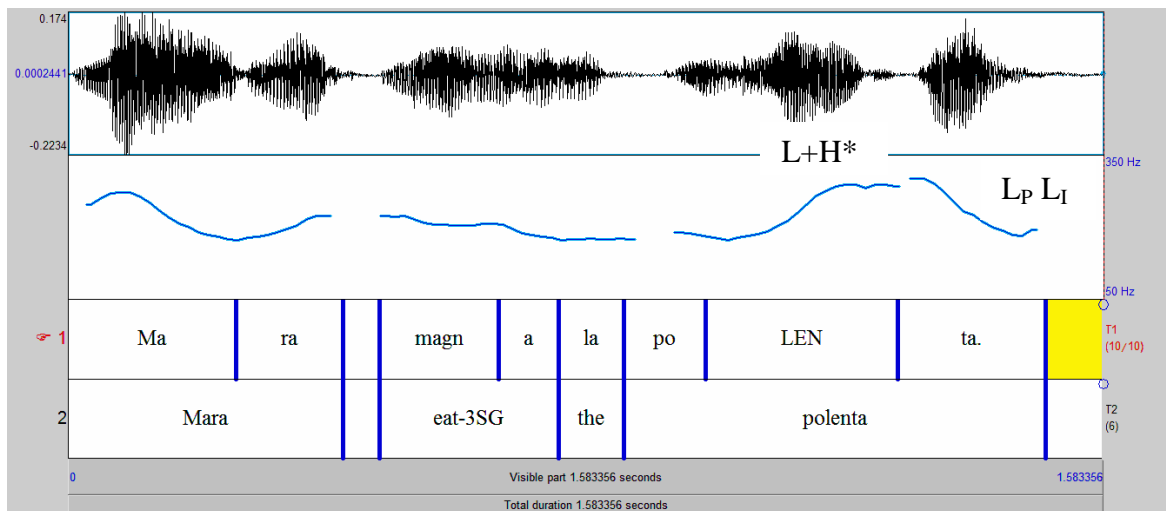


Figure 8.21: Fascian 5 Mara magna la poLENta.

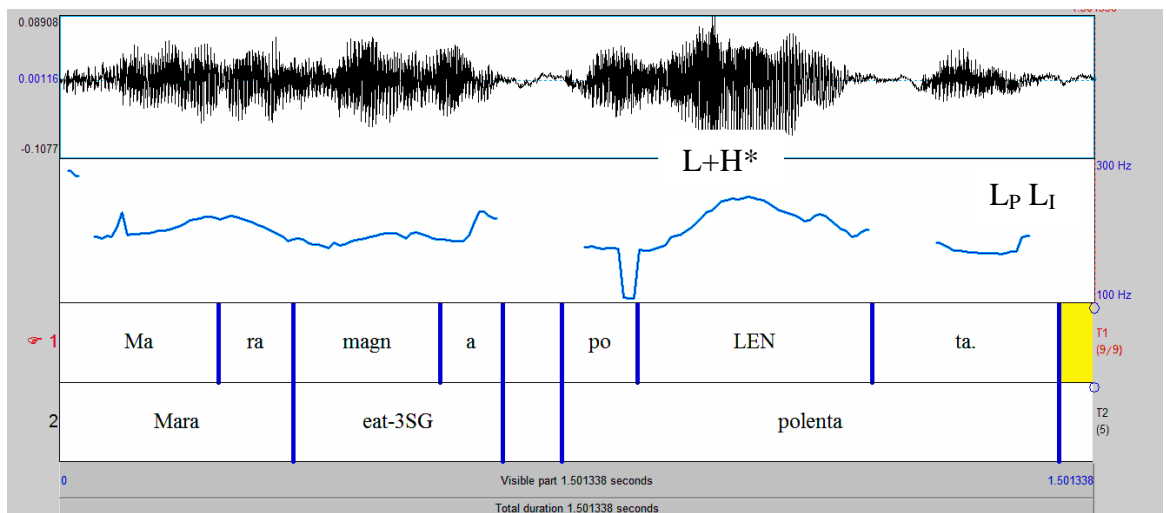


Figure 8.22: Fascian 7 Mara magna poLENta.

The variation between the rise (figure 8.21) and the peak (8.22) in contexts of penultimate stress on a closed syllable might be related to dialectal variation: while speakers of the Brach subvariety of Fascian (except for one speaker, F4, who exhibits the peak) show the rise, speakers of Cazet and Moenat exhibit the peak.



| Shape | Subvariety of Fascian | Informants ¹⁹ |
|---|--------------------------|------------------------------|
| rise  | Brach | F2, F5, F9, F11 |
| peak  | Brach Cazet Moenat | F4 F1, F6 F7, F10, F12 |

Table 8.10: Variation in the implementation of the L+H* L_P L_I tune in Fascian late narrow focus statements with main stress on closed penultimate syllables

Moreover, we also find variation in late narrow focus statements involving main stress on the final syllable: if the main stressed syllable is open (18, figure 8.23), we observe a peak, which, in contrast to what we have seen before in Gherdëina and Badiot, is not due tonal compression on the utterance-final syllable, but can rather be interpreted as a case of tonal repulsion. The rise starts out already early in the unstressed syllable preceding the nuclear stressed one suggesting that the leading tone of the L+H* nuclear pitch accent is aligned earlier than in similar Gherdëina or Badiot cases (cf. figures 8.10, 8.16).

- (18) Final stress on open syllables (Fascian)
- a. L' = aede magnÀ.
it = have-2PL eaten
'You have EATEN it.'
- b.
- | | | | | |
|--|---|---|------------------------------------|---|
| | | | | x |
| | x | | | x |
| x | x | x | x | x |
| [[L' a e de] _P [magn À] _P] _I | | | | |
| | | | | |
| | | | L+H* L _P L _I | |

¹⁹ The corpus does not contain data for this context for speaker F8 (Cazet).

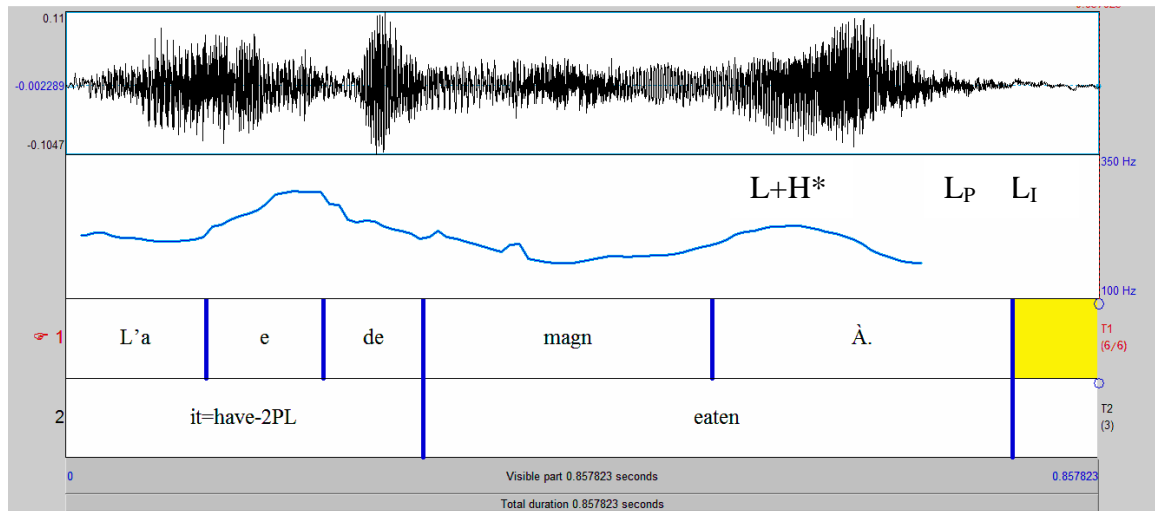


Figure 8.23: Fascian 3 L'aede magnÀ.

If the final syllable is closed, we either observe the rise (19a, figure 8.24) or – in some rare cases – the peak (19b, figure 8.25).

(19) Final stress on closed syllables

(Fascian)

a. Mara va a luRAR.

Mara go-3SG to work
 'Mara is gone to WORK.'

a'.
 X X X X X X
 X X X X X X
 [[Ma ra]_P [va a]_P [lu RAR]_P]_I
 | |
 L+H* L_P L_I

b. Mara é jit a laoRAR.

Mara is gone to work
 'Mara is gone to WORK.'

b'.
 X X X X X X
 X X X X X X
 [[Ma ra]_P [é jit a]_P [lao RAR]_P]_I
 | | |
 L+H*L_P L_I

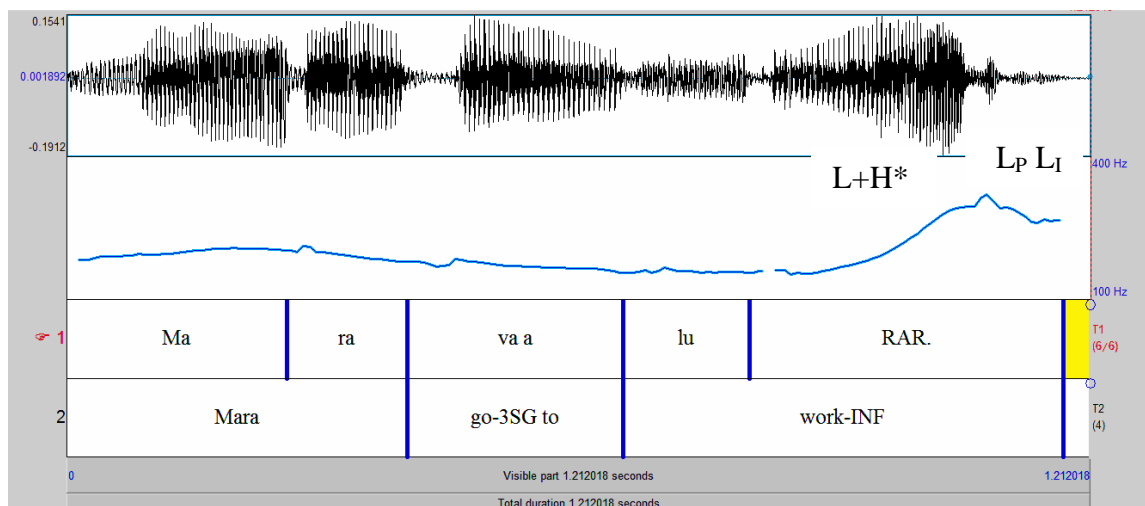


Figure 8.24: Fascian 4 Brach Mara va a luRAR.

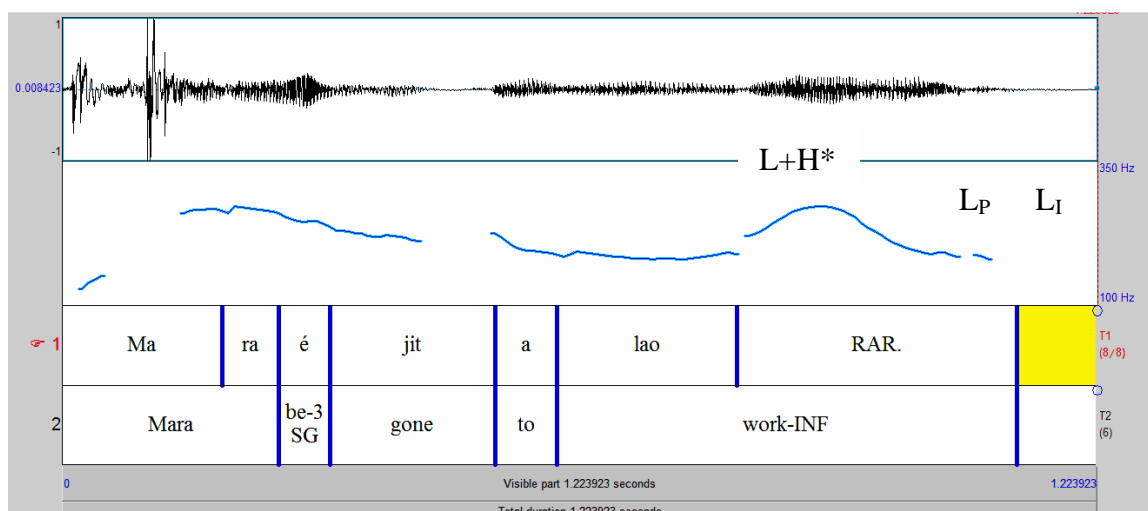


Figure 8.25: Fascian 7 Moenat Mara é jit a laoRAR.

The variation between the rise and the peak again seems to depend on the speaker, but – unlike in cases of penultimate stress in closed syllables – does not seem to be subject to dialectal variation.



| Shape | | Subvariety of Fascian | Informants ²⁰ |
|-------|---|--------------------------|-----------------------------------|
| rise |  | Cazet Brach Moenat | F6 F3, F4, F5, F11 F10, F12 |
| peak |  | Brach Moenat | F2 F7 |

Table 8.11: Variation in the implementation of the L+H* L_p L_i tune in Fascian late narrow focus statements with main stress on closed final syllables

²⁰ My corpus does not include narrow focus statements with main stress on a final closed syllable for informants F8 and F9. The data for F1 are not straightforward.

The results in table 8.12 show that in final clash contexts, tonal compression is much less frequent in Fascian than in Gherdëina and Badiot. Instead, Fascian shows another adjustment strategy in cases of tonal crowding, tonal repulsion (cf. figure 8.23).

| The narrow focus statement tune | | | |
|---------------------------------|----------------|----------------------|-------------------------------|
| Variety | Focus position | Nuclear pitch accent | Edge tones |
| Fascian | late | L+H* | L _P L _I |

Table 8.12: The late narrow focus statement tune in Fascian

8.2.2.5 Nònes

Nònes narrow focus statements share the L+H* L_P L_I tune found in the previous varieties as well as phrasing rule (10). In Nònes, the variation between the rise and the peak is more pronounced than in the previous varieties.

Nònes early narrow focus statements

In Nònes early narrow focus statements, variation between the rise and the peak is observed even in cases of penultimate stress on open syllables (20, figures 8.26–8.27), the context in which the previous three varieties always showed the rise.

(20) Penultimate stress on open syllables (Nònes)

- a. L MAUro l gj vuel ben a la Maria.
the Mauro he DAT want-3SG good to the Maria
‘MAURO loves Maria.’

a'. x
 x
 x x x x x x x x x x x x
[[L MAU ro]_P [l gj vuel ben a la Ma ri ia]_P]_I
 | | |
 L+H* L_P L_I

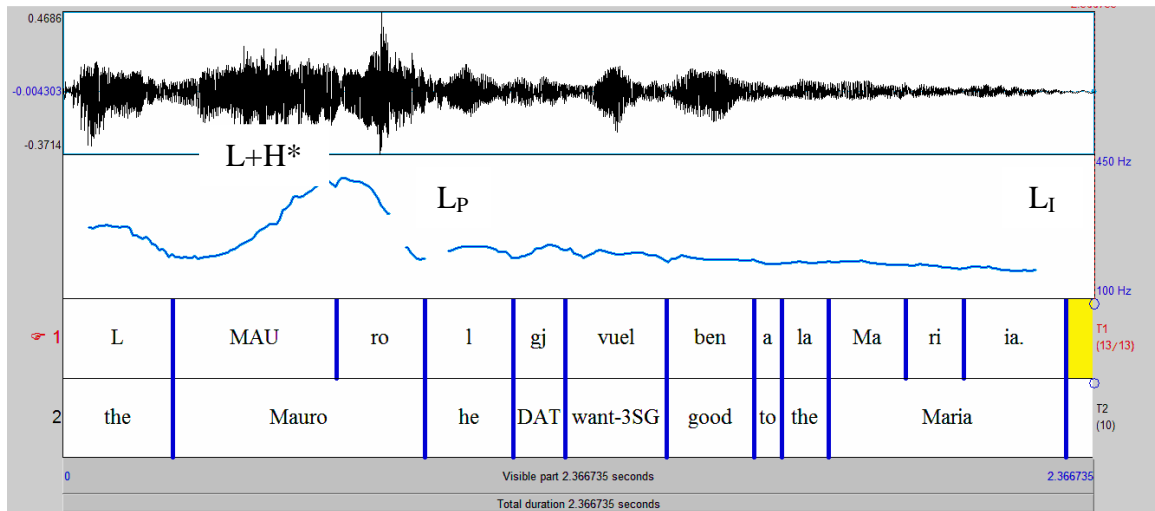


Figure 8.26: Nònes 7 L MAUro l gj vuel ben a la Maria.

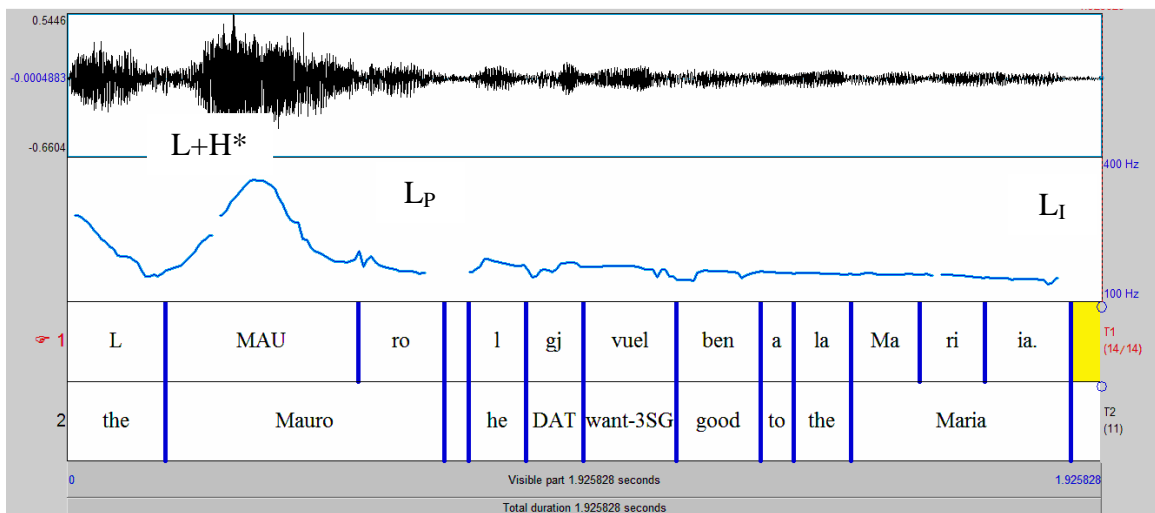


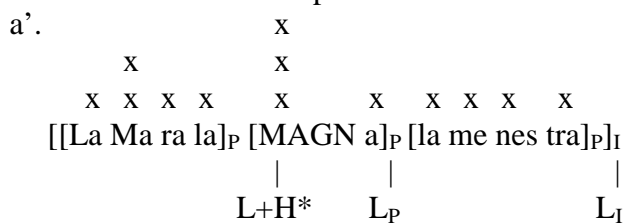
Figure 8.27: Nònes 6 L MAUro l gj vuel ben a la Maria.

A more detailed investigation of this variation can be found in the appendix.

Variation between the rise (figure 8.26) and the peak (figure 8.27) is observed also in cases of penultimate stress on closed syllables.

(21) Penultimate stress on closed syllables (Nònes)

- a. La Mara la MAGNa la menestra.
 the Mara she eat-3SG the soup
 ‘Mara EATS the soup.’



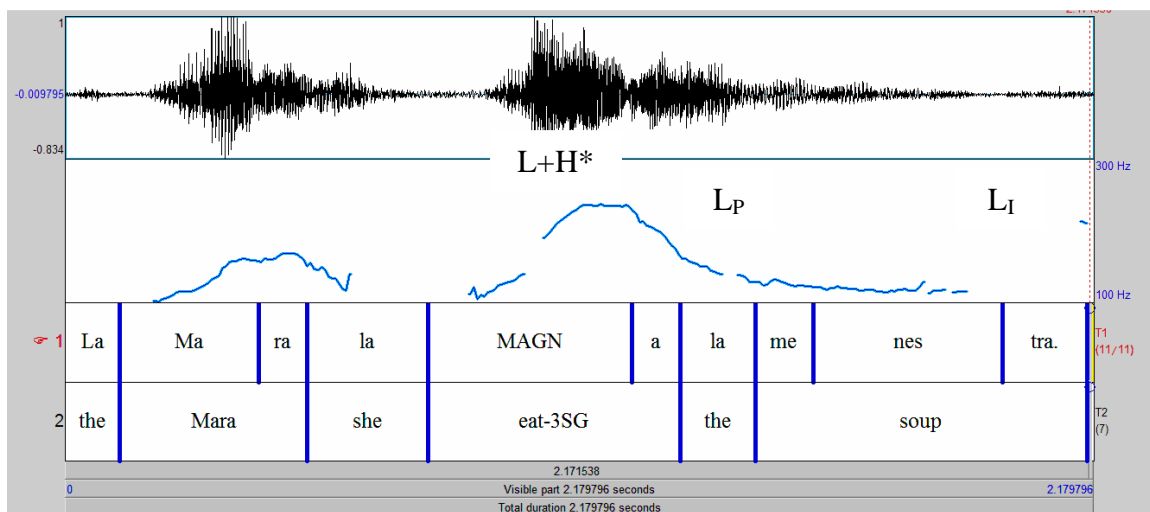


Figure 8.28: Nònes 1 La Mara la MAGNa la minestra.

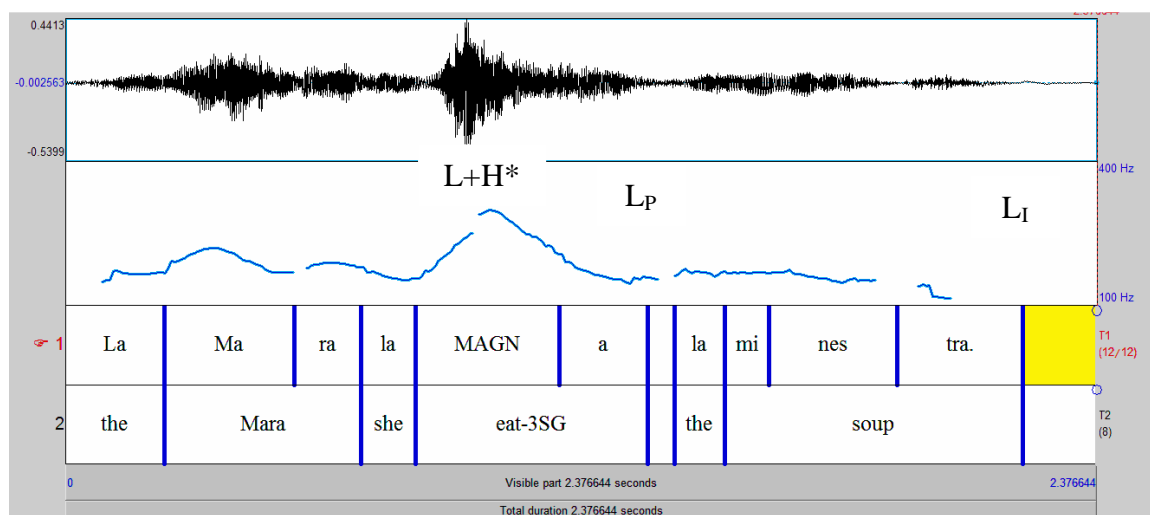


Figure 8.29: Nònes 6 La Mara la MAGNa la minestra.

My corpus contains up to two early narrow focus statements with main stress on a closed penultimate syllable per speaker. Table 8.13 shows the tonal implementation per speaker in these two Nònes early narrow focus statements.

| | N1 | N2 ²¹ | N3 | N4 | N5 | N6 | N7 | N8 |
|-------|----|------------------|----|----|----|----|----|----|
| MAGNa | | | | | | | | |
| MANda | | | | | | | | |

Table 8.13: The variation in Nònes early narrow focus statements with main stress on closed penultimate syllables

²¹ Instead of *MANda*, the speaker uses the verb form *PORTa* – which represents the same context: main stress on a closed penultimate syllable.

A given speaker either realises early narrow focus statements with main stress on closed penultimate syllables with a rise (N1, N2, N7) or with a peak (N6, N8). Note that the tonal implementation in table 8.13 (penultimate stress on closed syllables) coincides at least in part with what we have found regarding penultimate stress on open syllables (cf. Appendix 3): speakers N2 and N7 realise narrow focus always with a rise. This finding suggests that the variation observed here between the rise and the peak is speaker-dependent.

Let us now turn to final stress in early narrow focus statements.²² If the final syllable is open, we find a peak. This is expected given that final stress involves a ‘final clash’ context in which the tones of the L+H* and the L_P are implemented in close proximity.

(22) Final stress on open syllables (Nònes)

a. La Maria la manda l forMAI a la Nina.
 the Maria she send-3SG the cheese to the Nina
 ‘Maria sends Nina the CHEESE.’
 a’.

X
 X X X X X X X X X X X X X
 [[La Ma ri ia]_P [la man da l]_P [for MAI]_P [a la Ni na]_P]_I
 L+H* L_P L_I

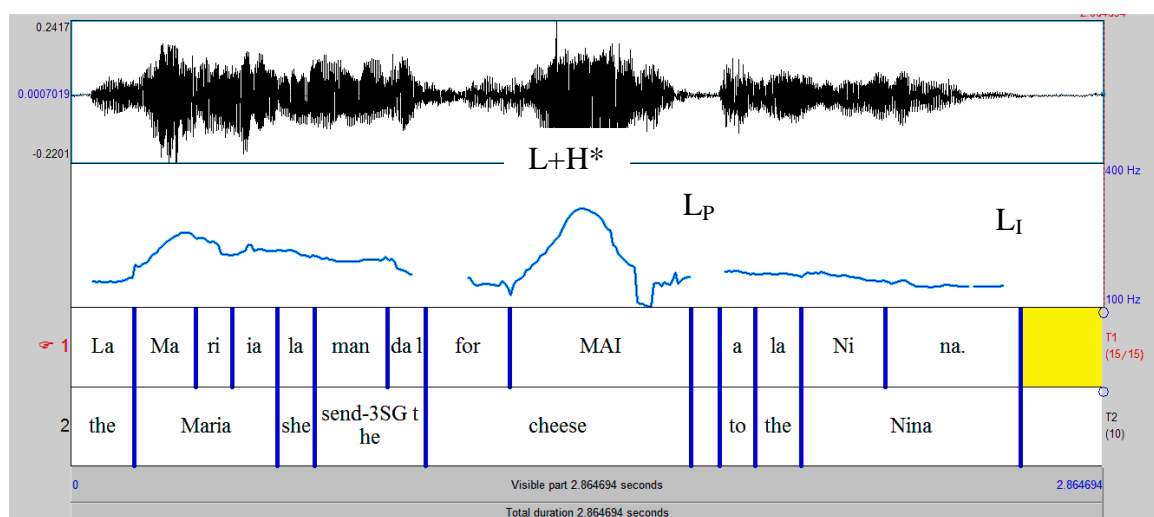


Figure 8.30: Nònes 6 La Maria la manda l forMAI a la Nina.

²² The corpus contains only very few instances of early narrow focus statements with final stress on the first constituent. I will analyse cases of final stress on the second constituent instead. I shall draw the distinction along the following lines: early focus is focus on a constituent which is not the last constituent of the statement whereas late narrow focus is focus on the last constituent of the statement.

As regards early narrow focus statements with final stress on closed syllables, the corpus contains only three items, all of which show a peak.

(23) Final stress on closed syllables (Nònes)

a. NIN da Romen.
 come-1PL from Romeno
 ‘We are COMING from Romeno.’

a'. x
 x x
 x x x x
 [[NIN]_P [da Ro men]_P]_I
 | | |
 L+H* L_P L_I

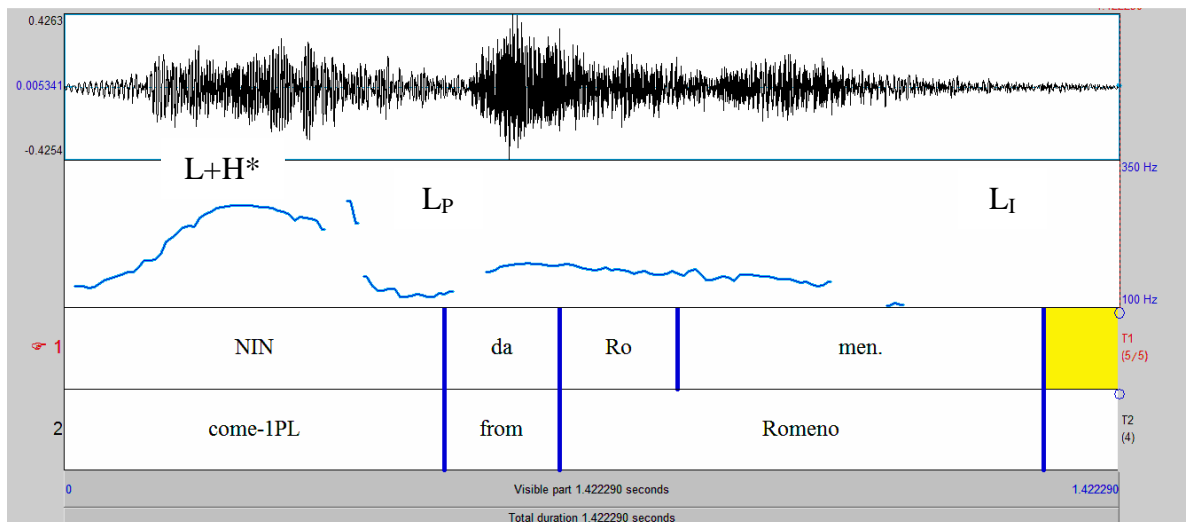


Figure 8.31: Nònes 5 NIN da Romen.

If we consider early narrow focus statements with final stress on closed syllables with the focus constituent coming later in the statement (as before for final stress on open syllables), we observe again variation between the rise (figure 8.32) and the peak (8.33).

(24) Final stress on closed syllables (focus constituent later in the statement) (Nònes)

a. L Mauro l gj vuel BEN a la Maria.
 the Mauro he DAT want-3SG good to the Maria
 ‘Mauro LOVES Maria.’

a'. x
 x
 x x x x x x x x x x x
 [[L Mau ro]_P [l gj vuel BEN]_P [a la Ma ri ia]_P]_I
 | | |
 L+H* L_P L_I

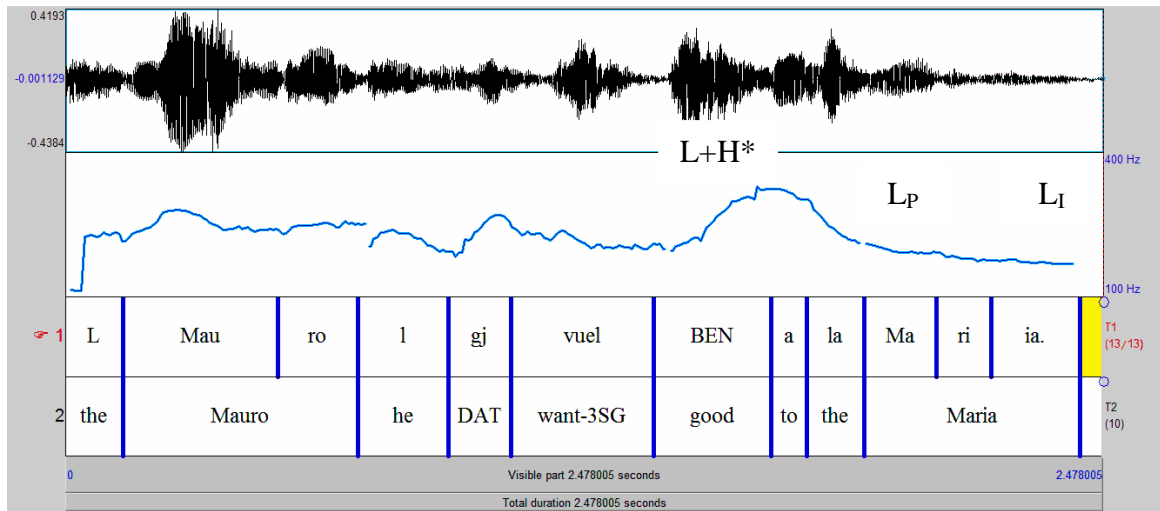


Figure 8.32: Nònes 7 L Mauro l gj vuel BEN a la Maria.

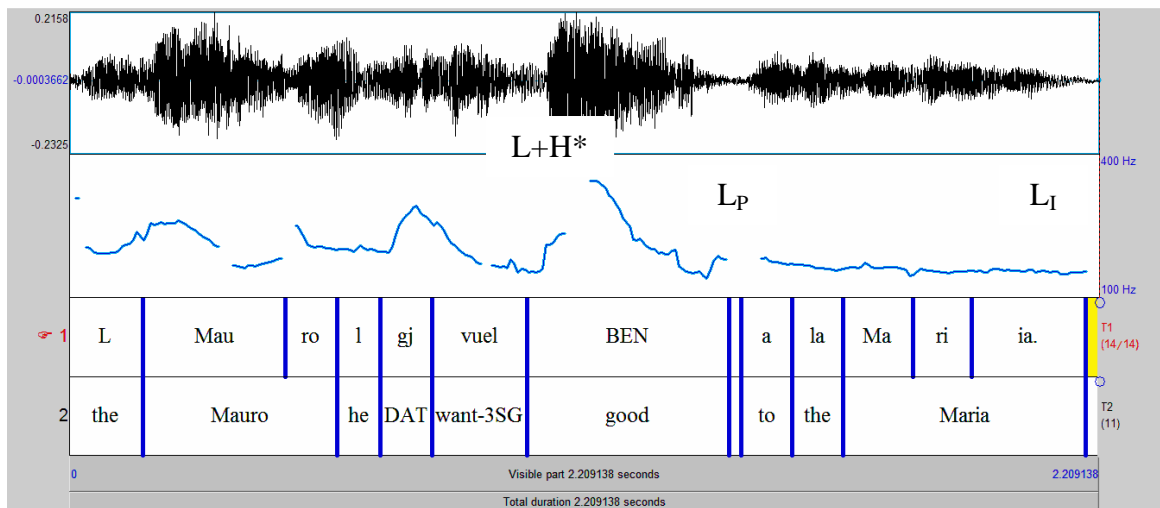


Figure 8.33: Nònes 6 L Mauro l gj vuel BEN a la Maria.

Table 8.14 shows the distribution of the rise and the peak in early narrow focus statements with main stress on final closed syllables among the speakers of Nònes interviewed.

| | N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 |
|-----|----|----|----|----|----|----|----|----|
| BEN | | | | | | | | |

Table 8.14: The variation in Nònes early narrow focus statements with main stress on closed final syllables

The variation as to tonal implementation in table 8.14 coincides at least in part with what we have seen before for penultimate stress: for speakers N2 and N7, for instance, we always find the rise whereas speakers N6 and N8, always show the peak. This provides

further evidence for the assumption that there is free variation between two different patterns.

| The narrow focus statement tune | | | |
|---------------------------------|----------------|----------------------|-------------------------------|
| Variety | Focus position | Nuclear pitch accent | Edge tones |
| Nònes | early | L+H* | L _P L _I |

Table 8.15: The early narrow focus statement tune in Nònes

Nònes late narrow focus statements

Nònes late narrow focus statements with penultimate stress show variation between the rise (25a, figure 8.34) and the peak (25b, figure 8.35).

(25) Penultimate stress on open syllables (Nònes)

- a. L Mauro l gj vuel ben a la MaRIa.
 the Mauro he DAT want-3SG well to the Maria
 ‘Mauro loves MARIA.’

a'.
 x x x x x x x x x x x x
 [L Mau ro l]_P [gj vuel ben a la]_P [Ma RI ia]_P_I
 | |
 L+H* L_P L_I

- b. La gj manda l formai a la NI na.
 she DAT send-3SG the cheese to the Nina
 ‘She sends the cheese to NINA.’

b'.
 x x x x x x xx x x
 [[La gj man da l]_P [for mai a la]_P [NI na]_P_I
 | |
 L+H* L_P L_I

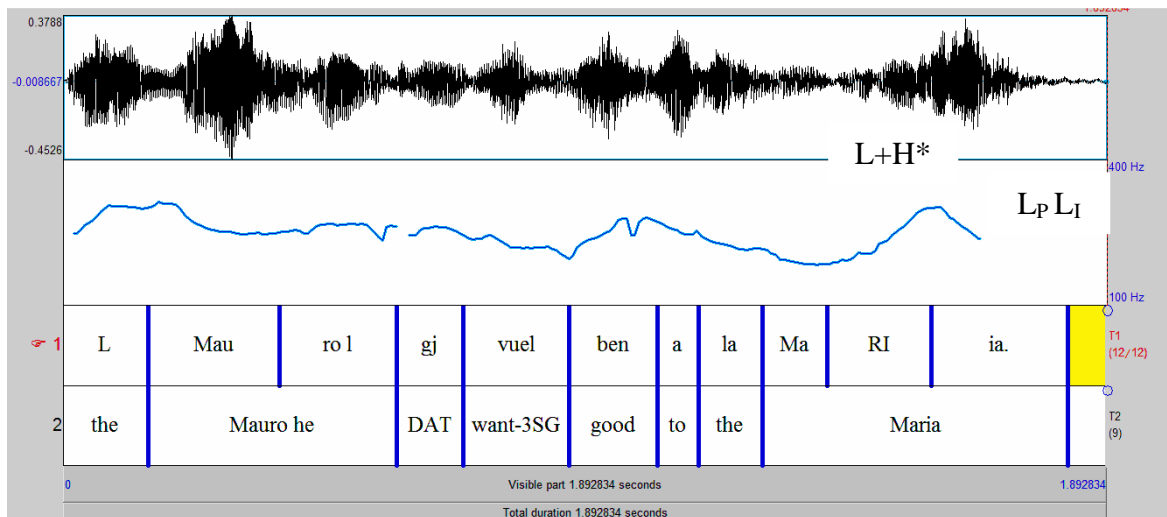


Figure 8.34: Nònes 7 L Mauro l gj vuel ben a la MaRIa.

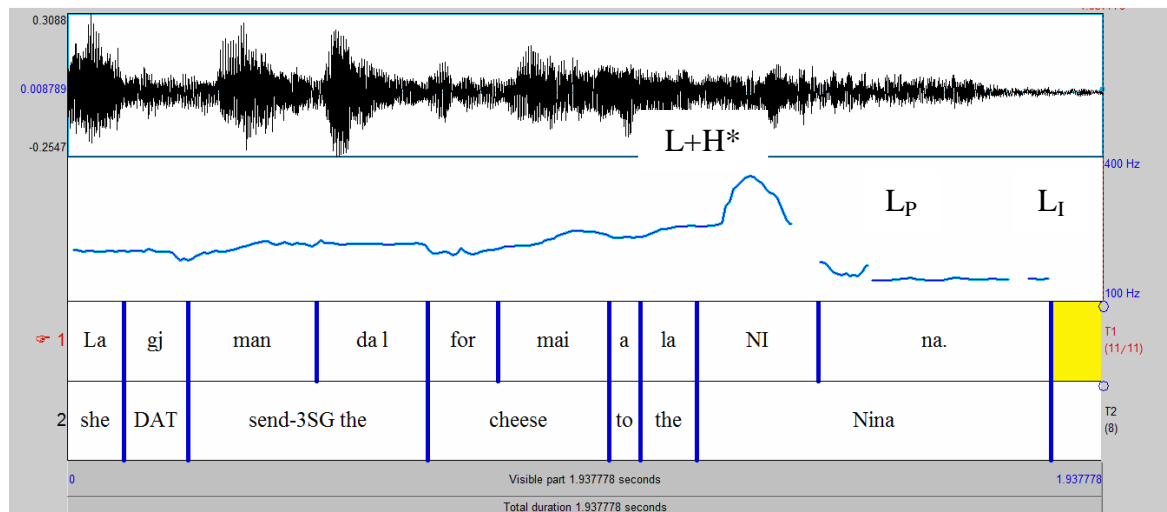


Figure 8.35: Nònes 3 La gj manda l formai a la NI na.

As for penultimate stress on closed syllables, we always find the peak.

- (26) Penultimate stress on closed syllables (Nònes)
- a. La Mara la magna la miNEStra.
the Mara she eat-3SG the soup
‘Mara is eating SOUP.’
- a’.
- | | | | | | | | | | | |
|--|-----|----|----|------------------|-------|----|------------------|-----|-----|----------------------------------|
| | | | | | | | X | | | |
| | | X | | X | | | X | | | |
| | X | X | X | X | X | X | X | | | |
| | [La | Ma | ra | la] _P | [magn | a | la] _P | [mi | NES | tra] _P] _I |
| | | | | | | | | | | |
| | | | | L+H* | | Lp | Li | | | |

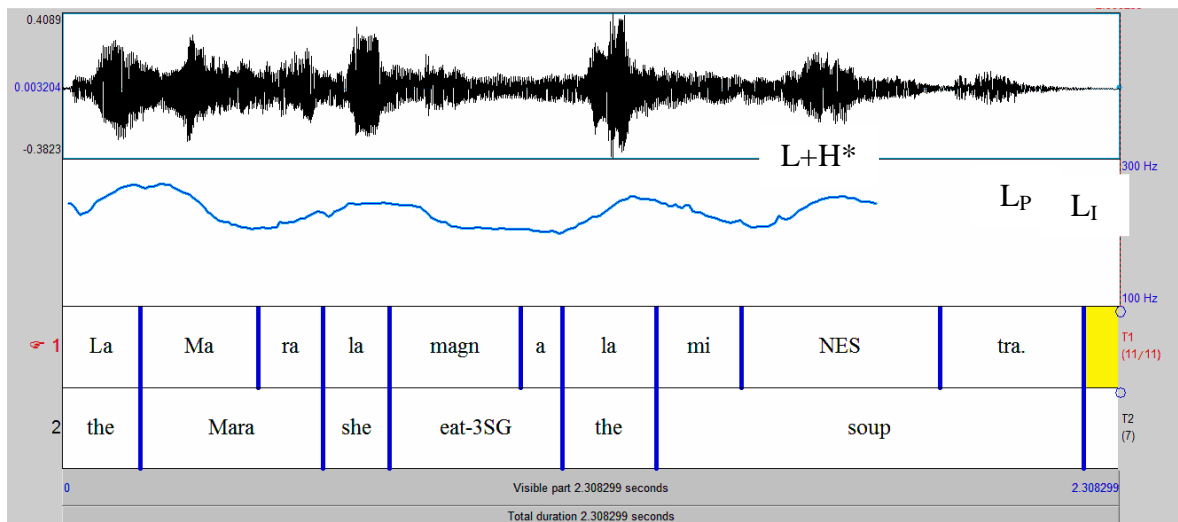


Figure 8.36: Nònes 8 La Mara la magna la miNEStra.

If main stress falls on the utterance-final syllable, Nònes late narrow focus statements show the peak independent of whether the main stressed syllable is open (27a, figure 8.37) or closed (27b, figure 8.38) as expected given the ‘final clash’ context.

(27) Final stress on open (a) and closed (b) syllables (Nònes)

a. Nan a MaLÉ.
 go-1PL to Malé
 ‘We are going to MALÉ.’

a'.
 x x
 x x x x
 [[Nan a]_P [Ma LÉ]_P]_I
 | |
 L+H*_P L_I

b. La Mara la cogn nar a laoRAR.
 the Mara she must-3SG go to work
 ‘Mara goes to WORK.’

b'.
 x x x
 x x x x x x x
 [[La Ma ra]_P [la cogn nar a]_P [lao RAR]_P]_I
 | |
 L+H*_P L_P L_I

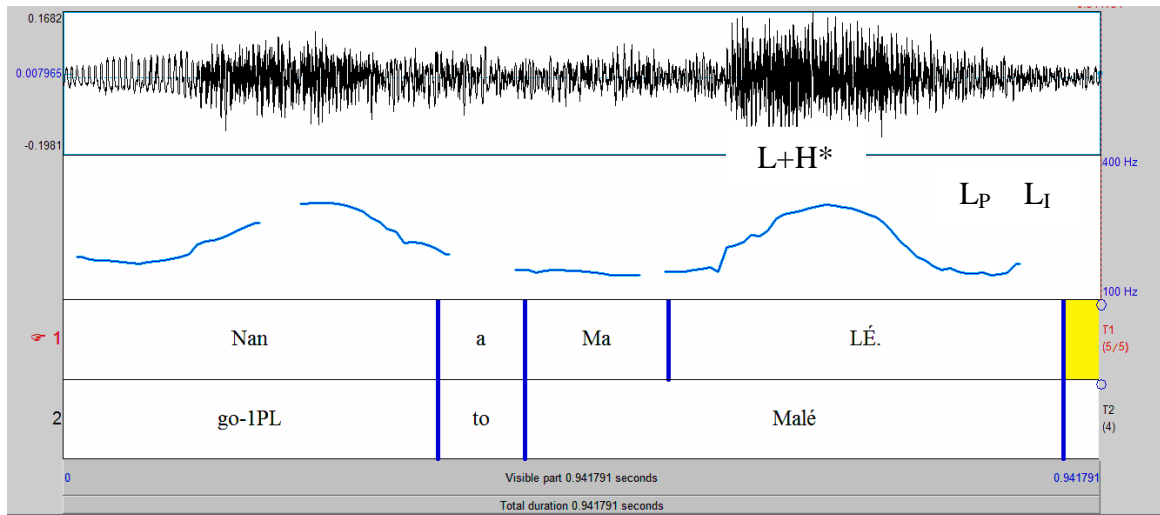


Figure 8.37: Nònes 3 Nan a MaLÉ.

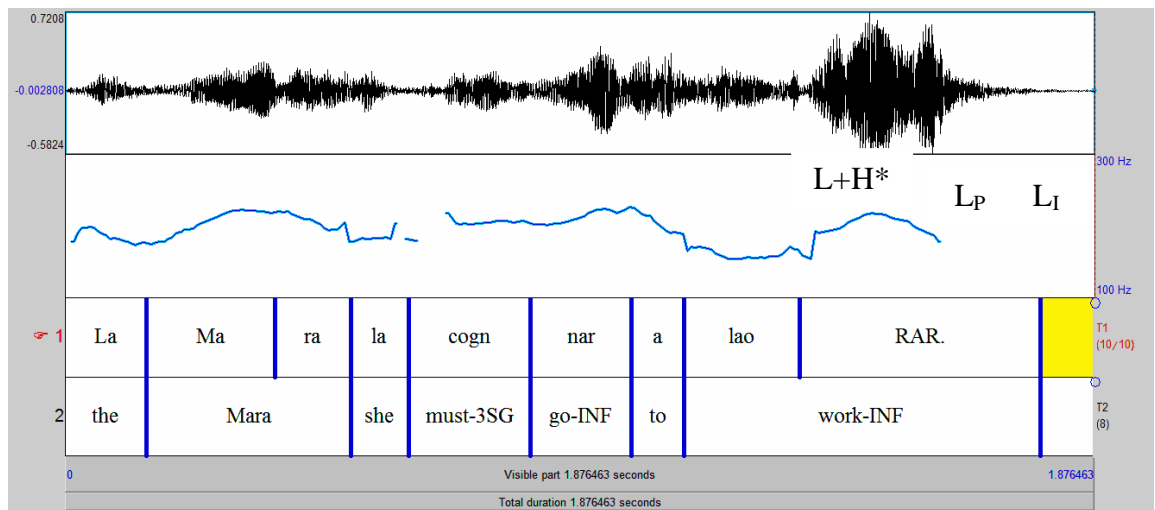


Figure 8.38: Nònes 8 La Mara la cogn nar a laoRAR.

| The narrow focus statement tune | | | |
|---------------------------------|----------------|----------------------|-------------------------------|
| Variety | Focus position | Nuclear pitch accent | Edge tones |
| Nònes | late | L+H* | L _p L _I |

Table 8.16: The late narrow focus statement tune in Nònes

8.3 Conclusion

In this chapter, we have examined the tune in neutral and narrow focus statements in the varieties Gherdëina, Badiot, Fascian and Nònes.

8.3.1 The neutral focus statement tune

As to the neutral focus statement tune, the varieties under consideration share a falling bitonal H+L* nuclear pitch accent and an L_I tone. This H+L* L_I tune has also been observed in neutral focus statements in varieties of Italian examined in the literature.

| | The neutral focus statement tune | |
|----------------|---|----------------------|
| Variety | Nuclear pitch accent | Edge tone |
| Gherdëina | H+L* | L_I |
| Badiot | | |
| Fascian | | |
| Nònes | | |

Table 8.17: The neutral focus statement tune in the varieties under scrutiny

8.3.2 The narrow focus statement tune

As for the varieties of Italian examined in the literature, different tunes have been suggested in narrow focus statements (section 8.2.1). While some varieties show a rising nuclear pitch accent, others feature a falling one. As regards the four varieties Gherdëina, Badiot, Fascian and Nònes, I have proposed an analysis of the narrow focus statement tune in terms of an L+H* L_P L_I tune. Note that the L+H* nuclear pitch accent has been proposed also for narrow focus statements in Neapolitan Italian and German.

| | The narrow focus statement tune | |
|------------------|--|------------------------------------|
| Varieties | Nuclear pitch accent | Edge tones |
| Gherdëina | L+H* | L_P L_I |
| Badiot | | |
| Fascian | | |
| Nònes | | |

Table 8.18: The narrow focus statement tune in the varieties under scrutiny

Crucially, in all varieties, narrow focus has been found to trigger insertion of a phonological phrase boundary to its right providing evidence for the claim that focus influences phonological phrasing. The tone found at this phonological phrase boundary is low (L_P) in all cases. Apart from the ‘Focus to Stress Alignment’ rule in section 1.3.3.2, we can hence state the following phrasing rule:

- (28) Phrasing rule for narrow focus utterances
- a. Insert a phonological phrase boundary after a focused constituent.
 - b. Associate an L_P tone to this phonological phrase boundary.

The position of the focus constituent in the utterance (early vs. late) was not found to matter for the tune. However, we have observed variation in the shape of the pitch contour in the nuclear region – a rise or a peak – depending on the position of the main stressed syllable in the phonological phrase (penultimate vs. final). The crucial proposal in the present analysis is that both the rise and the peak are attributed to the same $L+H^*$ nuclear pitch accent. While the rise represents the regular shape for the $L+H^*$ nuclear pitch accent, I have argued that the occurrence of the peak is due to tonal compression in cases of tonal crowding which arise when main stress falls on the final syllable of the phonological phrase. In cases of final stress, both the tones of the nuclear pitch accent, L and H, and the obligatory L_P tone after the focus constituent (as well as L_I in cases of utterance-final stress) have to be implemented in close proximity. In situations of tonal crowding like this, languages have been observed to employ two main adjustment strategies: ‘tonal truncation’ or ‘tonal compression’. While tonal truncation leads to the non-realisation of certain tones in the tune, the four varieties under consideration here employ tonal compression, i.e. all tones are implemented but their alignment is varied in such a way that the pitch contour results to be compressed in the relevant portion. Hence, as shown in figure 8.39, when the nuclear stressed syllable is final in its phonological phrase, the H target of the nuclear pitch accent and the L target of the phonological phrase boundary tone have to be implemented

in close proximity resulting in a nuclear rise immediately followed by a fall towards L_P . Given that this fall has to occur within the boundaries of the nuclear stressed syllable, a peak-shaped pitch contour results. In cases of penultimate stress, in contrast, in which the main stressed syllable is followed by an unstressed one before the phonological phrase boundary, the fall towards L_P will occur through this unstressed syllable. Consequently, the nuclear stressed syllable is characterised by the rise (only).

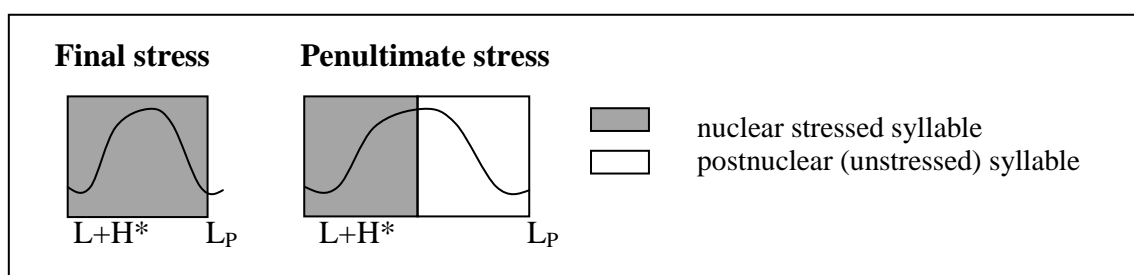


Figure 8.39: Difference in tonal implementation between final and penultimate stress

Under the scenarios in figure 8.39 we would expect to find a clear distribution with the rise occurring in cases of penultimate stress and the peak limited to cases of final stress. Such a clear distribution was found, however, only in the varieties Badiot and Gherdëina with Gherdëina showing a peak also in early narrow focus statements with main stress on closed penultimate syllables. In the other varieties, in contrast, the opposition between the rise and the peak could not be correlated with the position of the main stressed syllable. In Fascian, early narrow focus statements are generally characterised by the rise even in cases of final stress. Late narrow focus statements do tend to exhibit the peak in cases of final stress and the rise in cases of penultimate stress but the rise appears also with main stress on closed final syllables and the peak also with main stress on closed penultimate syllables. Just in one case, in Fascian late narrow focus statements with main stress on closed penultimate syllables, the shape of the nuclear contour could be related to dialectal variation: the rise was found with speakers of Brach whereas the peak occurred with speakers of Cazet and Moenat. In Nònes, early narrow focus statements feature the rise with penultimate stress

and the peak with final stress but closed final syllables were also found with a rise. In late narrow focus statements, the peak occurs with final stress but penultimate stress exhibits variation between the rise and the peak.

These observations suggest that despite of the general tendency towards tonal compression, varieties differ with respect to the extent they make us of it. Moreover, there is reason to assume that apart from the position of the main stressed syllable in its phonological phrase, also the syllable type (open vs. closed) plays a role for tonal implementation. A possible line of research could investigate the relation between the type of the nuclear stressed syllable and the shape of the pitch contour taking under consideration syllable length.

8.3.3 The neutral focus-narrow focus statement contrast

In the four varieties under consideration, neutral focus and narrow focus statements have been found to share a terminally low F_0 (L_I), but to differ with respect to (i) the attachment site of the nuclear pitch accent and (ii) the pitch movement within the main stressed syllable. While in neutral focus statements, the nuclear pitch accent is aligned with the last prominent phrasal unit, in narrow focus statements, it is aligned with the most prominent syllable of the focused constituent, which is not necessarily the last one in the utterance. Neutral focus statements have been found to involve a fall ($H+L^*$), while narrow focus statements exhibit a rise ($L+H^*$). Moreover, narrow focus statements involve an L_P tone to the right of the focus constituent. In sum, the findings in the present chapter suggest that narrow focus is encoded in terms of $L+H^* L_P$.

| Varieties | Focus type | Nuclear pitch accent | Edge tones | |
|---------------------|----------------|----------------------|----------------------|----------------------|
| Gherdëina Badiot | neutral | H+L* | | L_I |
| Fascian Nònes | narrow | L+H* | L_P | |

Table 8.19: The neutral focus-narrow focus statement contrast in the varieties under scrutiny

Chapter 9

Yes/no-question intonation and the statement-question contrast

Yes/no-questions are often divided into information-seeking yes/no-questions and confirmation-seeking yes/no-questions (Bolinger 1989). While the former are also referred to as ‘queries’ the latter are known as ‘checks’ (cf. Carletta et al. 1995; & Savino 2004; Grice et al. 2005b:367). We shall be concerned here with the first type of yes/no-questions, i.e. true requests for information.

The chapter is organised as follows: section 9.1 reviews the literature on yes/no-question intonation in varieties of Italian. In section 9.2, I analyse the tune of neutral focus yes/no-questions in the four varieties Gherdëina, Badiot, Fascian and Nònes. Section 9.3 is concerned with the statement-question contrast and in section 9.4, I show that morphosyntactic marking does not influence the tune. Section 9.5 examines narrow focus yes/no-questions and section 9.6 concludes the chapter summarising the main results.

9.1 The intonation of neutral yes/no-questions in varieties of Italian

In contrast to the neutral statement tune, which is H+L* L_I in all regional varieties of Italian studied so far in the literature, the neutral focus yes/no-question tune seems to differ between the varieties. In the following, I review the findings regarding the neutral focus yes/no-question tune in varieties of Italian.

9.1.1 Standard Italian

Chapallaz (1964), one of the first descriptions of Standard Italian intonation, describes the yes/no-question tune as a falling-rising pattern in which “the last stressed syllable may be on a low level pitch with a rise of pitch in the following unstressed syllables” (307).¹ In autosegmental terms, this corresponds to an L* nuclear pitch accent followed by a rising H- phrase accent and an H% boundary tone [H_P H_I] (D’Imperio 2002a:40), the tune assumed for Standard Italian yes/no-questions also in subsequent work (cf. Magno Caldognetto, Ferrero, Lavagnoli & Vagges 1978; Canepari 1986; Avesani 1990). Avesani (1995), in contrast, suggests an alternative analysis in terms of an H+L* nuclear pitch accent followed by an L-H% [L_P H_I] boundary tone combination.²

9.1.2 Northern and central vs. southern varieties of Italian

As regards the yes/no-question tune, there seems to be a major split between northern and central varieties of Italian on the one hand and southern varieties of Italian on the other: while the yes/no-question tune in most northern and central varieties has been reported to exhibit a terminal rise, southern varieties usually exhibit a terminal fall (with the terminal rise as an optional variant) (D’Imperio 2002:37f.; Grice 1991; Caputo 1994). AM analyses of the yes/no-question tune in northern and central varieties of Italian have been proposed for Pisa Italian and Florentine Italian. Gili Fivela (2003, 2008:114) describes the neutral focus yes/no-question tune in Pisa Italian as a “falling nuclear accent followed by a sequence of high-low edge tones” and transcribes it in terms of a falling bitonal H+L* nuclear pitch accent and an H-L% [H_P L_I] boundary tone combination. The final low boundary tone can be truncated in cases of tonal crowding, e.g. when both the nuclear pitch

¹As noted by D’Imperio (2002a:39), the concept of a Standard Italian accent is a controversial issue (cf. Lepschy & Lepschy 1977), but traditionally, the Tuscan pronunciation and intonation is regarded as the standard.

² In the labelling conventions adopted in the present work, this corresponds to an L* H_P H_I tune (Chapallaz 1964) or H+L* L_P H_I (Avesani 1990).

accent and the edge tones are associated with the same syllable in final stress words. Florentine Italian, a Central Italian variety, exhibits an H* nuclear pitch accent, followed by an obligatory final rise (represented as a high boundary tone) (Grice et al. 2005b).

Southern varieties of Italian studied within AM include the varieties of Naples, Bari, Palermo and Catania. As regards Neapolitan Italian, the neutral focus yes/no-question tune has been analysed in terms of an L*+H nuclear pitch accent followed by an HL phrase accent (D’Imperio 1997b, 2000, 2002a; Grice et al. 2005b). The same rising bitonal L*+H nuclear pitch accent has been proposed by Grice (1995) and Grice et al. (2005b) also for Palermo Italian. In this variety, the nuclear pitch accent is followed by a final fall, but, optionally, a final rise is also possible. Bari Italian yes/no-questions involve the same LH sequence in yes/no-questions but there seems to be a difference in alignment between Bari Italian and the previously mentioned varieties. Grice & Savino (1995:30) describe the nuclear pitch accent of Bari Italian as “a low pitch target just before a high accented syllable” and transcribe it in terms of L+H*. Similarly to Palermo Italian, there is usually a final fall, but a final rise (analysed in terms of a high boundary tone) is observed as an optional variant. Table 9.1 gives an overview of the yes/no-question tune in Standard Italian and several northern, central and southern varieties of Italian.

| Variety | | Nuclear pitch accent | Edge tone(s) |
|------------------|--------------------|--|-------------------------------------|
| Standard Italian | | L* | H _P (H _I) |
| | | H+L* | L+H _I |
| Northern | Pisa Italian | H+L* | H _P (L _I) |
| Central | Florentine Italian | H* | L _P H _I |
| Southern | Neapolitan Italian | L*+H | HL _P L _I |
| | Palermo Italian | L*+H | L _P L _I |
| | | | L _P H _I |
| | Catania Italian | L*+H | L _I (or H _I) |
| Bari Italian | L+H* | L _P L _I L _P H _I | |

Table 9.1: The nuclear pitch accent of yes/no-questions in several varieties of Italian (labelling conventions for boundary tones adopted as stated in chapter 7)

9.2 Yes/no-question intonation in Dolomitic Ladin

9.2.1 Preliminaries

Many studies investigating the prosody of interrogation (i. a. Grice 1995) emphasise that Italian is a particularly suitable testing ground for the central role of intonation in distinguishing between statements and yes/no-questions. Due to the fact that Italian is a null-subject (or *pro*-drop) language, there is no morphological or syntactic marking differentiating between statements and yes/no-questions and intonation alone is assumed to signal interrogative force and the statement-question contrast. A sentence such as *Hanno fame* (1) will be perceived as a statement or as a yes/no-question depending on the tune.

- (1) Hanno fame (Standard Italian)
a. Hanno fame.
 have-3PL hunger
 ‘They are hungry.’
b. Hanno fame?
 have-3PL hunger
 ‘Are they hungry?’

These studies appear to suggest that a difference in (morpho)syntax – caused by the use of proclitic vs. enclitic subject pronouns or dedicated question particles – between statements and questions could, and possibly should, involve a difference in prosody, but little is said about whether this is in fact the case and, if so, on how the influence of (morpho)syntax on the prosody of questions may manifest itself. Consequently, this is one of the aspects the present dissertation seeks to shed light on.

In contrast to Standard Italian, the varieties Gherdëina, Badiot, Fascian and Nònes do use subject pronouns, but in some grammatical persons only. Table 9.2 repeats the paradigms from section 2.2.3.2 for convenience.

| Person | Gherdëina | | Badiot/Marèò | | Fascian | | Nònes | |
|--------|-----------|-----------------|------------------|-------|-----------------|--------------------|--------|-------|
| | procl. | encl. | procl. | encl. | procl. | encl. | procl. | encl. |
| 1SG | | -i | i | -i | | -(e) ³ | | -te |
| 2SG | te | | te | -te | te ⁴ | -te | | |
| 3SG M | l | -(e)l | al | -el | l | -(e)l ⁵ | el | -l |
| 3SG F | la / l' | -(e)la | ara | -era | la | -(e)la | la | -la |
| 1PL | | -s | i * ⁶ | -se | | -e ⁷ | | -te |
| 2PL | | | i * | -e | | | | |
| 3PL M | i | -i | -i | ai | i | -(e)i | i | -i |
| 3PL F | les | -(e)les / -i | -eres | ares | le(s) | -(e)le(s) | le | -le |



| | | | | |
|-------------------|------|-----|----------------|----------|
| Data set 1 | 2PL | ∅ | 2PL (1SG, 1PL) | 2SG, 2PL |
| Date set 2 | rest | all | rest | rest |

Table 9.2: The split-*pro*-drop paradigms of Gherdëina, Badiot/Marèò, Fascian and Nònes

As regards the statement-question contrast, these split-*pro*-drop paradigms give rise to two different situations. First, in those instances where neither preverbal nor postverbal subject clitics exist (data set 1), we find the same situation as in Standard Italian (1) and in the varieties of Italian examined in the literature: statements and yes/no-questions are characterised by the same syntactic structure and should differ only in intonation. This kind of scenario should be particularly suitable to investigate the statement-question contrast and to determine the prosodic cue(s) for interrogative force.⁸

Second, where a proclitic or an enclitic subject pronoun or both occur (data set 2), statements and yes/no-questions exhibit morphosyntactic marking. Given that proclitic subject pronouns appear only in statements, they are a diagnostic for this clause type. Enclitic subject pronouns, in contrast, signal inverted word order and hence questions. Note, however, that due to the V2-property in Gherdëina and Badiot (cf. section 2.2.3.1),

³ The 1SG enclitic subject pronoun *-e* is restricted to the verb *esser* ('to be').

⁴ The form in the Brach subvariety of Fascian is *-tu* (cf. Chiocchetti 1992:210).

⁵ *-(e)lo* in Moena.

⁶ * dropped in Alta Badia

⁷ My fieldwork data show that the 1PL enclitic subject pronoun *-e* can be omitted in Soraga, Vigo and Pozza (verbs: *poder* ('can'), *aer* ('have')). This omission seems to be due to a regular phonological process which deletes final unstressed vowels (apocope).

⁸ Note that, as mentioned before in chapter 3, in these varieties, under certain conditions also postverbal subject clitics are omitted. As a result, also other subject clitics than those mentioned under 'data set 1' are omitted and we can actually compare more data.

enclitic subject pronouns also occur in V2-statements and hence do not necessarily indicate questions.

Previous studies on Italian and Italian varieties have concentrated on data without morphosyntactic marking (cf. data set 1) and not taken into consideration the statement-question contrast with overt marking. Thus, the question arises as to whether the presence of such marking influences the prosody of yes/no-questions. In the following, I exploit the split-*pro*-drop property of Gherdëina, Badiot, Fascian and Nònes and the contrast between data sets 1 and 2 in order to determine whether morphosyntactic marking in questions influences the yes/no-questions tune in any crucial way.

Yes/no-questions involving morphosyntactic marking might differ from yes/no-questions without such marking in four different ways: (i) in a different nuclear pitch accent; (ii) in a different edge tone; (iii) in a different temporal alignment of the (nuclear) pitch accent and/or (iv) in a difference in scaling/fundamental frequency values. Nevertheless, given that the nuclear pitch accent is associated with the main stressed syllable and since an (unstressed) subject clitic is not likely to receive main stress, the influence of morphosyntactic marking in terms of subject clitics on the tune might be marginal. Possible cases in which the realisation of a syllabic enclitic subject pronoun might affect the prosody are cases of ‘tonal crowding’, i.e. situations in which several tones are associated to one and the same tone-bearing unit or realised in close proximity. If the verb receives nuclear stress and the enclitic subject pronoun comes right after the main stressed syllable, the pronoun might be able to “help” in accommodating all tones and prevent adjustment strategies for tonal crowding such as tonal compression or tonal truncation.

On a par with the analysis of the statement tune in chapter 8, I shall take the following parameters into consideration for the analysis of the yes/no-question tune: (i) the position of the main stressed syllable ((ante)penultimate vs. final) and (ii) the syllable type (open vs. closed)

9.2.2 The neutral focus yes/no-question tune

In this section, I show that the four varieties Gherdëina, Badiot, Fascian and Nònes share the same tune in neutral focus yes/no-questions involving a rise through the nuclear stressed syllable and another falling-rising pitch movement at the end of the utterance. I analyse this tune in terms of a rising bitonal L+H* nuclear pitch accent followed by an L_IH_I phrase boundary combination.

| Varieties | The neutral focus yes/no-question tune | |
|---|--|-------------------------------|
| | Nuclear pitch accent | Edge tones |
| Gherdëina Badiot Fascian Nònes | L+H* | L _I H _I |

Table 9.3: The neutral focus yes/no-question tune in the varieties under consideration

Crucially, the four varieties differ with respect to how this tune is actually implemented depending on factors such as the position of the main stressed syllable in the phonological phrase (penultimate vs. final) or the syllable type (open vs. closed). In what follows, I first analyse the neutral focus yes/no-question tune in Badiot (section 9.2.2.1) before addressing Fascian (9.2.2.2) and Nònes (9.2.2.3) and finally Gherdëina (9.2.2.4), which differs from the previous varieties in the obligatory use of the question particle *pa* in yes/no-questions.

9.2.2.1 Badiot

In Badiot neutral focus yes/no-questions, the L+H* L_IH_I tune is implemented in two different ways depending on the position of the main stressed syllable: in pattern 1, which occurs when main stress falls on a penultimate syllable, the tune is fully realised (2, figures 9.1–9.2). Pattern 2, in contrast, is observed when main stress falls on the final syllable: the nuclear rise is not followed by another falling-rising movement but instead, F₀ stays on a high level (H_I) (3, figures 9.3–9.4). I assume that in cases of final stress like this, tonal crowding leads to truncation of the L_I tone of the boundary tone combination. As a

consequence, we observe one single rise instead of the postnuclear rise in pattern 1. Patterns 1 and 2 are observed with both open and closed syllables suggesting that the syllable type has no influence on the pattern realised.

(2) Penultimate stress on open (a) and closed (b) syllables (Badiot)

a. Jís a Roma?
 go-2PL to Rome
 ‘Are you going to Rome?’

a'.
 x
 x x
 x x x x
 [[Jís a]P [Ro ma]P]I
 | |
 L+H* L₁H₁

b. Mangé da marëna?
 eat-INF PREP lunch
 ‘Having lunch?’

b'.
 x
 x x
 x x x x x x
 [[Man gé da]P [ma rën na]P]I
 | |
 L+H* L₁H₁

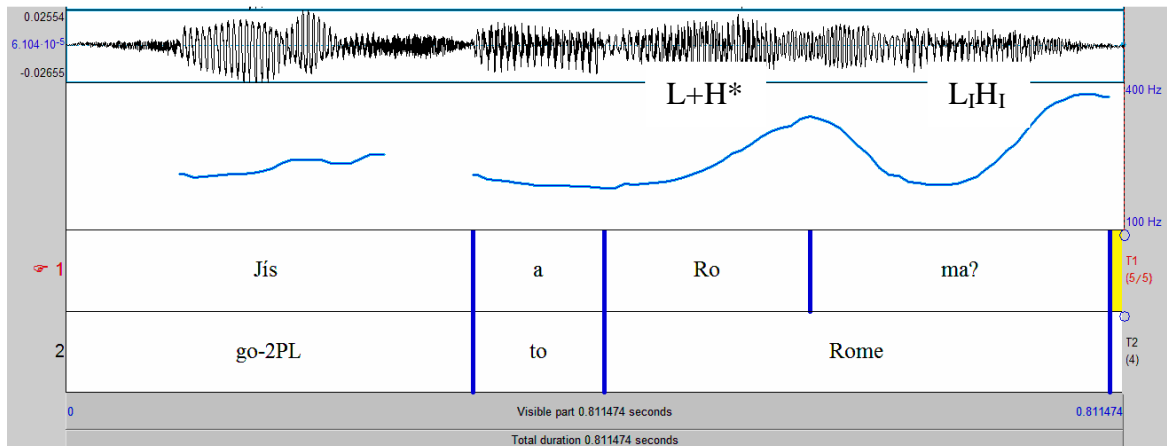


Figure 9.1: Badiot 8 Jís a Roma?

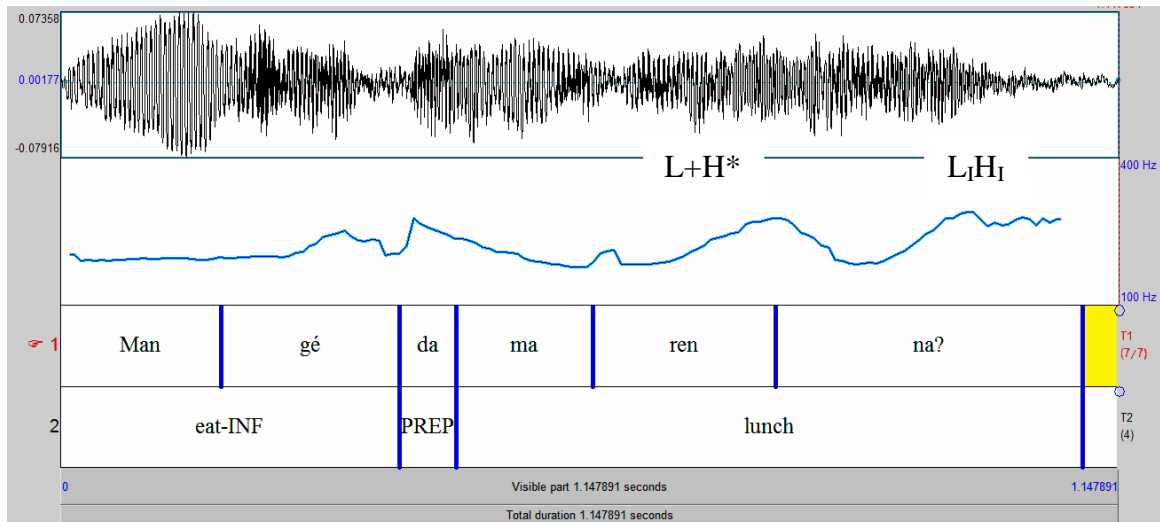


Figure 9.2: Badiot 2 Mangé da marèna?

(3) Final stress on open (a) and closed (b) syllables (Badiot)

a. L'èis mangè?
 it=have-2PL eaten
 'Have you eaten it?'

b'.
 x x
 x x x
 [[L'èis]_P [man gè]_P]_I
 | |
 L+H* L₁H₁

b. Rùves duman?
 arrive-2SG tomorrow
 'Do you arrive tomorrow?'

b'.
 x
 x x
 x x x x
 [[Rù ves]_P [du man]_P]_I
 | | |
 H+L* L+H* L₁H₁

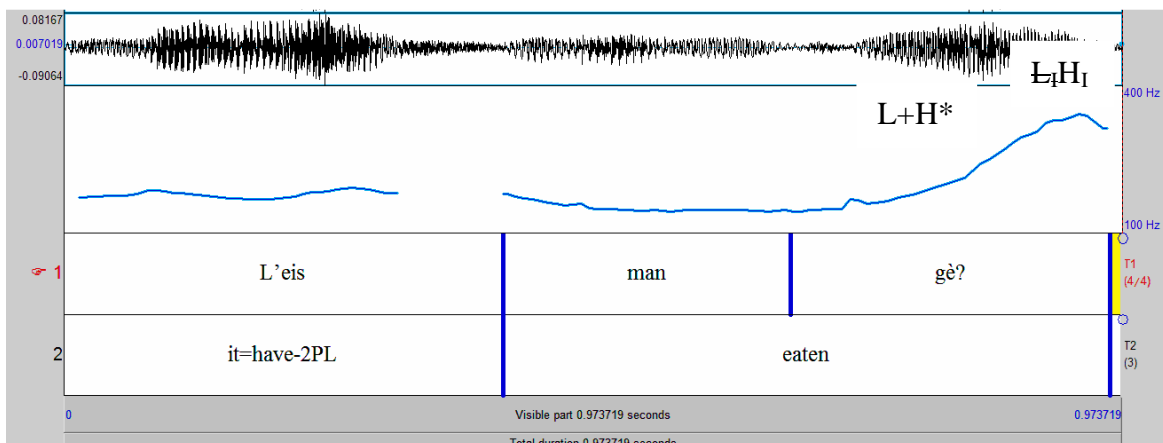


Figure 9.3: Badiot 3 L'èis mangè?

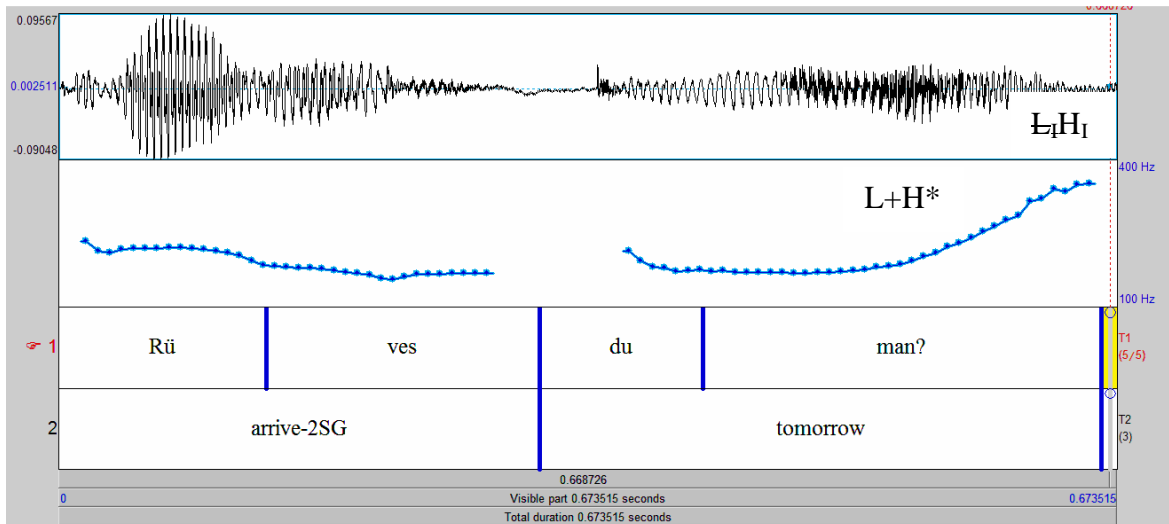


Figure 9.4: Badiot 11 Rüves duman?

In sum, in Badiot, on a par with what we have seen regarding narrow focus statements in chapter 8, the two patterns can be directly attributed to the position of main stress: while penultimate stress involves pattern 1, final stress involves pattern 2.

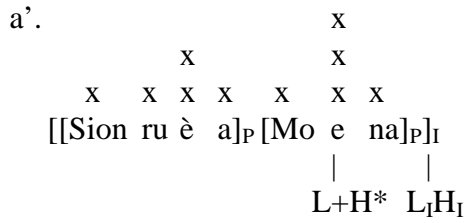
| Position of main stress | Pattern | Contour |
|-------------------------|---------|---------|
| Penultimate | 1 | |
| Final | 2 | |

Table 9.4: Variation in the implementation of the L+H* L₁H₁ tune in Badiot neutral focus yes/no-questions (nuclear stressed syllable highlighted in grey)

9.2.2.2 Fascian

Fascian shows a slightly more complex situation. If main stress falls on a penultimate syllable, we observe pattern 1, i.e. a rise through the nuclear stressed syllable (L+H*) followed by another falling-rising movement (L₁H₁) (4, figures 9.5–9.6). Note, however, that the nuclear peak in Fascian is aligned a little earlier than in Badiot giving rise to a peak-shaped contour on the nuclear stressed syllable.

- (4) a. Sion ruè a Moena? (Fascian)
 be-1PL arrived in Moena
 ‘Have we arrived in Moena?’



- b. Magnon polenta?
 eat-1PL polenta
 ‘Do we eat polenta?’

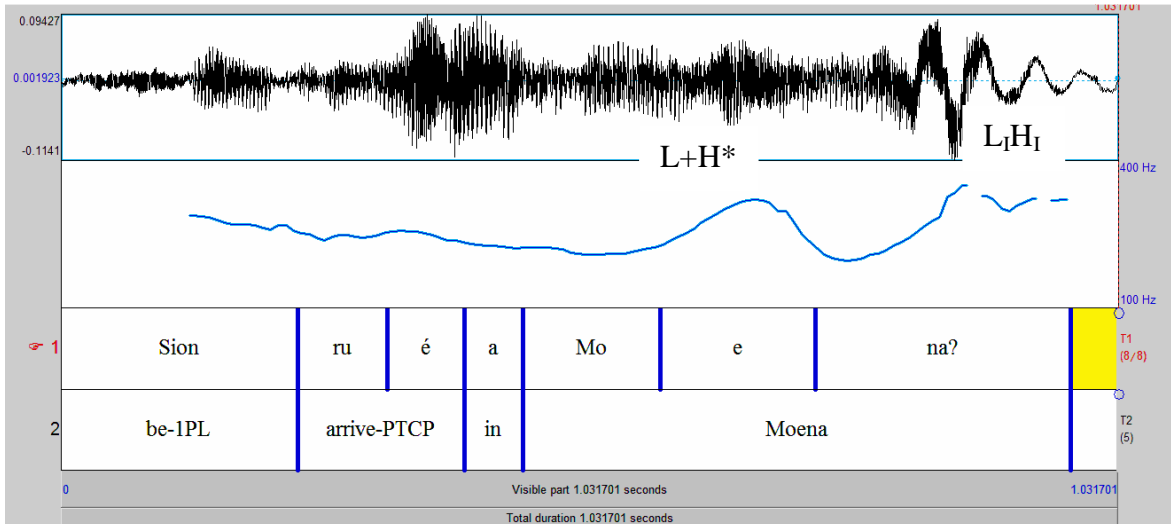
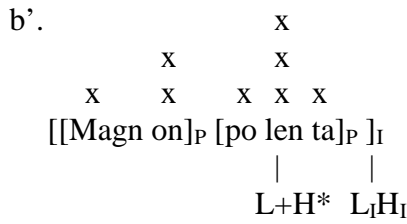


Figure 9.5: Fascian 3 Brach Sion rué a Moena?

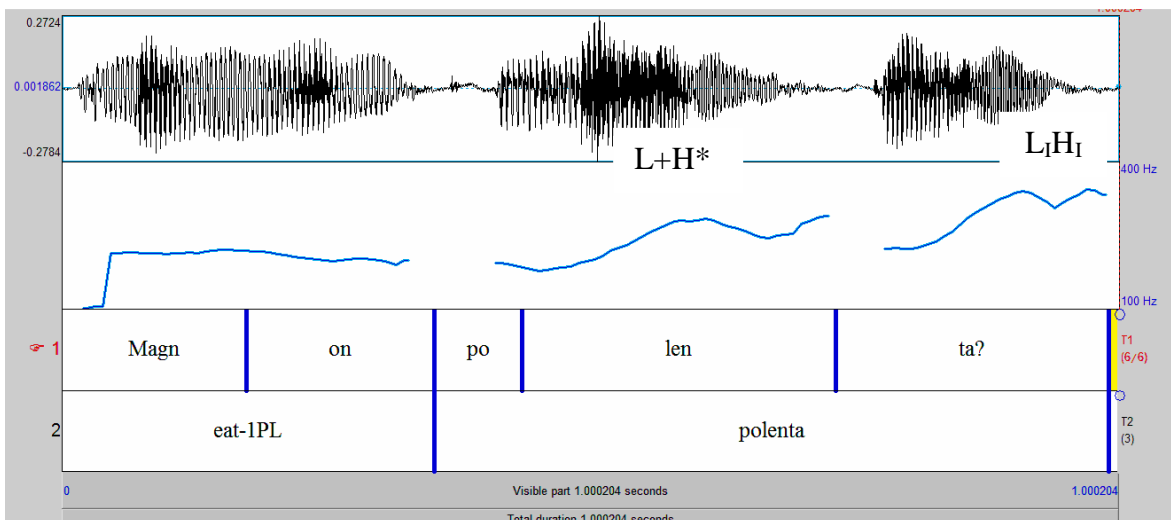


Figure 9.6: Fascian 1 Cazet Magnon polenta?

In cases of final stress, we observe either pattern 1 (figure 9.7) or pattern 2, i.e. a rise through the nuclear stressed syllable (L+H*) which stays on a terminally high level (H_I) (figure 9.8). Hence, while in Badiot the two patterns are directly related to the position of main stress (penultimate vs. final), this relation does not hold for Fascian.

- (5) a. L' = aede magnà? (Fascian)
 it=have-2PL eaten
 'Have you eaten it?'
 a'. x x
 x x x x x
 [[L'a e de]_P [magn à]_P]_I
 | |
 L+H* L_IH_I

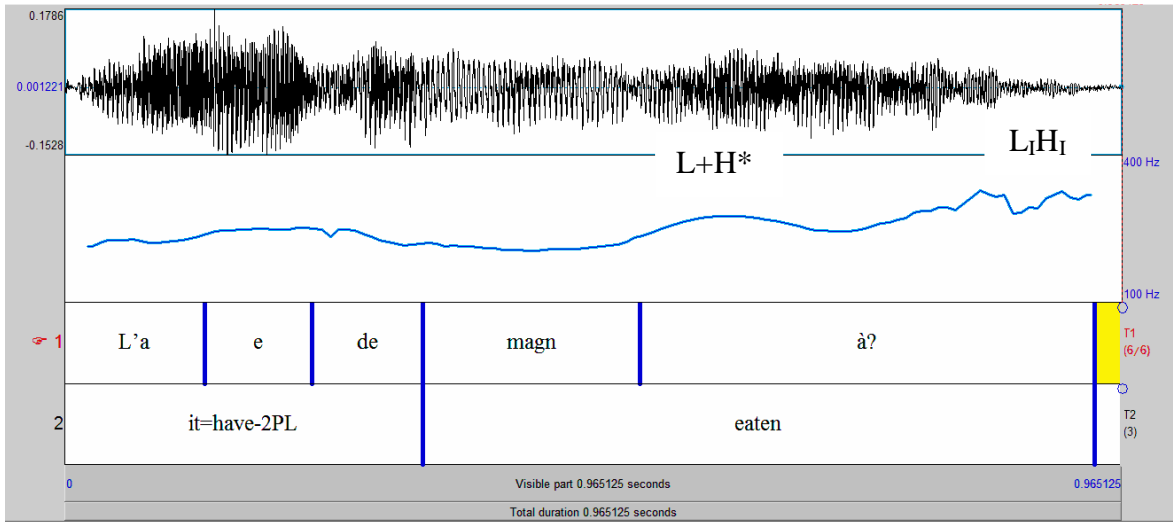


Figure 9.7: Fascian 11 Brach L'aede magnà?

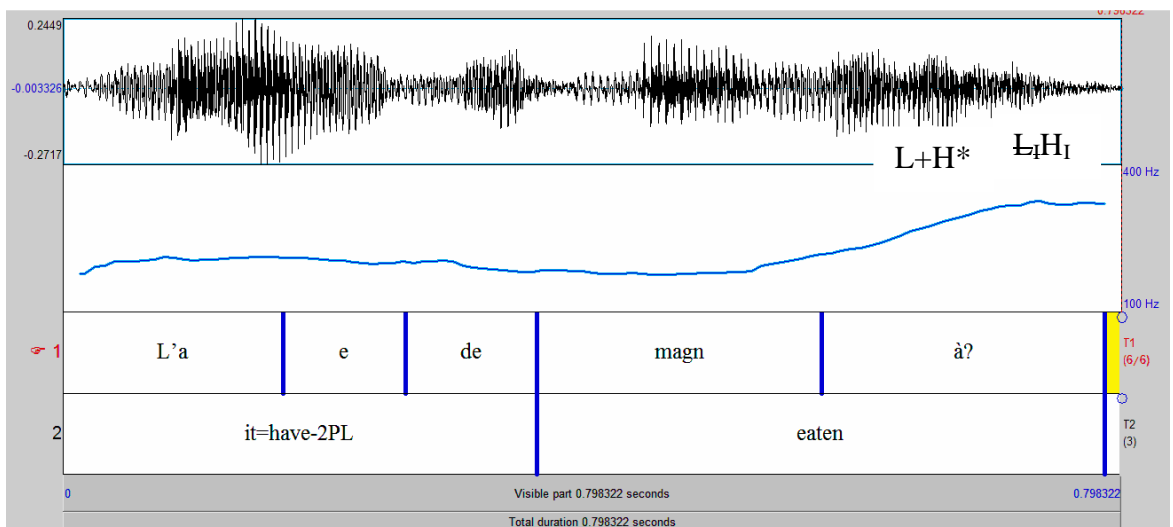


Figure 9.8: Fascian 6 Cazet L'aede magnà?

The differences between the pitch tracks in figures 9.7 and 9.8 can be accounted for in the following way: given that main stress falls on the final syllable, the two tones of the nuclear pitch accent and the two tones of the intonational phrase boundary tone combination have to be realised in close proximity giving rise to tonal crowding. Languages employ various adjustment strategies in final clash contexts (cf. section 7.2.3.1) and the pitch tracks in figures 9.7 and 9.8 show two of them. In figure 9.7, the pitch contour is compressed (‘tonal compression’) enabling the realisation of all tones. Note that the nuclear peak is aligned very early in the main stressed syllable, suggesting that the leading L tone of L+H* was shifted to the left. We could thus even speak of ‘tonal repulsion’. In figure 9.8, in contrast, the L_I tone is omitted (‘tonal truncation’) like in Badiot (cf. figures 9.3–9.4). Hence, in the analysis proposed here, the two patterns 1 and 2 are attributed to the same L+H* L_IH_I tune but the outcomes of two different adjustment strategies in contexts of tonal crowding. This raises the question, however, what kind of factors govern the application of a given adjustment strategy, i.e. why does one and the same utterance (5) involve ‘tonal compression’ or ‘tonal repulsion’ in the case of speaker 11 while it involves ‘tonal truncation’ with speaker 6? Table 9.5 shows the use of the two patterns in neutral focus yes/no-questions with main stress on an open final syllable per speaker.

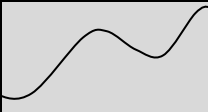
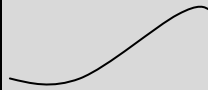
| Position of main stress | Pattern | | Informants ⁹ |
|-------------------------|----------|---|---|
| Final | 1 |  | Cazet: F1 Brach: F2, F3, F4, F5, F11 Moenat: F7 |
| | 2 |  | Cazet: F6, F8 Brach: F9 Moenat: F10 |

Table 9.5: Variation in the tonal implementation of the L+H* L_IH_I tune in Fascian neutral focus yes/no-questions with final stress on an open syllable

⁹ My corpus does not contain instances for this context for speaker 12.

The two patterns cannot be attributed to sociolinguistic variables such as age and given that both patterns occur with speakers of all subvarieties of Fascian, also dialectal variation cannot be the crucial factor. Note, however, that almost all speakers of Fascian Brach exhibit pattern 1.

Variation between pattern 1 (6a, figure 9.9) and pattern 2 (6b, figure 9.10) is observed also when main stress falls on a closed final syllable.

(6) Final stress on closed syllables (Fascian)

a. Ru=ei doman?
 arrive-3PL=SCL tomorrow
 ‘Will they arrive tomorrow?’

a'.
 x x
 x x x x
 [[Ru ei]_P [do man]_P]_I
 | |
 L+H* L_IH_I

b. Ruade doman?
 arrive-2PL tomorrow
 ‘Will they arrive tomorrow?’

b'.
 x x
 x x x x
 [[Ru a de]_P [do man]_P]_I
 | |
 L+H* L_IH_I

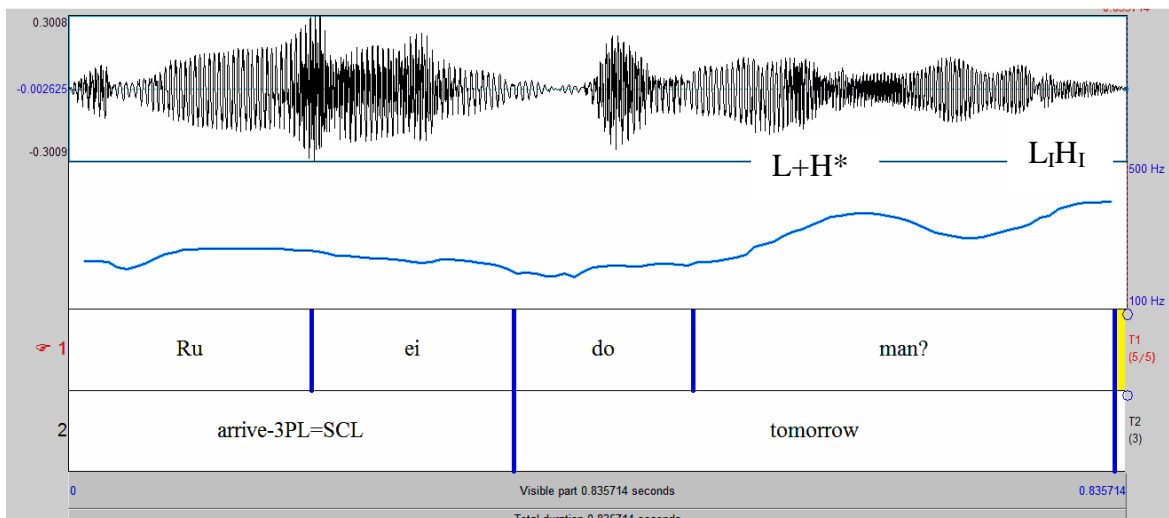


Figure 9.9: Fascian 4 Brach Ruae doman?

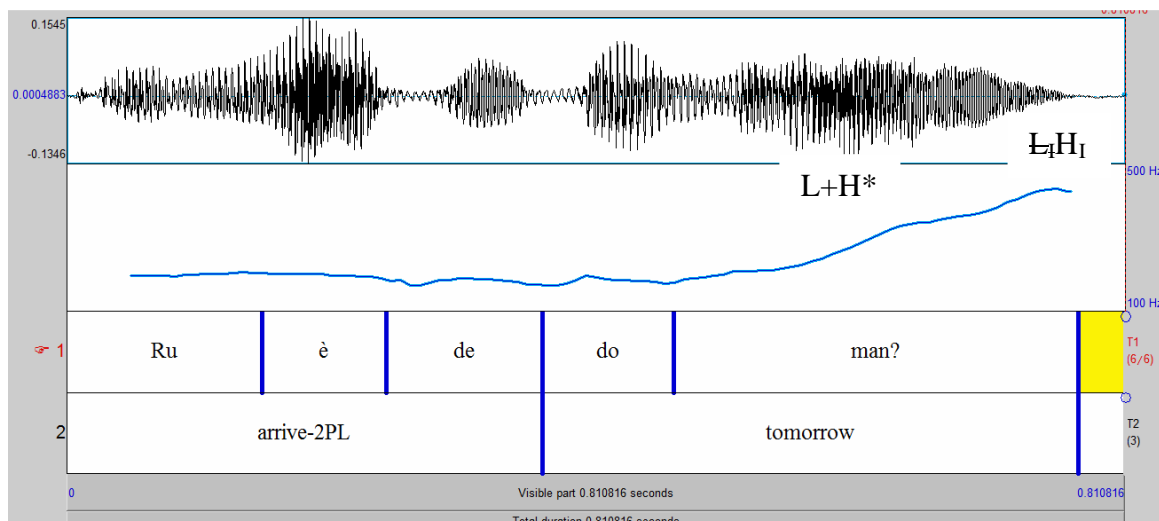


Figure 9.10: Fascian 8 Cazet Ruède doman?

Table 9.6 shows the use of the two patterns in neutral focus yes/no-questions with main stress on a closed final syllable across speakers. Note that except for speaker F9, all speakers exhibit the same pattern with both open and closed final syllables. This finding suggests that the pattern used depends on the personal choice of the speaker.

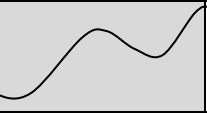
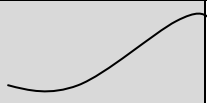
| Position of main stress | Pattern | | Informants ¹⁰ |
|-------------------------|---------|---|---|
| Final | 1 |  | Cazet: F1 Brach: F2, F3, F4, F5, F9, F11 Moenat: F7 |
| | 2 |  | Cazet: F6, F8 Moenat: F10 |

Table 9.6: Variation in the tonal implementation of the L+H* L₁H₁ tune in Fascian neutral focus yes/no-questions with final stress on a closed syllable

In conclusion, the L+H* L₁H₁ tune of Fascian neutral focus yes/no-questions exhibits two different patterns: penultimate stress involves pattern 1 whereas in instances of final stress both pattern 1 or 2 are observed, the choice depending on the speaker.

¹⁰ As far as F12 (Moenat) is concerned, my corpus contains only utterances involving narrow focus.

| Position of main stress | Pattern | Contour | |
|-------------------------|-----------|---------|--|
| Penultimate | Pattern 1 | | |
| Final | Pattern 1 | | |
| | Pattern 2 | | |

Table 9.7: Variation in the implementation of the L+H* L₁H₁ tune in Fascian neutral focus yes/no-questions

9.2.2.3 Nònes

Nònes presents similar facts as Fascian, but here, also the syllable type (open vs. closed) plays a role for the implementation of the tune. On a par with Fascian, Nònes neutral focus yes/no-questions with main stress on a penultimate syllable exhibit pattern 1 (7, figures 9.11–12).

(7) Penultimate stress on open (a) and closed (b) syllables (Nònes)

a. As mandà na maia a la mare?
 have-2SG sent a pullover to the mother
 ‘Did you send a pullover to mother?’

a'.
 x x x x x x x x x x
 x x x x x x x x x x
 [[As man dà na]_P [mai ia(a) la]_P [ma re]_P]_I
 | |
 L+H* L₁H₁

b. Mages na bona minestra?
 eat-2SG a good soup
 ‘Do you eat a good soup?’

b'.
 x x x x x x x x x x
 x x x x x x x x x x
 [[Magn es na]_P [bo na mi nes tra]_P]_I
 | |
 L+H* L₁H₁

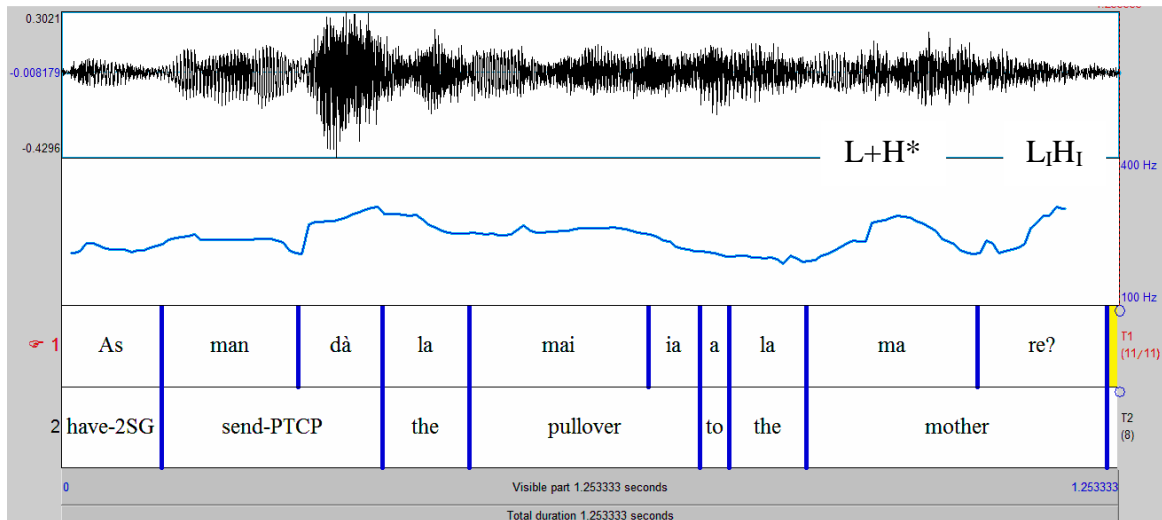


Figure 9.11: Nònes 6 As mandà na maia a la mare?

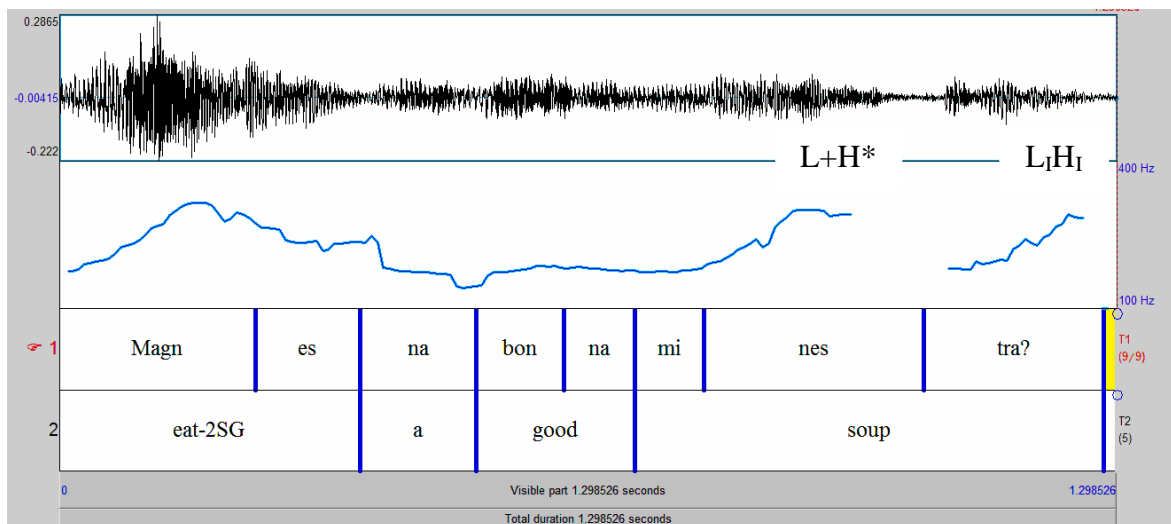


Figure 9.12: Nònes 6 Magn es na bona minestra?

If main stress falls on a final syllable, we observe variation in the tonal implementation of the tune depending on the syllable type: main stress on a closed syllable involves pattern 1 (8a, figure 9.13), whereas main stress on an open syllable involves pattern 2 (8b, 9.14).

(8) Final stress on closed (a) and open (b) syllables (Nònes)

a. Arivau doman?
 arrive-2PL tomorrow
 'Will you arrive tomorrow?'

a'.
 X
 X X
 X X X X X
 [[A ri vau]_P [do man]_P]_I
 | |
 L+H* L_IH_I

b. As magnà l formai?
 have-2SG eaten the cheese
 ‘Did you eat the cheese?’

b'.
 X X X X X
 X X X X X
 [[As magn à l]_P [for mai]_P]_I
 | |
 L+H* L_IH_I

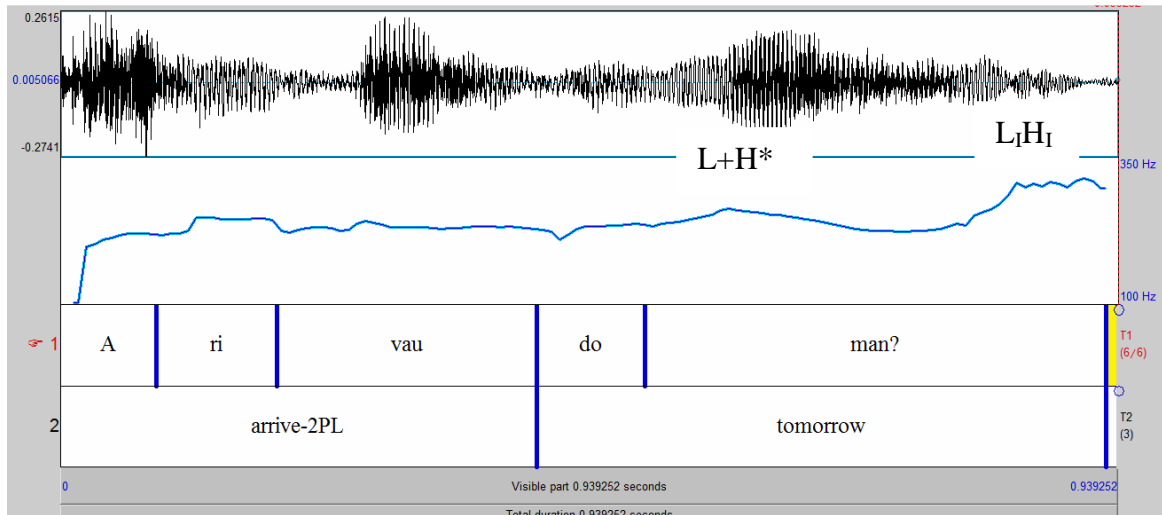


Figure 9.13: Nònes 7 Arivau doman?

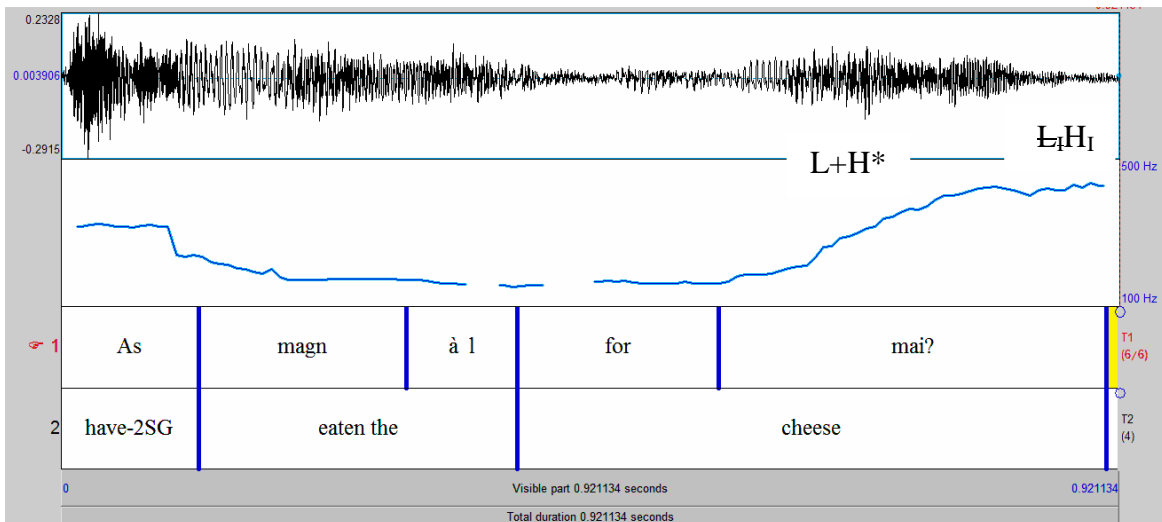


Figure 9.14: Nònes 6 As magnà l formai?

In sum, in Nònes, like in Badiot and Fascian, the tune of neutral focus yes/no-questions exhibits two different patterns. However, the conditions governing the realisation of the patterns slightly differ since here, the syllable type (open vs. closed) also plays a role.

Pattern 1 is the default case, whereas pattern 2 is restricted to cases of final stress on an open syllable.

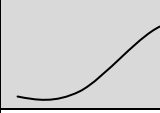
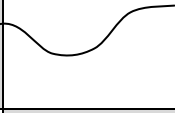

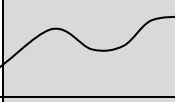

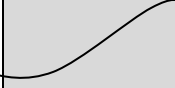
| Position of main stress | Syllable type | Pattern | Contour | |
|-------------------------|---------------|-----------|--|---|
| Penultimate | | Pattern 1 |  |  |
| Final | closed | Pattern 1 |  |  |
| | open | Pattern 2 |  |  |

Table 9.8: Variation in the implementation of the L+H* L_IH_I tune in Nònes neutral focus yes/no-questions

9.2.2.4 Gherdëina

Gherdëina differs from the previous varieties in the use of the obligatory question particle *pa* in yes/no- (and wh-)questions. Hence, apart from the enclitic subject pronoun whose presence we can take as evidence for subject-verb-inversion the particle can be considered as another indicator for interrogative force (cf. chapter 3). The relevant characteristics of the particle for the following discussion are the following: (a) *pa* is obligatory in Gherdëina yes/no-questions; (b) the particle appears after the complex of the finite verb and the enclitic subject pronoun (when present) and (c) *pa* is phonologically reduced to 'a in the second person singular and in the first and second person plural.

First of all, the reduction of the particle *pa* to 'a does not have any influence on the pitch contour: the pitch accent and its temporal alignment with respect to the main stressed syllable are the same in (9a, figure 9.15) where the particle is fully realised and in (9b, figure 9.16) where the particle is reduced.¹¹

¹¹ Note, however, that both the peak of the nuclear pitch accent and the final rise attain higher F₀ values (394 Hz, 377 Hz) when *pa* appears in its reduced form (16a, figure 9.15) than when it is fully realised (16b, figure 9.16) (352 Hz, 359 Hz).

(9) a. Va=les *pa* a Roma? (Gherdëina)
 go-3PL.F=SCL PA to Rome
 ‘Are they going to Rome?’

a'.
 x
 x x x x x x
 [[Va les pa a]_P [Ro ma]_P]_I
 | |
 L+H* L_IH_I

b. Jon=s' *a* a Roma?
 go-1PL=SCL PA to Rome
 ‘Are we going to Rome?’

b'.
 x
 x x x x x
 [[Jon s' a a]_P [Ro ma]_P]_I
 | |
 L+H* L_IH_I

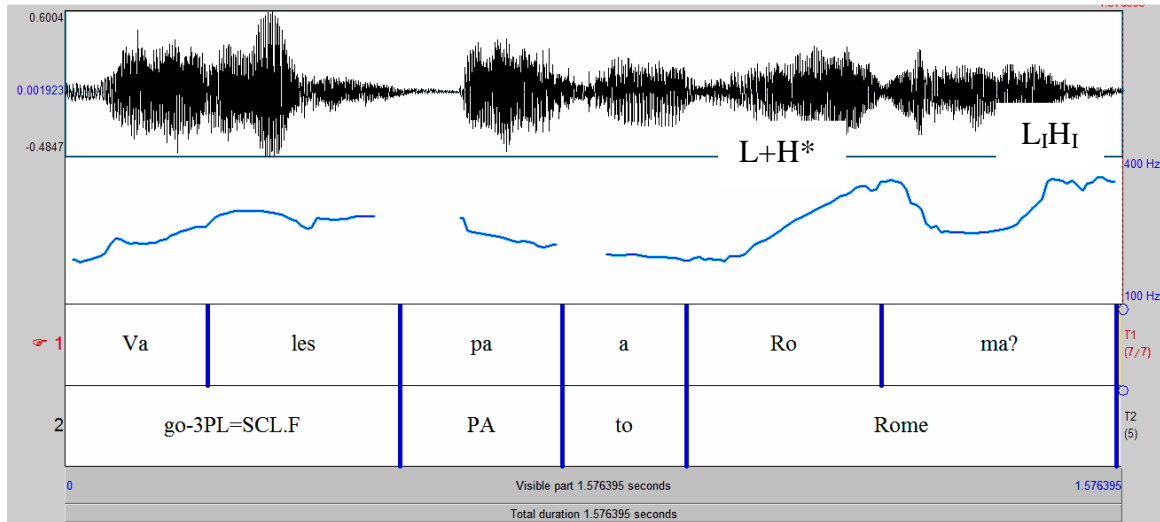


Figure 9.15: Gherdëina 3 Vales *pa* a Roma?

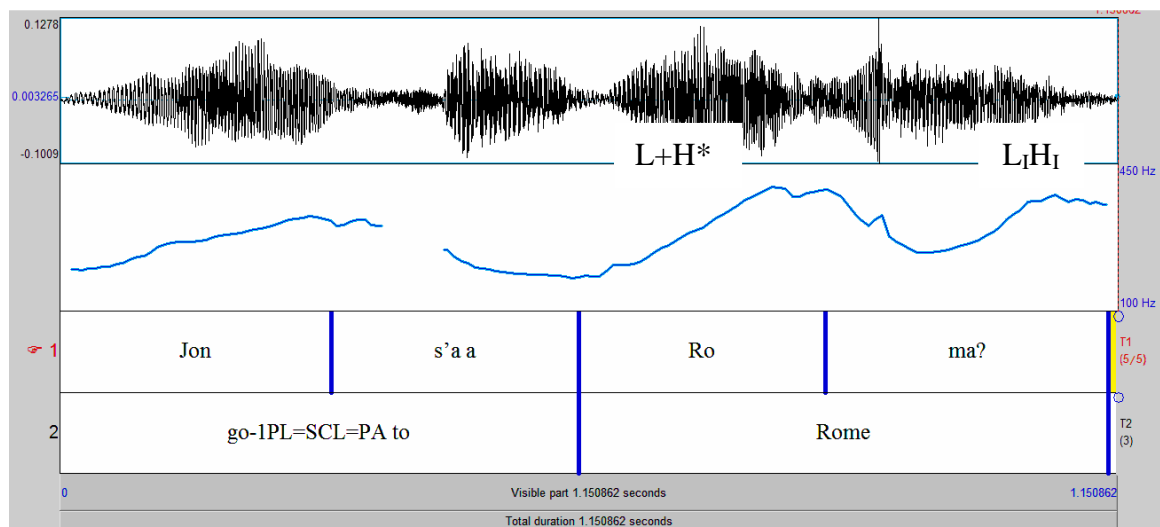


Figure 9.16: Gherdëina 3 Jons' *a* a Roma?

Similar to what we have observed earlier with respect to Badiot, Fascian and Nònes, in Gherdëina, the tonal implementation of the L+H* L₁H₁ tune differs slightly depending on the position of the main stressed syllable: if main stress falls on a penultimate syllable, we observe pattern 1 irrespective of whether the main stressed syllable is open (9, figures 9.15–16 above) or closed (10, figure 9.17).

- (10) a. Maies' *a* na bona marènda? (Gherdëina)
 eat-2SG PA a good lunch
 'Are you having a good lunch?'
 a'.
 X X
 X X X X X X X X X
 [[Mai(e) s'a na]_P [bo na ma rën da]_P]_I
 | |
 L+H* L₁H₁

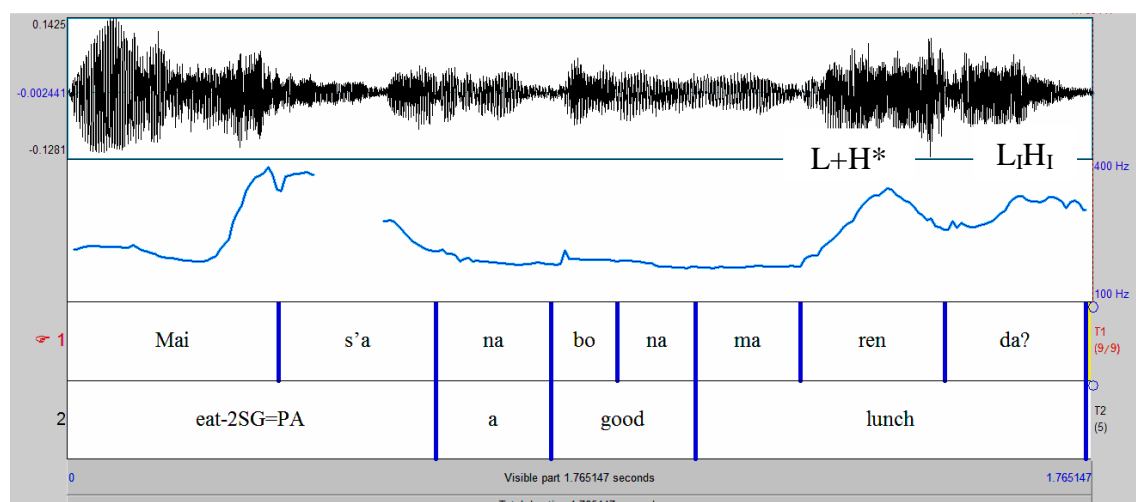


Figure 9.17: Gherdëina 2 Maies' *a* na bona marènda?

In cases of final stress, however, we observe variation depending on the syllable type: if the main stressed syllable is open, we do find a final rise as in pattern 2 (11, figure 9.18), although – in contrast to Badiot, Fascian and Nònes – this rise sets in only very late in the nuclear stressed syllable suggesting that the rise is not due to the nuclear pitch accent but rather to the L₁H₁ boundary tone combination. Hence, the nuclear pitch accent in Gherdëina seems to be only L*. The proposal I would like to make here is that this somewhat “reduced” nuclear pitch accent in Gherdëina as compared to the other varieties is due to

tonal crowding on the final syllable and is to be interpreted as a case of tonal truncation in final clash contexts. Unlike the previous varieties, which have been found to truncate part of the boundary tones in final clash contexts, Gherdëina seems to maintain the full boundary tone combination and instead truncates the nuclear pitch accent. I refer to this case as pattern 3.

(11) Final stress on open syllables (Gherdëina)

a. L'èis' a vo maià?
 it=have-2PL PA you eaten
 'Did you eat it?'
 a'. X X
 X X X X X
 [[L'èi s'a vo]_P [mai ià]_P]_I
 | |
 L+H* L_IH_I

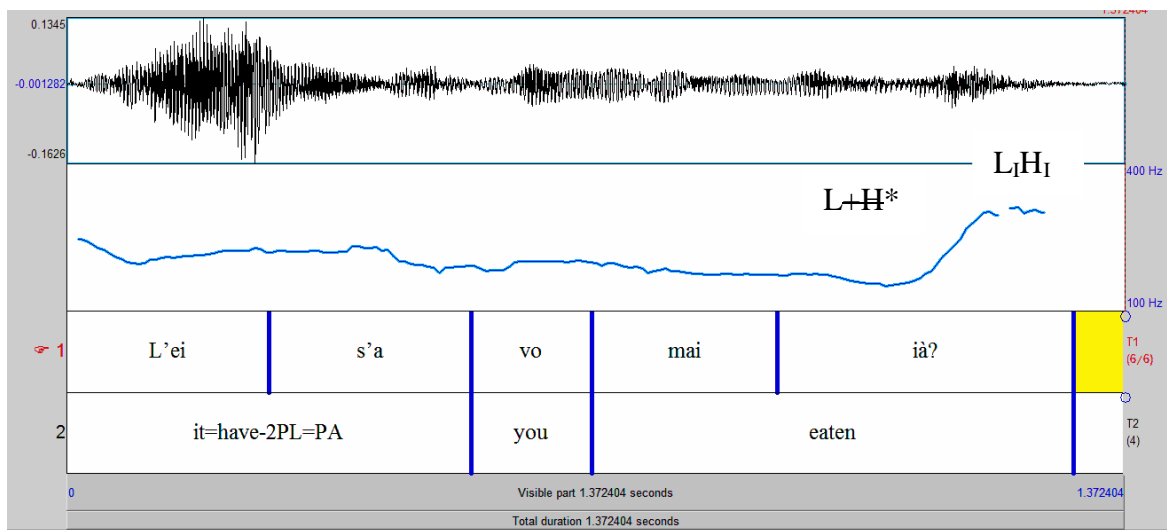


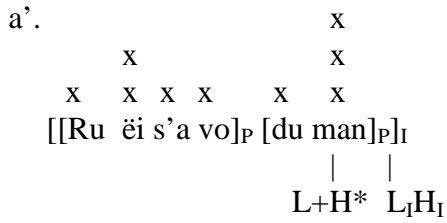
Figure 9.18: Gherdëina 2 L'èis'a vo maià?

If the main stressed syllable is closed, we either find pattern 1 as in the other varieties (12a, figure 9.19) or the late rise contour (L+H* L_IH_I) (pattern 3) which we have just observed also with open final syllables (12b, figure 9.20).

(12) Final stress on closed syllables

a. Ruëis' **a** vo duman?
 arrive-2PL PA you tomorrow

(Gherdëina)



b. Ruvëis' **a** duman?
 arrive-2PL PA tomorrow
 'Will you arrive tomorrow?'

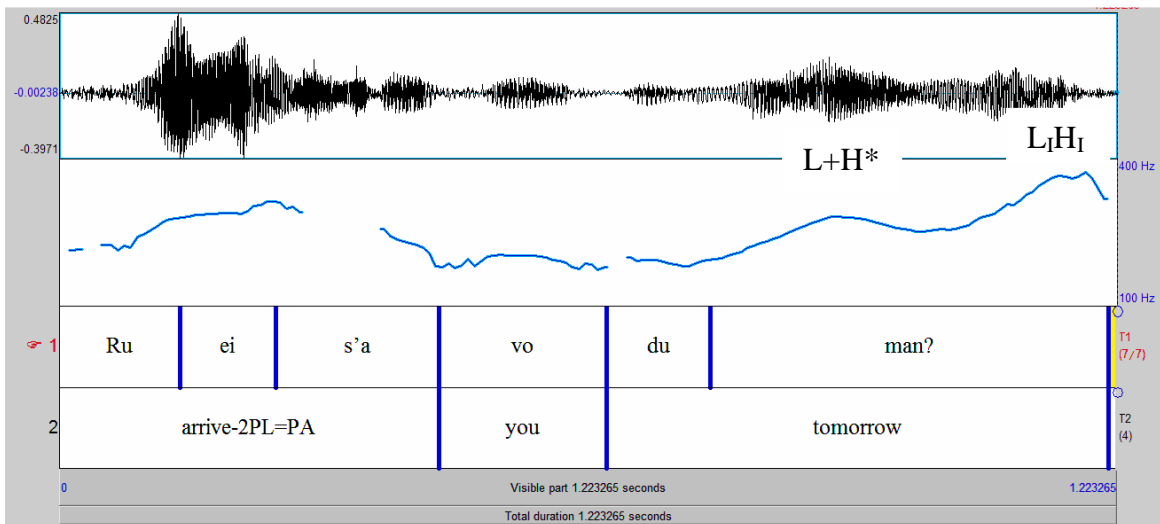
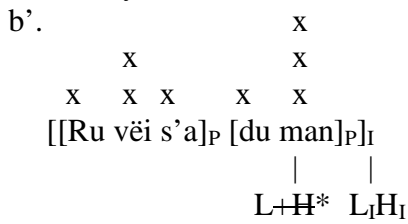


Figure 9.19: Gherdëina 4 Ruëis' a vo duman?

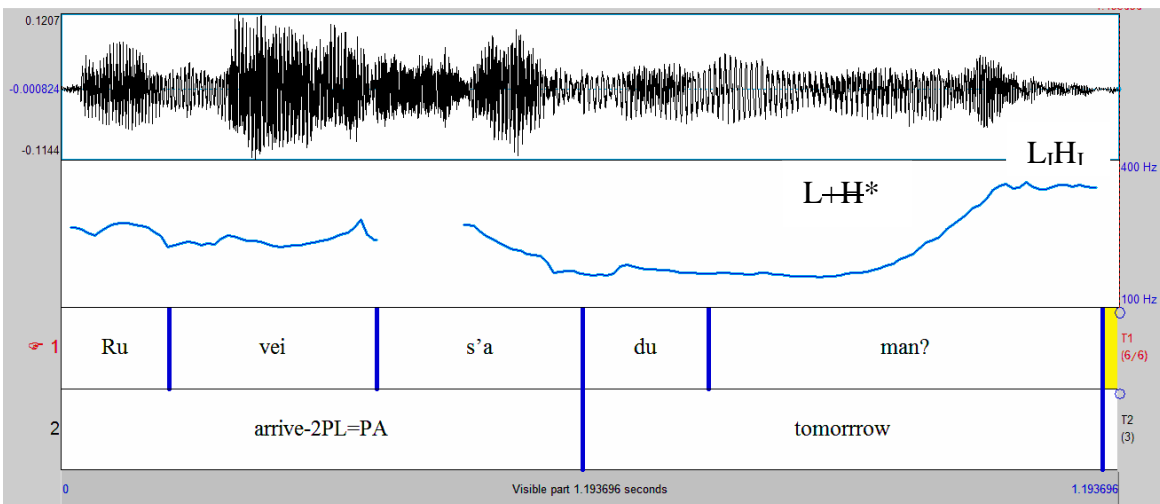


Figure 9.20: Gherdëina 3 Ruvëis' a duman?

Further motivation for analysing Gherdëina pattern 3 in terms of truncation of the H-tone of the nuclear pitch accent rather than truncation of the L₁-tone comes from the comparison with Fascian. In Fascian neutral focus yes/no-questions with main stress on the final syllable, the pitch rises straight from the beginning of the nuclear stressed syllable (13, figure 9.21) whereas in Gherdëina, the rise starts considerably later in the nuclear stressed syllable. This suggests that in Fascian, the rise is part of the nuclear pitch accent whereas in Gherdëina, the pitch rises only to attain the high target at the intonational phrase boundary.

(13) Final stress on closed syllables (Fascian)

- a. Ruède doman?
 arrive-2PL tomorrow
 ‘Will you arrive tomorrow?’
- a'. x
 x x
 x x x x x
 [[Ru è de]_P [do man]_P]_I
 | |
 L+H* L₁H₁

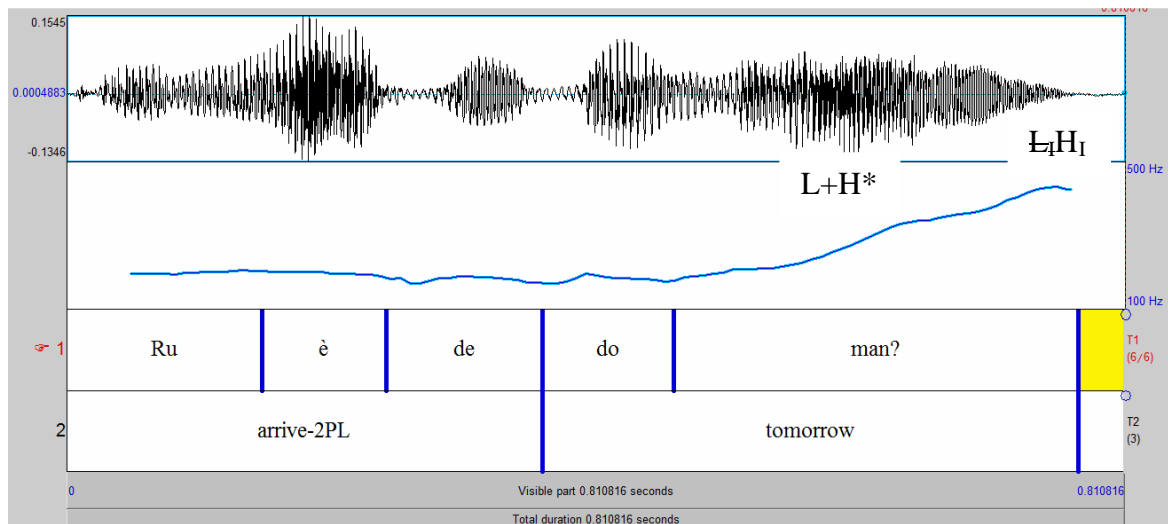


Figure 9.21: Fascian 8 Cazet Ruède doman?

In sum, Gherdëina neutral focus yes/no-questions exhibit the L+H* L₁H₁ tune found also in the other varieties. However, in cases of final stress, the rise sets in considerably later in Gherdëina than in the other varieties. I interpret this finding as a case of tonal truncation of the H-part of the bitonal L+H* nuclear pitch accent. Hence, while the varieties Badiot,

Fascian and Nònes adjust situations of tonal crowding on the utterance-final syllable by truncating the L_I -part of the L_IH_I phrase boundary combination, Gherdëina truncates the H-part of the bitonal $L+H^*$ nuclear pitch accent.

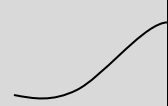






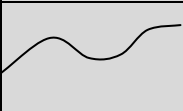
| Position of main stress | Syllable type | Pattern | Contour | |
|-------------------------|---------------|-----------|---|---|
| Penultimate | open/closed | Pattern 1 |  |  |
| Final | open | Pattern 3 |  |  |
| | closed | Pattern 3 |  |  |
| | | Pattern 1 |  |  |

Table 9.9: Variation in the implementation of the $L+H^* L_IH_I$ tune in Gherdëina neutral focus yes/no-questions

9.2.2.5 Preliminary conclusion: the neutral focus statement-yes/no-question tune

All varieties under consideration here exhibit the $L+H^* L_IH_I$ tune in neutral focus yes/no-questions but differ with respect to how this tune is actually implemented. We have observed that the pitch contour can take three different shapes (patterns) and the pattern realised was found to depend on factors such as the position of the main stressed syllable (penultimate vs. final) and the syllable type (open vs. closed).

In pattern 1, all tones of the $L+H^* L_IH_I$ tune are realised, but the pitch contour may be compressed in contexts of tonal compression, i.e. when main stress falls on the final syllable. Pattern 2 appears mainly in cases of final stress. The postnuclear falling-rising pitch movement is not observed suggesting that instead, the L_I -tone of the L_IH_I phrase boundary tone combination is truncated. Finally, instead of truncating the L_I -part of the L_IH_I phrase boundary tone in cases of tonal crowding, Gherdëina truncates the H-component of the rising bitonal $L+H^*$ nuclear pitch accent. Consequently, we observe

pattern 3, which involves low pitch on the nuclear stressed syllable (L*) and a late final rise (L₁H₁). Table 9.10 summarises the three patterns observed.


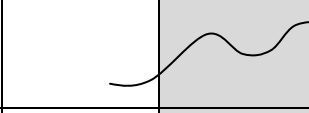


| Position of main stress | Pattern | Tune | Contour |
|-------------------------|-----------|------------------------------------|---|
| Penultimate | Pattern 1 | L+H* L ₁ H ₁ |  |
| Final | Pattern 1 | L+H* L ₁ H ₁ |  |
| | Pattern 2 | L+H* L ₁ H ₁ |  |
| | Pattern 3 | L+H* L ₁ H ₁ |  |

Table 9.10: Variation in the implementation of the L+H* L₁H₁ tune in neutral focus yes/no-questions (nuclear stressed syllable shaded in grey)

9.3 The statement-question contrast

9.3.1 A typology of indicators signalling the statement-question contrast

As regards the difference between statements and yes/no-questions and the issue of what signals the question meaning, four different factors have been discussed in the literature, (a) the nuclear pitch accent (section 9.3.1.1); (b) the terminal part of the pitch contour (9.3.1.2), (c) the temporal alignment of the nuclear pitch accent peak (9.3.1.3) and (d) scaling (9.3.1.4).

9.3.1.1 Difference in nuclear pitch accent

The nuclear pitch accent has been claimed to be the “primary cue to interrogation” in southern varieties of Italian (Grice et al. 2005b:367) and considered as the distinguishing factor between statements and questions in the varieties of Bari (Grice & Savino 2004), Palermo (Grice 1995), Naples (D’Imperio 1997, 1999, 2001; Caputo 1993, 1996) and other

southern varieties. Statements and yes/no-questions have been found to differ with respect to the nuclear pitch accent in varieties such as Palermo, Catania and Bari Italian (Grice & Savino 1995; Grice et al 2005b). While statements exhibit a falling bitonal H+L* nuclear pitch accent, yes/no-questions are characterised by a rising bitonal L*+H (Palermo and Catania Italian) or L+H* (Bari Italian) nuclear pitch accent.

| Varieties | Neutral focus statements | Neutral focus yes/no-questions |
|--|--------------------------|--------------------------------|
| Bari Italian | H+L* | L+H* |
| Palermo Italian Catania Italian | H+L* | L*+H |

Table 9.11: The statement-question contrast signalled by the nuclear pitch accent (Grice et al. 2005b)

9.3.1.2 Difference in the terminal part of the pitch contour

In other varieties, statements and yes/no-questions have been reported to share the same nuclear pitch accent and in these cases, it has been claimed that the question meaning is signalled only by the terminal part of the contour. A case in point is Pisa Italian where both statements and yes/no-questions have been found to exhibit an H+L* nuclear pitch accent but to differ with respect to the combination of edge tones (Gili Fivela 2008). While statements show an L-L% [$L_P L_I$] edge tone combination, yes/no-questions involve an H-phrase accent [H_P] followed by an L% [L_I] boundary tone, the latter being subject to optional truncation.

| | Nuclear pitch accent | Edge tones |
|------------------|----------------------|-------------|
| Statements | H+L* | $L_P L_I$ |
| Yes/no-questions | H+L* | $H_P (L_I)$ |

Table 9.12: The statement-question contrast in Pisa Italian (adapted from Gili Fivela 2008)

Similar facts have been reported for Florentine Italian. Grice et al. (2005b) argue that the H* nuclear pitch accent of Florentine Italian yes/no-questions cannot unambiguously signal that an utterance is a question. According to this study, interrogative force is

signalled by an obligatory final rise (represented as an H% boundary tone) in questions. Other examples of this category include English or Standard Italian (Avesani 1990, 1995).

9.3.1.3 Difference in temporal alignment

In work by Mariapaola D’Imperio and colleagues on the intonation of Neapolitan Italian it is argued that the question meaning is signalled by a difference in the temporal alignment of the nuclear pitch accent peak. Note, however, that what is compared in these studies are narrow focus statements and narrow focus yes/no-questions and thus not the contrast between neutral focus statements and yes/no-questions as in the other varieties studied so far. D’Imperio & House (1997) and D’Imperio (2000, 2002) show that narrow focus yes/no-questions and narrow focus statements differ in the temporal alignment of the L and H targets. The authors observe that the peaks are aligned later in questions than in statements and account for this alignment difference by proposing L+H* as the nuclear pitch accent in statements and L*+H for yes/no-questions.

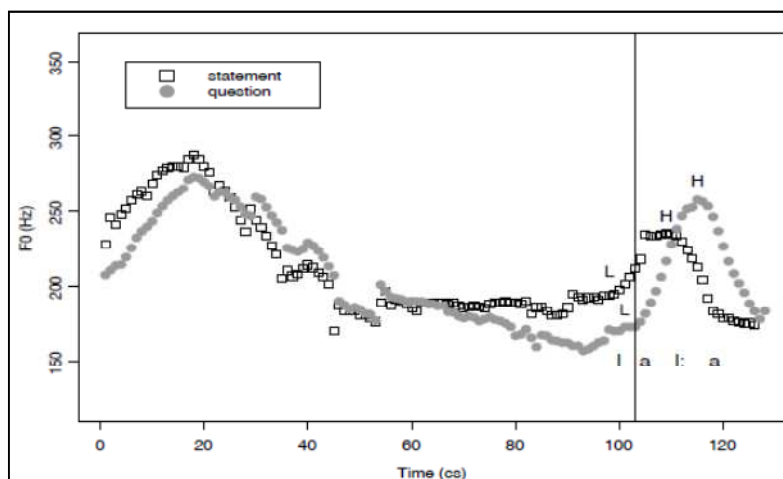


Figure 9.22: Pitch contours of the statement and the yes/no-question *Mamma andava a ballare da Lalla./?* (‘Mom used to go dancing at Lalla’s./?’), both with narrow focus on *Lalla* (D’Imperio 2000:43)¹²

¹² The vertical line indicates the onset of the stressed vowel.

9.3.1.4 Difference in scaling

In many languages, it has been argued that questions and statements differ with respect to the scaling of F_0 values. Jun & Oh (1996) on Korean and Sosa (1999) on Spanish, for instance, report that questions usually exhibit higher peaks and/or a higher global F_0 range than statements.¹³ Moreover, scaling has been argued to be relevant for the perceptual identification of questions and statements.

In sum, on the basis of the differences found between statements and yes/no-questions in the literature we can set up the following typology of cues to interrogative force.

| Type | Cue to interrogativity | Examples |
|------|------------------------|---|
| A | Nuclear pitch accent | Bari Italian, Palermo and Catania Italian |
| B | Edge tone(s) | Pisa Italian, Florentine Italian |
| C | Temporal alignment | Neapolitan Italian |
| D | Scaling | Spanish, Korean |

Table 9.13: Typology of cues to interrogative force

There might also be the case that in a given variety, the statement-question contrast is signalled by more than one factor. For Standard Italian, for instance, it has been claimed, that the edge tone (B) or a combination of the nuclear pitch accent and the edge tone (A + B) distinguishes questions from statements (cf. Agard & di Pietro 1965; Chapallaz 1979; Canepari 1980; D'Eugenio 1982; Avesani 1990; Grice et al. 2005b).

9.3.2 The statement-question contrast in the four varieties

In all four varieties under consideration, statements and yes/no-questions differ both in nuclear pitch accent and in edge tone exhibiting pitch movements in opposing directions. While neutral focus statements are characterised by a fall which in chapter 8 has been analysed in terms of a bitonal falling $H+L^*$ nuclear pitch accent, yes/no-questions exhibit a

¹³ Note that in D'Imperio's (2002) study on Neapolitan Italian, one speaker showed in fact the reverse effect: higher peaks in statements than in questions. Therefore, D'Imperio assumes that the gradient raising of the peak F_0 value is optional and subject to strong inter- and intra-speaker variability.

rising contour in the nuclear region, involving a rising bitonal L+H* nuclear pitch accent. Moreover, statements end on a low pitch level (L_I), whereas yes/no-questions are characterised by a terminal rise (L_IH_I). In what follows, I exemplify the statement-question contrast for Badiot (14a, figures 9.23–24), Fascian (15, figures 9.25–26) and Nõnes (16, figures 9.27–28) referring to data set 1 (cf. section 9.2.1), i.e. statements and yes/no-questions which, given the absence of any proclitic and enclitic subject pronouns, involve identical (morpho)syntactic structures.

(14) a. Rūves duman. (Badiot)

arrive-2SG tomorrow
 ‘You arrive tomorrow.’

a’.
 x
 x x x x
 [[Rū ves]_P [du man]_P]_I
 | |
 H+L* L_I

b. Rūves duman?
 arrive-2SG tomorrow
 ‘Do you arrive tomorrow?’

b’.
 x
 x x x x
 [[Rū ves]_P [du man]_P]_I
 | |
 L+H* L_IH_I

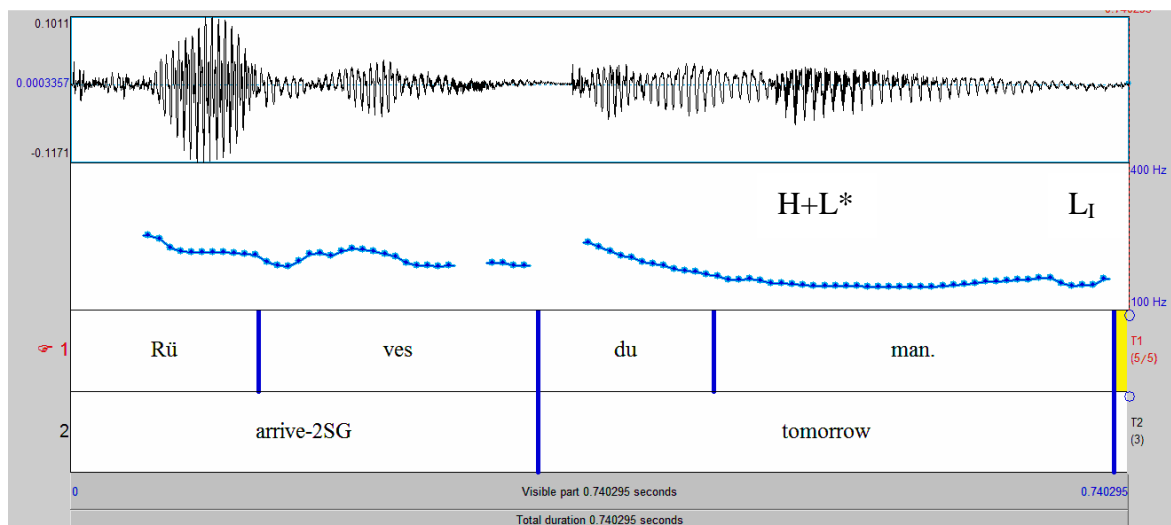


Figure 9.23: Badiot 11 Rūves duman.

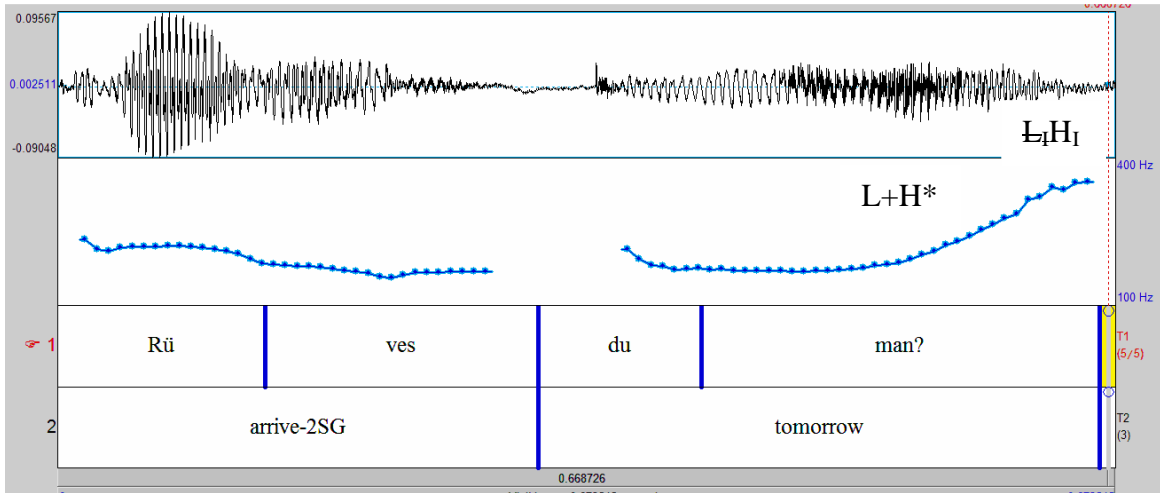


Figure 9.24: Badiot 11 Rüves duman?

(15) a. Magnon polenta. (Fascian)

eat-1PL polenta
 'We are eating polenta.'

a'.
 X
 X X
 X X X X X
 $[[\text{Magn on}]_P [\text{po len ta}]_P]_I$
 | |
 $H+L^*$ L_1

b. Magnon polenta?
 eat-1PL polenta
 'Are we eating polenta?'

b'.
 X
 X X
 X X X X X
 $[[\text{Magn on}]_P [\text{po len ta}]_P]_I$
 | |
 $L+H^*$ L_1H_1

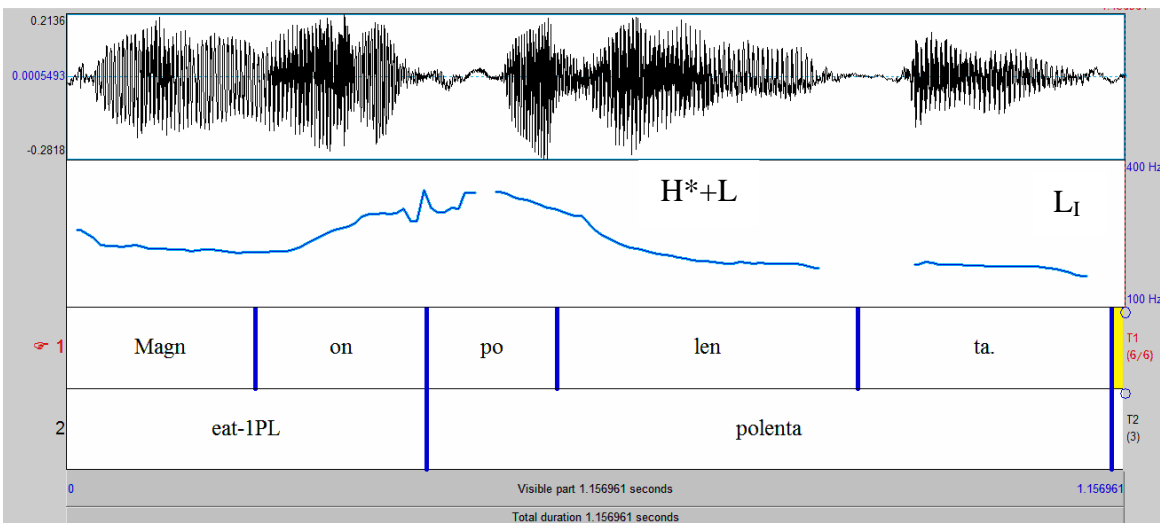


Figure 9.25: Fascian 1 Cazet Magnon polenta.

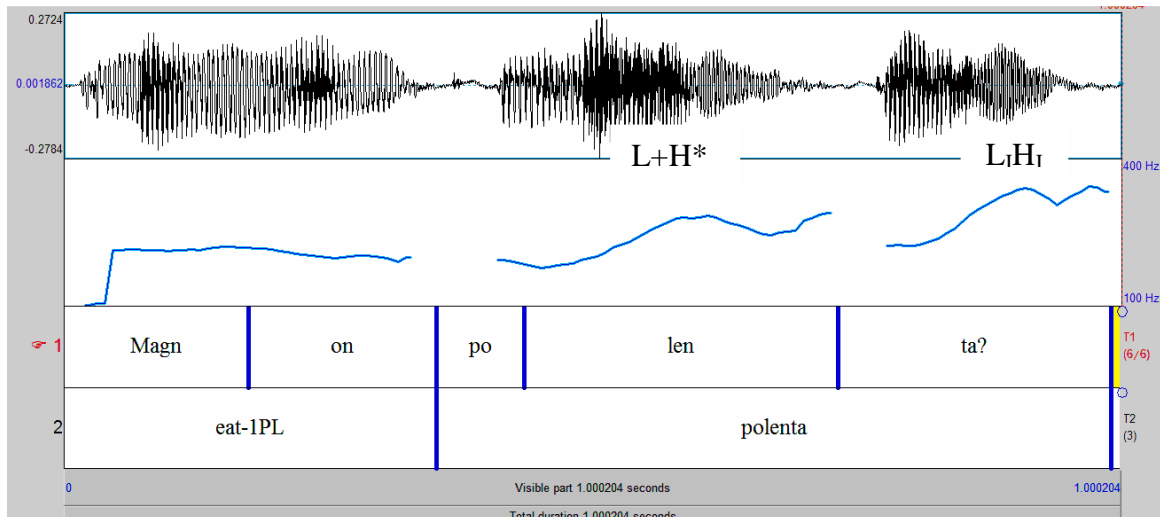


Figure 9.26: Fascian 1 Cazet Magnon polenta?

(16) a. Arivau doman. (Nònes)

arrive-2PL tomorrow
'You arrive tomorrow.'

a'.
 $\begin{array}{cc} & x \\ & x \quad x \\ x \quad x \quad x & x \quad x \\ [[A \text{ ri } \text{vau}]_P [do \text{ man}]_P]_I \\ & | \quad | \\ & H+L^* \quad L_I \end{array}$

b. Arivau doman?
 arrive-2PL tomorrow
 'Will you arrive tomorrow?'

b'.
 $\begin{array}{cc} & x \\ & x \quad x \\ x \quad x \quad x & x \quad x \\ [[A \text{ ri } \text{vau}]_P [do \text{ man}]_P]_I \\ & | \quad | \\ & L+H^* \quad L_I H_I \end{array}$

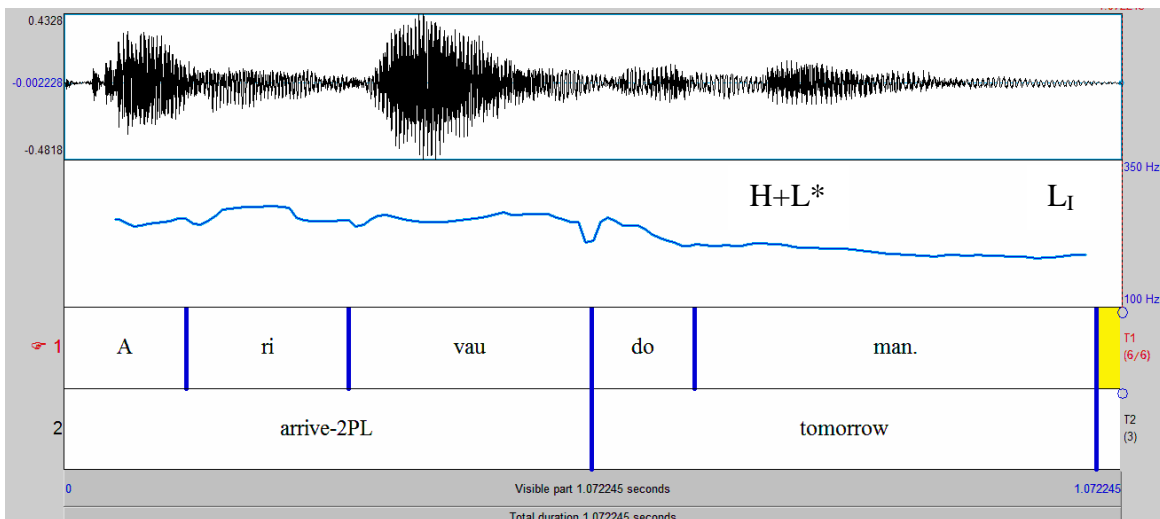


Figure 9.27: Nònes 7 Arivau doman.

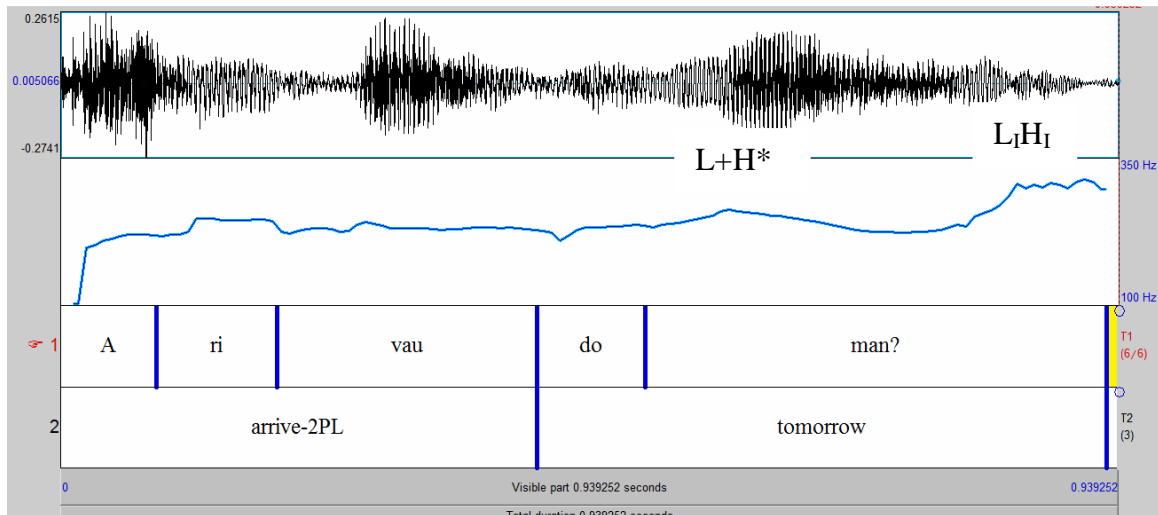


Figure 9.28: Nònes 7 Arivau doman?

In Gherdëina, in contrast, statements and yes/no-questions differ syntactically in the use of the particle *pa* in yes/no-questions. Nevertheless, statements and yes/no-questions show the same difference in nuclear pitch accent and edge tone as in the previous varieties.

(17) a. Maion da marënda. (Gherdëina)

eat-1PL PREP lunch
 ‘We are having lunch.’
 a’.
 X X
 X X X X X X
 [[Mai ion da]_P [ma rën da]_I]
 | |
 H+L* L₁

b. Maion=s’ a da marënda?

eat-1PL=SCL PA PREP lunch
 ‘Are we having lunch?’
 b’.
 X X
 X X X X X X
 [[Mai ion s’a da]_P [ma rën da]_I]
 | |
 L+H* L₁H₁

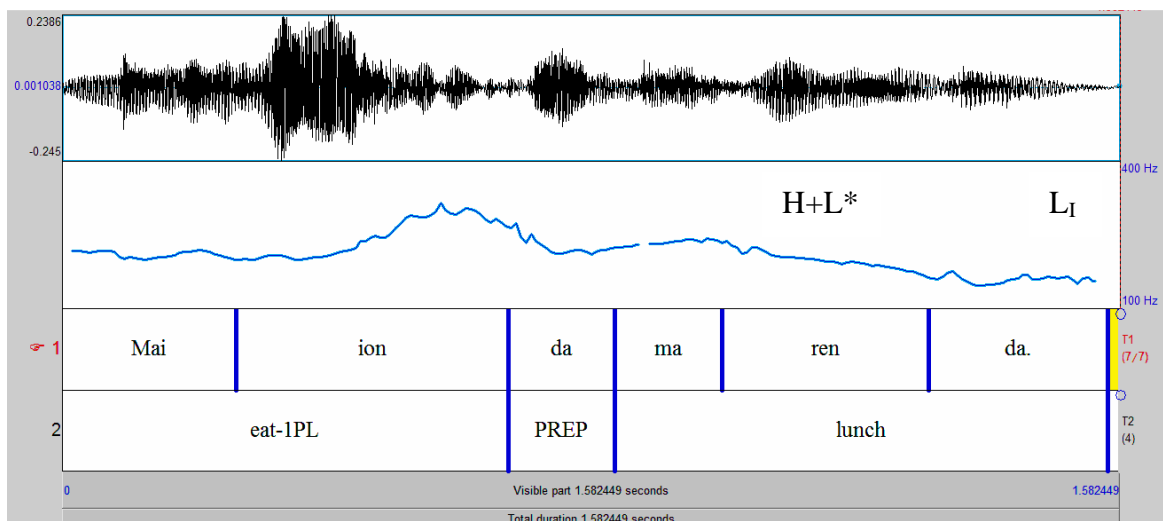


Figure 9.29: Gherdëina 1 Maion da marënda.

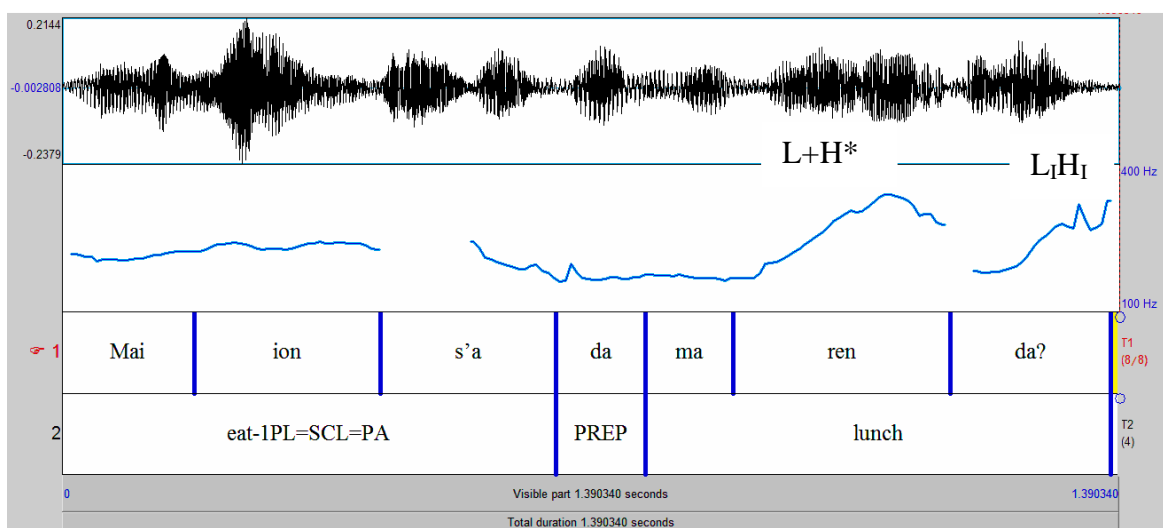


Figure 9.30: Gherdëina 1 Maions'a da marënda?

In sum, in all four varieties under consideration, statements and yes/no-questions differ in tune, i.e. in both nuclear pitch accent and in edge tone. With regard to the typology in table 9.13, Gherdëina, Badiot, Fascian and Nònes – on a par with what has been claimed for Standard Italian – involve types A and B.

| Varieties | Sentence type | Nuclear pitch accent | Edge tone(s) |
|---|------------------|----------------------|-------------------------------|
| Gherdëina Badiot Fascian Nònes | Statements | H+L* | L ₁ |
| | Yes/no-questions | L+H* | L ₁ H ₁ |

Table 9.14: The neutral focus statement-question contrast in the varieties under scrutiny

b. V`a=les a Roma?
 go-3PL=SCL.F to Rome
 ‘Are they going to Rome?’

b'.
 x
 x x x x x
 [[V`a les a]_P [Ro ma]_P]_I
 | |
 L+H* L_IH_I

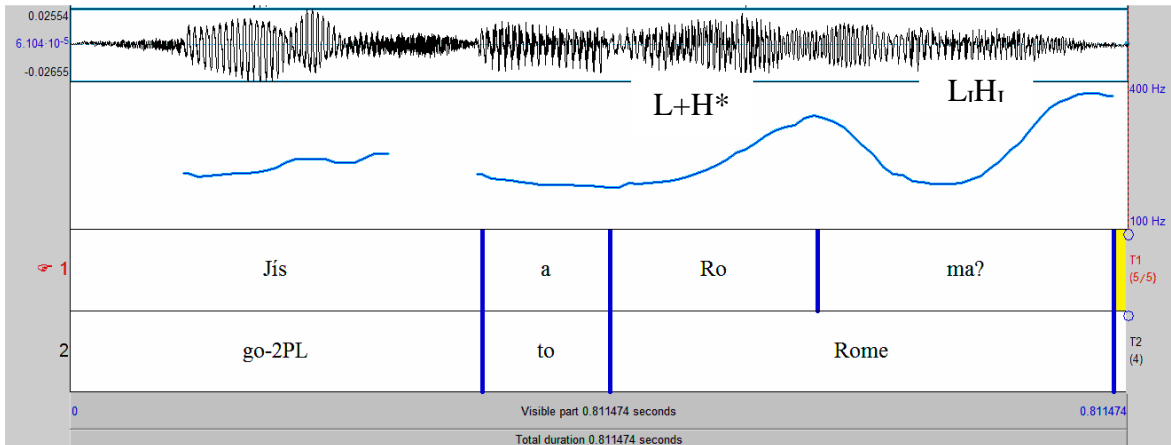


Figure 9.31: Badiot 8 J'is a Roma?

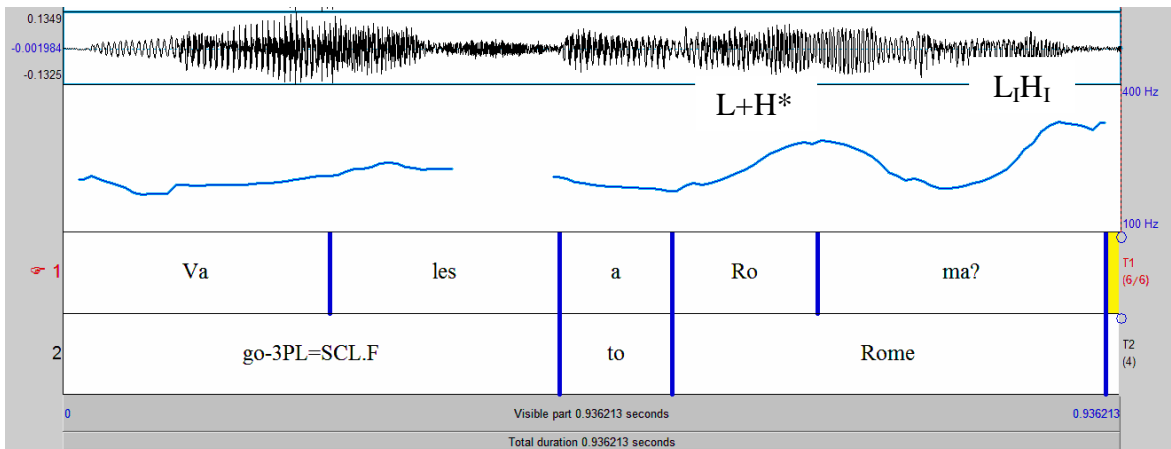


Figure 9.32: Badiot 8 V`ales a Roma?

(19) a. Saede lur`er a maia?
 know-2PL work PREP stitch
 ‘Can you knit?’

(Fascian)

a'.
 x
 x x x x x x x
 [[Sa e de]_P [lu r`er a]_P [mai ia]_P]_I
 | |
 L+H* L_IH_I

(20) a. Arivau doman?
 arrive-2PL tomorrow
 ‘Will you arrive tomorrow?’

(Nònes)

a'.
 x
 x x
 x x x x x
 [[A ri vau]_P [do man]_P]_I
 | |
 L+H* L_IH_I

b. Arive=i doman?
 arrive-3PL=SCL tomorrow
 ‘Will they arrive tomorrow?’

b'.
 x
 x x
 x x x x x
 [[A ri vei]_P [do man]_P]_I
 | |
 L+H* L_IH_I

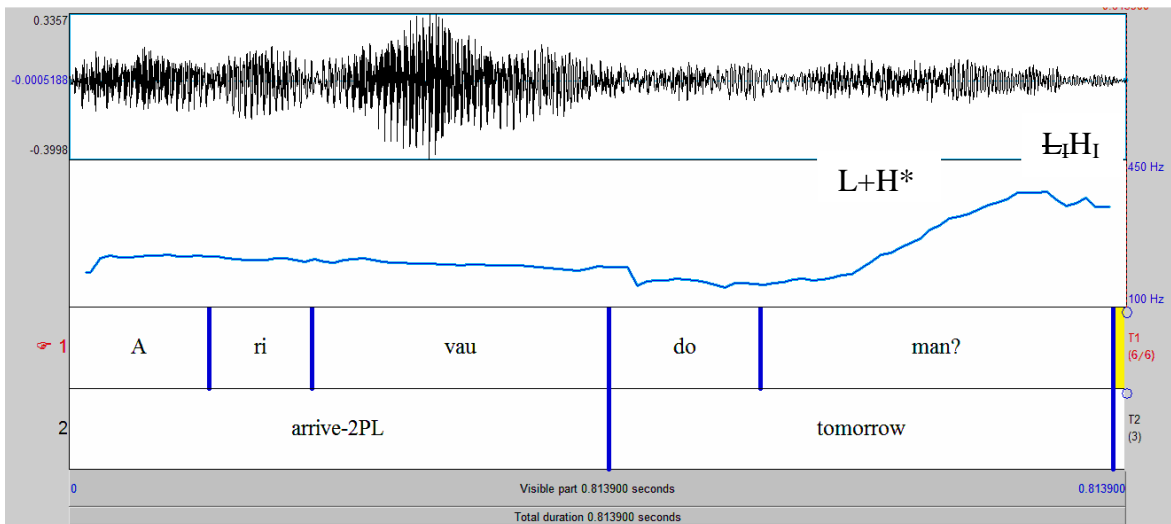


Figure 9.35: Nònes 6 Arivau doman?

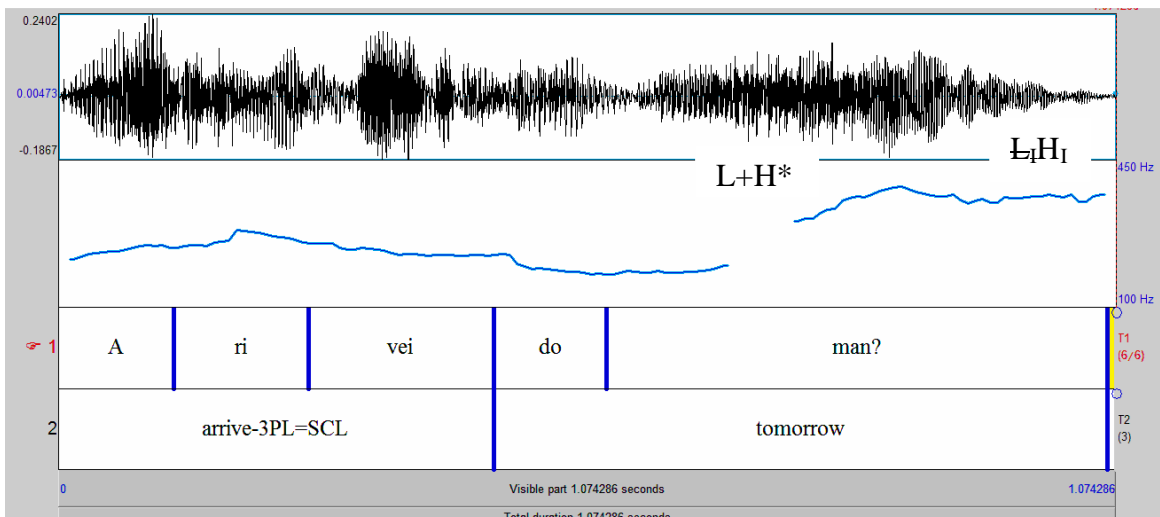


Figure 9.36: Nònes 2 Arivei doman?

Given that all varieties exhibit the same pitch contour in yes/no-questions with and without (morpho)syntactic marking there is no reason to believe that the presence of an enclitic subject pronoun influences the question tune in any relevant fashion. This observation suggests, hence, that the syntax and the prosody are autonomous in question formation.

Having examined in detail the tune in neutral focus yes/no-questions we can now move on to narrow focus yes/no-questions.

9.5 The narrow focus yes/no-question tune

Due to the position of the main stressed syllable late narrow focus might exhibit similar properties as neutral focus. Therefore, I proceed in the same fashion as with narrow focus statements and distinguish between early and late narrow focus yes/no-questions. Narrow focus yes/no-questions in all four varieties share the same basic characteristics. The nuclear pitch accent, which is aligned with the stressed syllable of the focus constituent, is a rising bitonal L+H* accent. On a par with narrow focus statements, the focused constituent in narrow focus yes/no-questions is followed by a phonological phrase boundary and the tone associated to it is an L_P phrase boundary tone. Hence, the phrasing rule stated for narrow focus statements also applies to narrow focus yes/no-questions:

- (21) Phrasing rule
- a. Insert a phonological phrase boundary after a focused constituent.
 - b. Associate an L_P tone to this phonological phrase boundary.

| | The narrow focus yes/no-question tune | |
|---|--|------------------------------------|
| Varieties | Nuclear pitch accent | Edge tones |
| Gherdëina Badiot Fascian Nònes | L+H* | L_P L_I |

Table 9.15: The narrow focus yes/no-question tune in the varieties under scrutiny

Early and late narrow focus yes/no-questions share the same tune but differ in the position of the focus constituent and hence with respect to alignment of the nuclear pitch accent. Moreover, varieties differ in the actual tonal implementation of the tune, especially in final clash contexts where different readjustment strategies are used giving rise to two different contours, the rise and the peak. I address the implementation of the narrow focus yes/no-question tune in Gherdëina (9.5.1), Badiot (9.5.2), Fascian (9.5.3) and Nònes (9.5.4).

9.5.1 Gherdëina

In Gherdëina, variation in the tonal implementation of the L+H* L_P L_I tune is observed only in late narrow focus yes/no-questions (section 9.5.1.2).

9.5.1.1 Gherdëina early narrow focus yes/no-questions

Early narrow focus yes/no-questions exhibit the L+H* L_P L_I tune independent of whether main stress falls on the (ante)penultimate (22, figures 9.37–38) or on the final syllable (23, figure 9.39) and independent of whether the main stressed syllable is open or closed.

(22) Penultimate stress in open (a) and closed (b) syllables (Gherdëina)

a. MAIs' *a* na bona marënda?
 eat-2SG PA a good lunch
 'Are you EATING a good lunch?'
 a'. x
 x
 x x x x x x x x
 [[MAI s'a na]_P [bo na ma rën da]_P]_I
 | | |
 L+H* L_P L_I

b. JON=s' *a* a Roma?
 go-1PL=SCL PA to Rome
 'Are we GOING to Rome?'
 b'. x
 x
 x x x x
 [[Jon s'a (a)]_P [Ro ma]_P]_I
 | | |
 L+H* L_P L_I

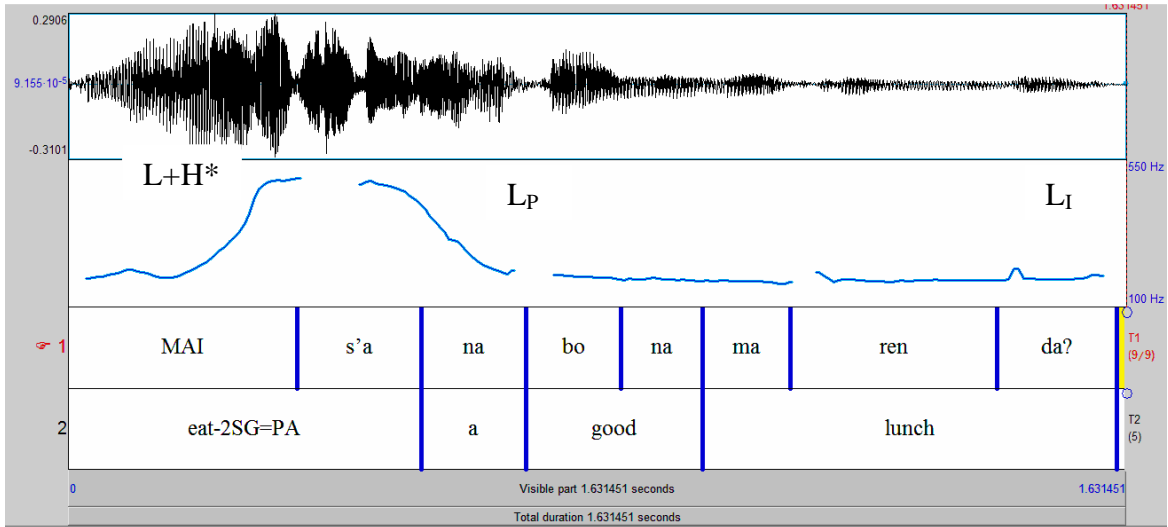


Figure 9.37: Gherdëina 4 MAIs 'a na bona marënda?

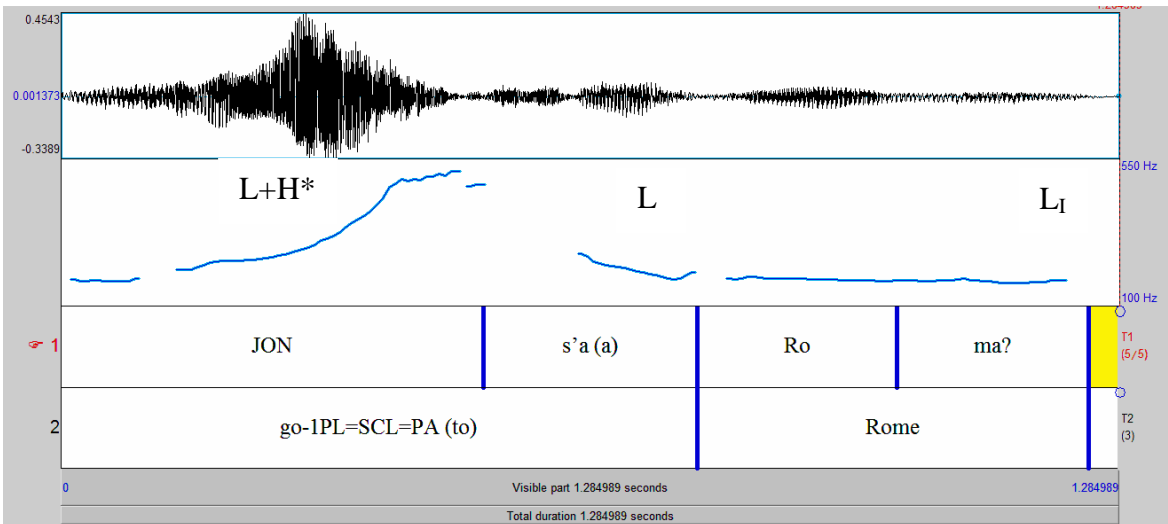


Figure 9.38: Gherdëina 4 JONs 'a a Roma?

(23) Final stress

(Gherdëina)

- a. MandÉ la marënda a l' oma?
 send-INF the lunch to the mother
 'SEND the lunch to the mother?'

a'.
 X
 X
 X X X X X X X X
 [[Man DÉ]_P [la ma rën da a]_P [l' o ma]_P]_I
 | | |
 L+H* Lp Ll

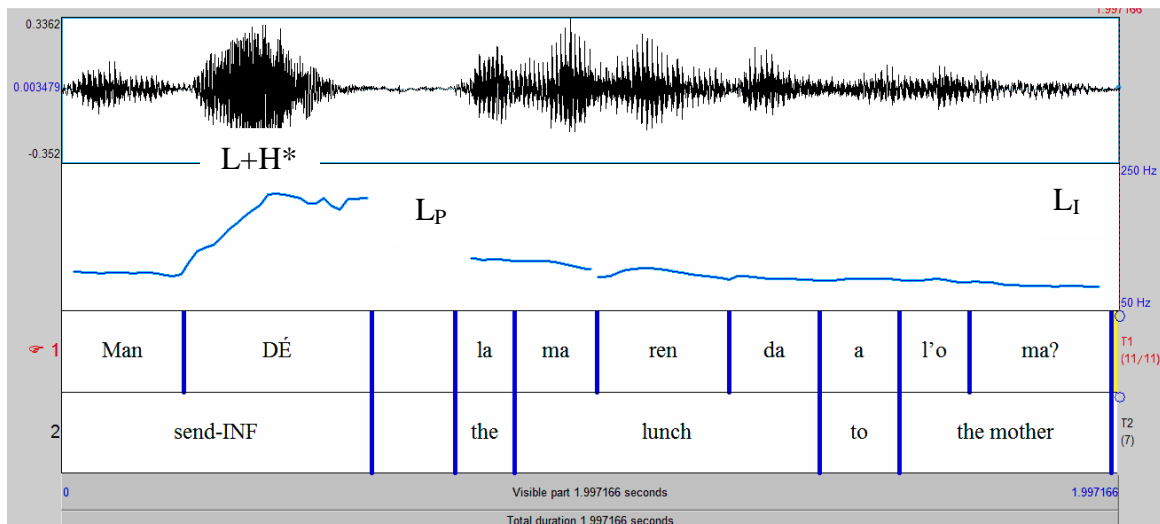


Figure 9.39: Gherdëina 6 ManDÉ la marënda a l'oma?

9.5.1.2 Gherdëina late narrow focus yes/no-questions

In Gherdëina late narrow focus yes/no-questions, the tonal implementation of the L+H* L_pL_l tune differs depending on the syllable type: when main stress falls on an open syllable, we observe a rise (24a, figure 9.40), whereas main stress on closed syllables (24b, figure 9.41; 25, figure 9.42) involves a peak-shaped contour which can be attributed to tonal crowding on the final syllable.¹⁴ On a par with what we have seen in narrow focus statements (cf. section 8.2), the pitch contour is compressed in order to enable the implementation of all tones.

- (24) Penultimate stress on open (a) and closed syllables (Gherdëina)
- a. Jon=s' **a** a ROma?
 go-1PL=SCL PA to Rome
 'Are we going to ROME?'
 a'.
 x x
 x x x x x
 [[Jon s'a a]_P [RO ma]_P]_I
 | |
 L+H* L_pL_l

¹⁴ My corpus does not include any late narrow focus yes/no-questions with main stress on an open final syllable.

b. Mais' a na bona maRĒNda?
 eat-2SG PA a good lunch
 'Are you eating a good LUNCH?'

b'.
 X X X X X X X X
 X X X X X X X X
 [[Mai s'a na]_P [bo na ma RĒN da]_P]_I
 | |
 L+H* L_P L_I

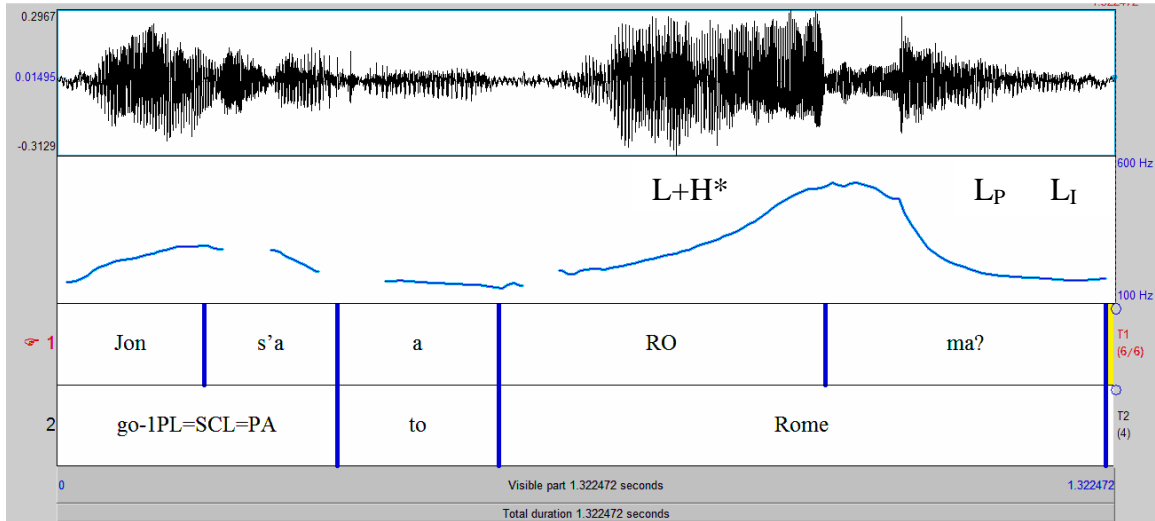


Figure 9.40: Gherdëina 4 Jons'a a ROma?

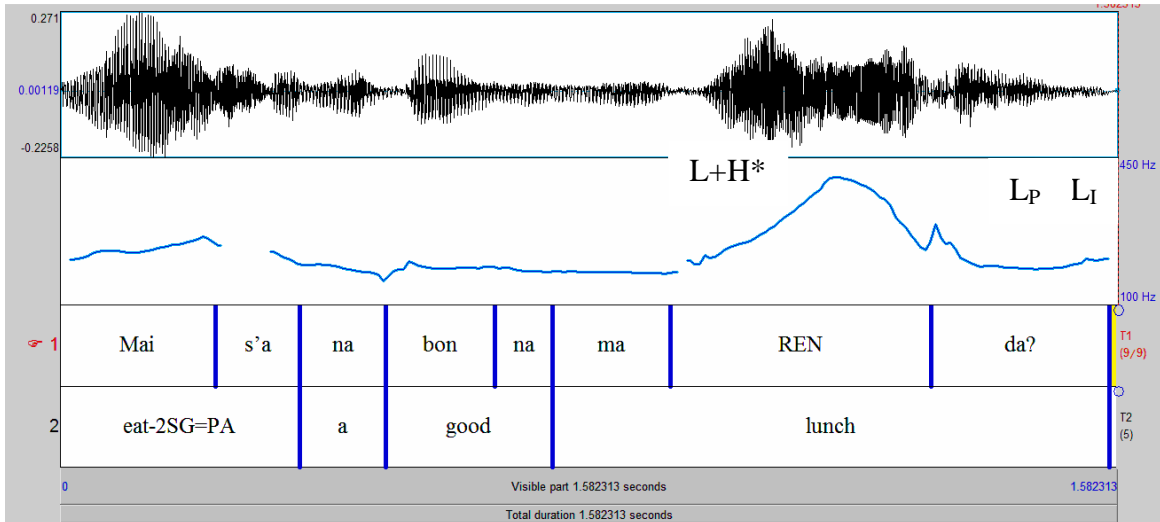


Figure 9.41: Gherdëina 4 Mais'a na bona maRĒNda?

(25) Final stress

(Gherdëina)

a. Es' *a* tu maià n MËIL?
 have-2SG PA you eaten an apple
 'Have you eaten an APPLE?'

a'.
 X
 X X X X X X X
 [[E s'a tu]_P [mai ià n MËIL]_P]_I
 | |
 L+H* L_P L_I

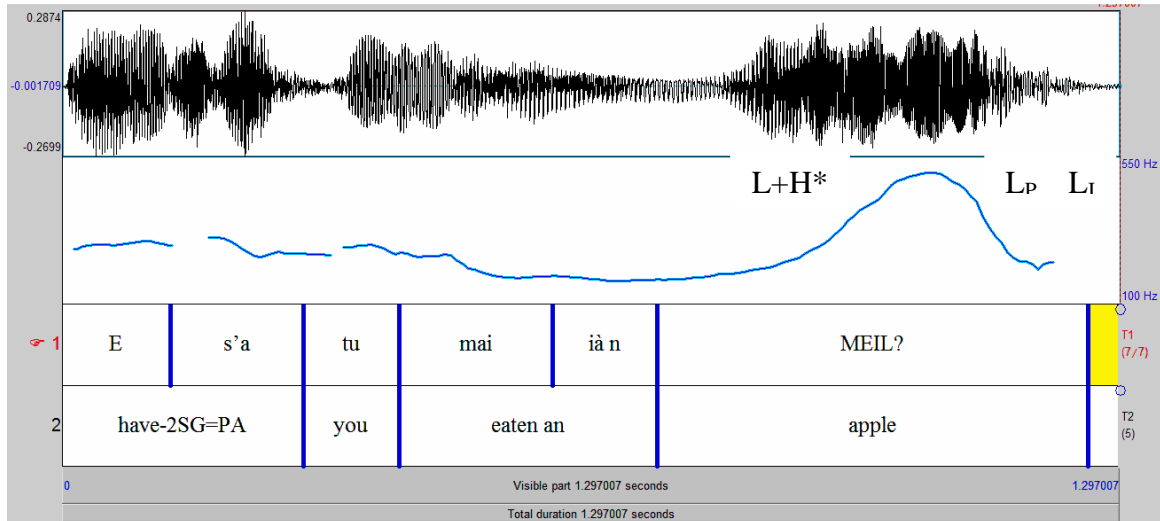


Figure 9.42: Gherdëina 4 Es'a tu maià n MËIL?

Hence, in Gherdëina, the position of the focused constituent in the utterance (early vs. late) does not influence the tune, but has an impact on its implementation given that late narrow focus is more prone to give rise to final clash contexts involving tonal crowding. Gherdëina adjusts this kind of situation by tonal compression which results in a peak-shaped pitch contour in the nuclear region. Note that in late narrow focus yes/no-questions, also the syllable type (open vs. closed) matters for how the tune is implemented.

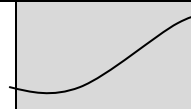
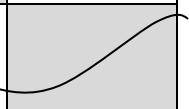
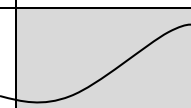
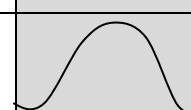
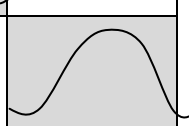
| Position of the focused constituent | Position of main stress | Syllable type | Contour |
|-------------------------------------|-------------------------|---------------|---|
| Early | Penultimate | open / closed |  |
| | Final | |  |
| Late | Penultimate | open |  |
| | | closed |  |
| | Final | closed |  |

Table 9.16: Variation in the implementation of the L+H* L_P L_I tune in Gherdëina narrow focus yes/no-questions (nuclear stressed syllable highlighted in grey)

9.5.2 Badiot

The implementation of the L+H* L_P L_I tune in Badiot essentially parallels the Gherdëina facts, except that there is no variation in pitch contour in late narrow focus yes/no-questions with main stress on a penultimate syllable.

9.5.2.1 Badiot early narrow focus yes/no-questions

In early narrow focus yes/no-questions, we always observe the peak irrespective of whether main stress falls on the penultimate (26, figure 9.43) or the final syllable (27, figure 9.44–45) and irrespective of whether the main stressed syllable is open or closed.^{15 16}

¹⁵ My corpus does not contain usable data for Badiot early narrow focus yes/no-questions with penultimate stress on an open syllable.

¹⁶ Note that the early narrow focus yes/no-question with main stress on a final open syllable (27, figure 9.44), rather unusually, exhibits a final rise.

(26) Penultimate stress

(Badiot)

- a. MANges=t na buna pulëinta?
- eat-2SG=SCL a good polenta
- ‘Are you EATING a good polenta?’

a'. x
 x
 x x x x x x x
 [[MAN gest]_P [na bu na pu lëin ta]_P]_I
 | | |
 L+H* L_P L_I

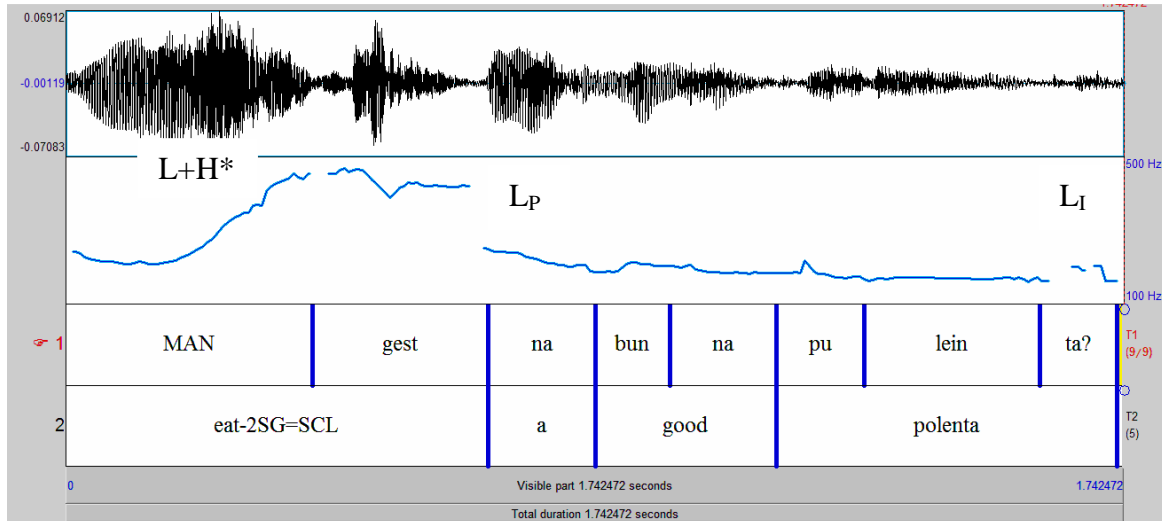


Figure 9.43: Badiot 9 MANgest na buna pulëinta?

(27) Final stress on open (a) and closed (b) syllables

(Badiot)

- a. JÍ a Roma?
- go-INF to Rome
- ‘GO to Rome?’

a'. x
 x
 x x x x
 [[JÍ]_P [a Ro ma]_P]_I
 | | |
 L+H* L_P L_IH_I

- b. JUN a Roma?
- go-1PL to Rome
- ‘Are we GOING to Rome?’

b'. x
 x
 x x x x
 [[JUN]_P [a Ro ma]_P]_I
 | | |
 L+H* L_P L_I

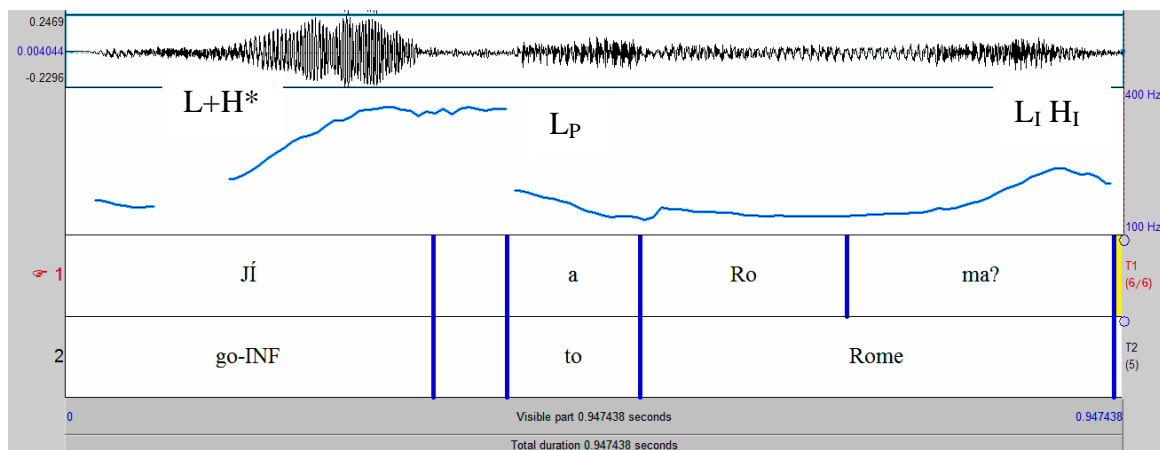


Figure 9.44: Badiot 3 JÍ a Roma?

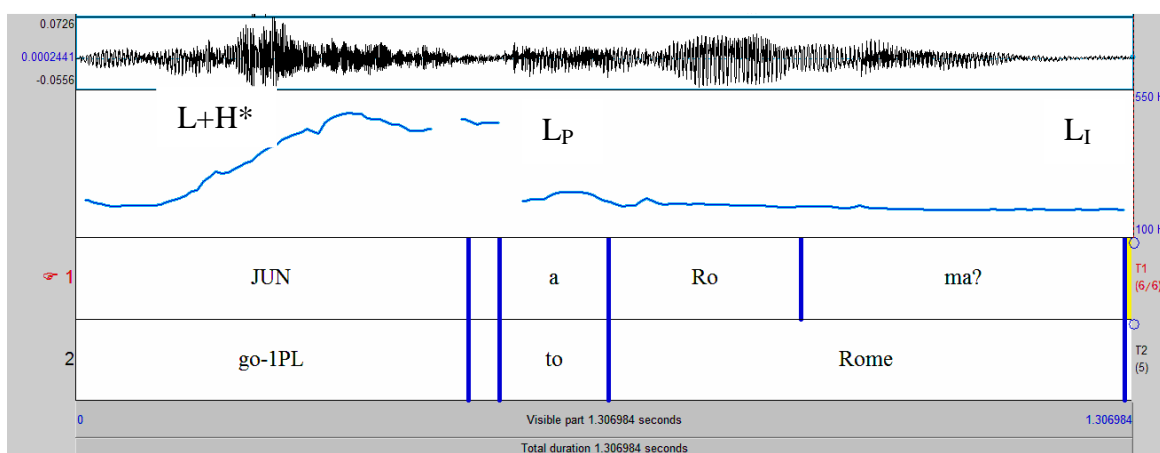


Figure 9.45: Badiot 7 JUN a Roma?

9.5.2.2 Badiot late narrow focus yes/no-questions

Badiot late narrow focus yes/no-questions exhibit a rise in case of penultimate stress (28, figures 9.46–47) and a peak in case of final stress (29, figure 9.48).¹⁷

(28) Penultimate stress on open (a) and closed (b) syllables (Badiot)

a. Portëis la marëna a la Uma?
 bring-2PL the lunch to the mother
 ‘Do you bring the lunch to the MOTHER?’

a'.
 X X X X X X X X X X
 X X X X X X X X X X
 [[Por tèis]_P [la ma rën na]_P [a la U ma]_P]_I
 | ||
 L+H* L_P L

¹⁷ My corpus does not contain any late narrow focus yes/no-questions involving main stress on a final open syllable.

b. Manges=t na buna puLËINta?
 eat-2SG=SCL a good polenta
 ‘Eat a good polenta?’

b'.
 X X X X X X X X X
 X X X X X X X X X
 [[Man gest na]_P [bu na]_P [pu LËIN ta]_P]_I
 | |
 L+H* L_P L_I

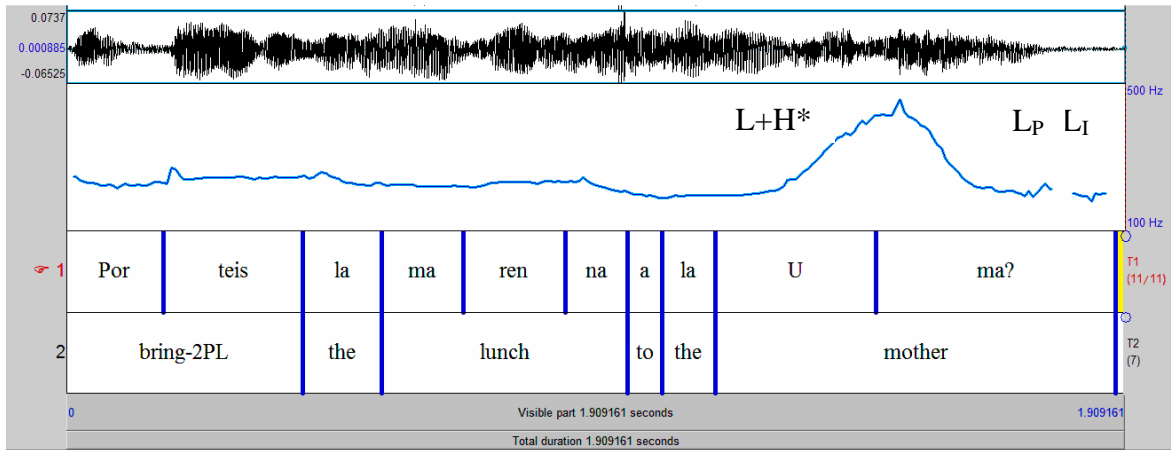


Figure 9.46: Badiot 7 Portëis la marëna a la Uma?

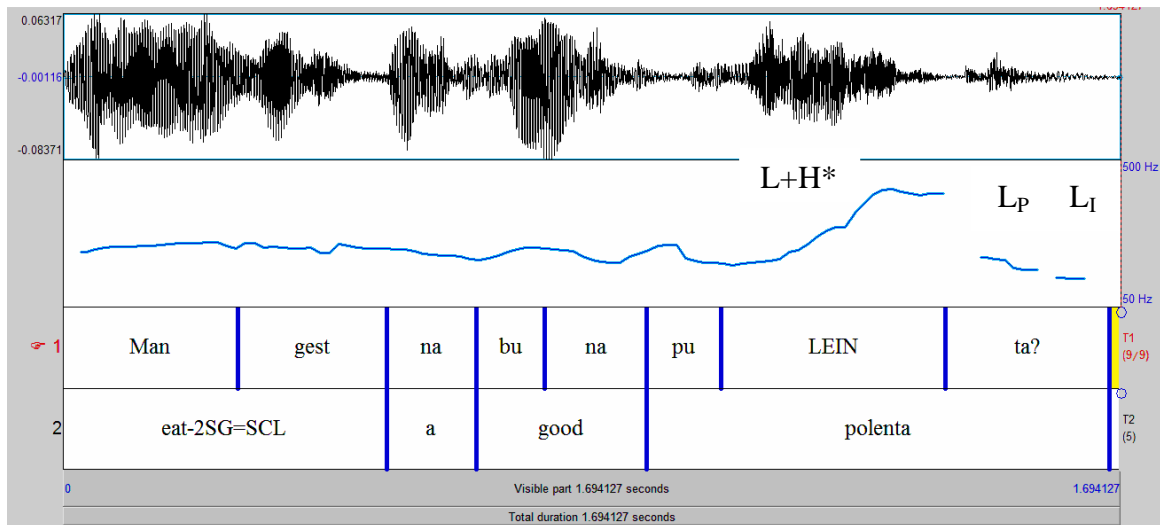


Figure 9.47: Badiot 9 Mangest na buna puLËINta?

(29) Final stress

(Badiot)

a. Laor=eres BUN?
 work-3PL.F=SCL well
 ‘Do they work well?’

a'.
 X X X X X
 X X X X X
 [[La o re res]_P [BUN]_P]_I
 | |
 L+H* L_P L_I

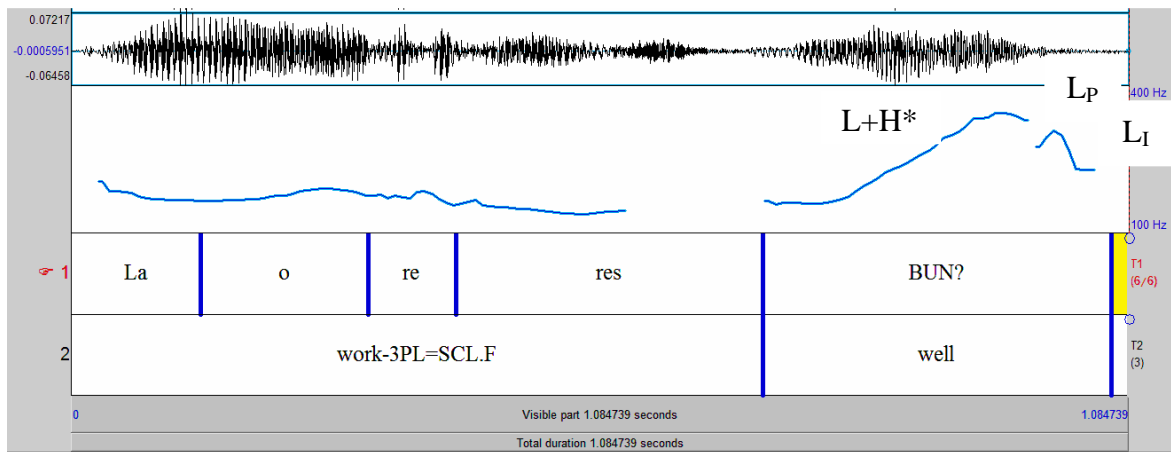


Figure 9.48: Badiot 3 Laoreres BUN?

The implementation of the $L+H^* L_P L_I$ tune in Badiot shows a very clear-cut picture. We usually observe the rise, except for cases of late narrow focus with main stress on a final syllable, which exhibit a peak due to tonal truncation in final clash contexts.

| Position of the focused constituent | Position of main stress | Syllable type | Contour |
|-------------------------------------|-------------------------|---------------|---------|
| Early | Penultimate | open / closed | |
| | Final | | |
| Late | Penultimate | open / closed | |
| | Final | closed | |

Table 9.17: Variation in the implementation of the $L+H^* L_P L_I$ tune in Badiot narrow focus yes/no-questions (nuclear stressed syllable highlighted in grey)

9.5.3 Fascian

Fascian shows differences in the tonal implementation of the $L+H^* L_P L_I$ tune depending on the position of main stress, and in cases of late narrow focus, also on syllable type.

9.5.3.1 Fascian early narrow focus yes/no-questions

When main stress falls on the penultimate syllable, Fascian early narrow focus yes/no-questions exhibit a rise (30, figures 9.49–50), whereas in case of final stress, we observe a peak which can be attributed to tonal compression due to tonal crowding on the main stressed syllable (31, figures 9.51–52).

(30) (Ante)penultimate stress on open (a) and closed (b) syllables (Fascian)

a. JO=ne a Roma?
 go-1PL=SCL to Rome
 ‘Are we GOING to Rome?’

a'. x
 x
 x x x x x
 [[JO ne]_P [a Ro ma]_P]_I
 | | |
 L+H* L_P L_I

b. MAGNe=to na bona polenta?
 eat-2SG=SCL a good polenta
 ‘Are you EATING a good polenta?’

b'. x
 x
 x x x x x x x x
 [[MAGN e to]_P [na bo na po len ta]_P]_I
 | | |
 L+H* L_P L_I

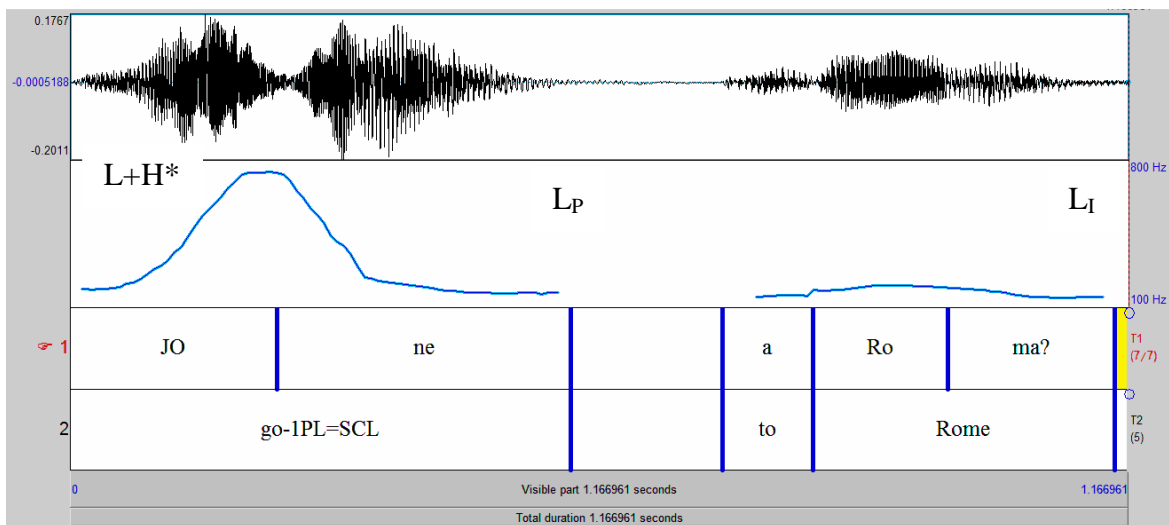


Figure 9.49: Fascian 10 JO ne a Roma?

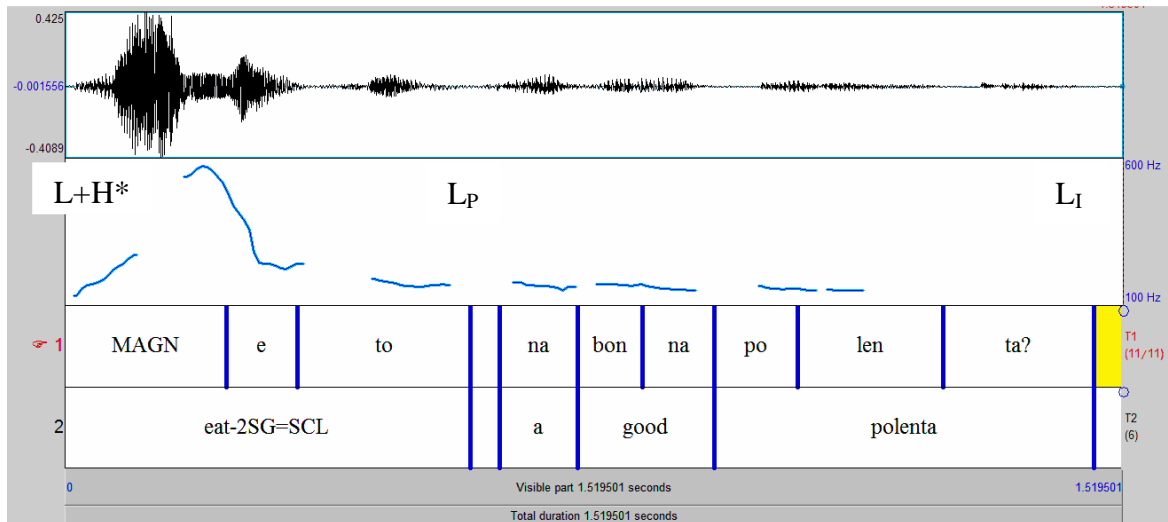


Figure 9.50: Fascian 10 MAGNeto na bona polenta?

(31) Final stress on open (a) and closed (b) syllables

(Fascian)

a. MaNAU n loroloi a la mama?
 send-2PL a clock to the mother
 ‘Do we SEND a clock to mum?’

a'. x
 x
 x x x x x x x x x
 [Ma NAU]_P [n lo ro loi a la ma ma]_P_I
 | | |
 L+H* L_P L_I

b. MaNON n orloi a la mama?
 send-1PL a clock to the mother
 ‘Do we SEND a clock to mum?’

b'. x
 x
 x x x x x x x x x
 [Ma NON]_P [n or loi a la ma ma]_P_I
 | | |
 L+H* L_P L_I

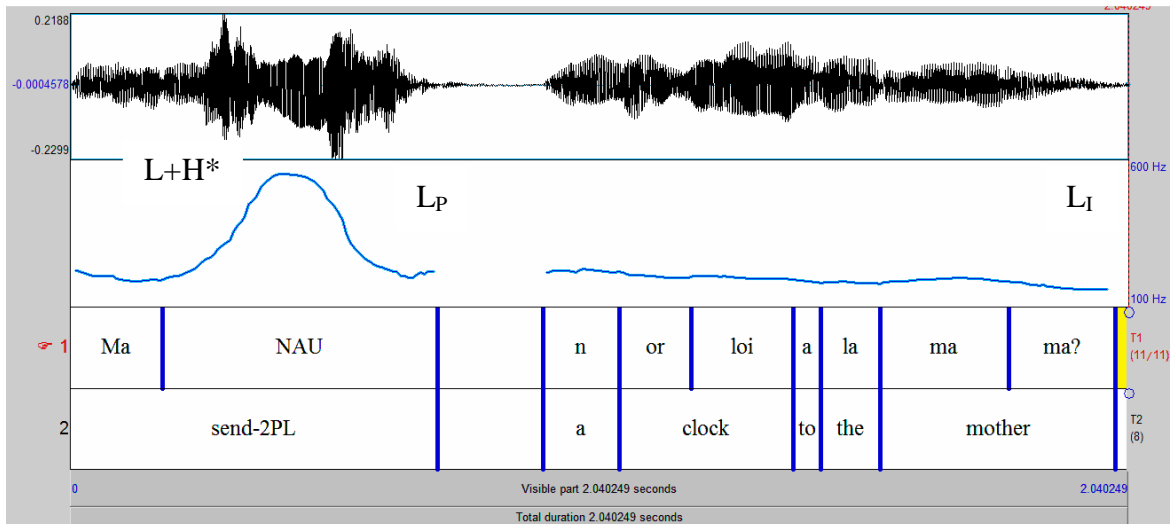


Figure 9.51: Fascian 10 Moenat MaNAU n orloi a la mama?

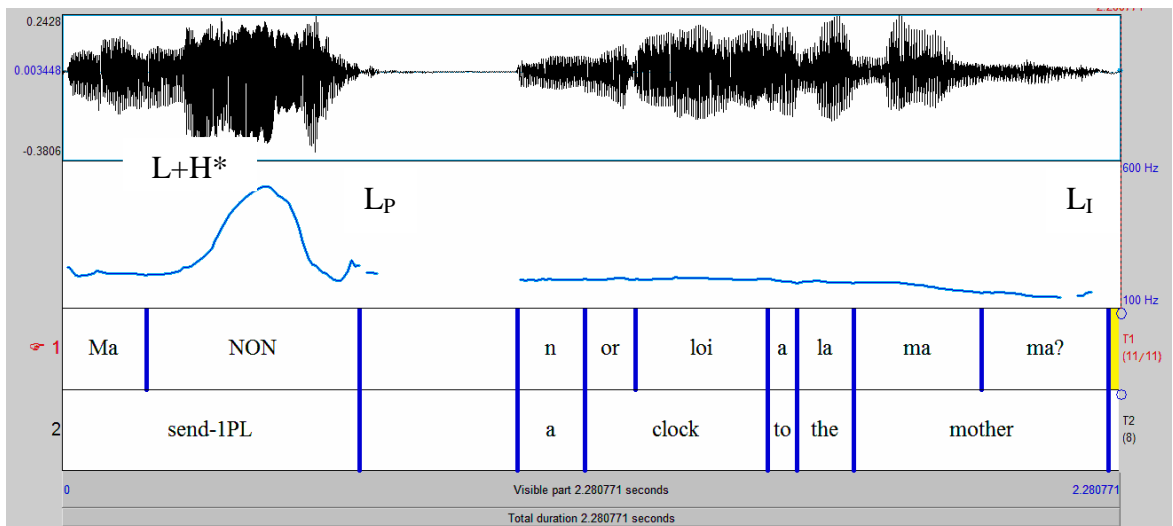


Figure 9.52: Fascian 4 MaNON n orloi a la mama?

9.5.3.2 Fascian late narrow focus yes/no-questions

Fascian late narrow focus yes/no-questions with penultimate stress exhibit a rise when the main stressed syllable is open (32a, figure 9.53) and a peak when it is closed (32b, figure 9.54). Final stress also involves the peak (33, figure 9.55).¹⁸

¹⁸ My corpus does not contain Fascian late narrow focus yes/no-questions with main stress on an open final syllable.

(32) a. Ge manon=e n orloi a la MAMA? (Fascian)
 DAT send-1PL=SCL a watch to the mother
 ‘Do we send a watch to MUM?’

a'.
 X
 X
 X X X X X X X X X X
 [[Ge ma no ne n]_P [or loi a la]_P [MA ma]_P]_I
 | |
 L+H* L_P L_I

b. Magnon=e na bona poLENTa?
 eat-1PL=SCL a good polenta
 ‘Are we eating a good POLENTA?’

b'.
 X
 X
 X X X X X X X X X
 [[Magn o ne na bo na]_P [po LEN ta]_P]_I
 | |
 L+H* L_P L_I

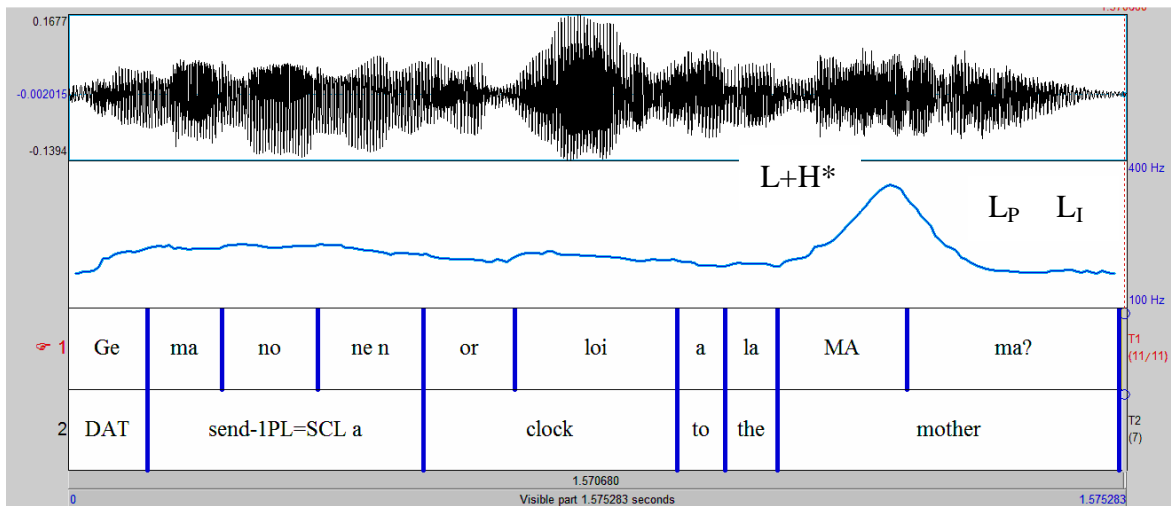


Figure 9.53: Fascian 8 Cazet Ge manone n orloi a la MAMA?

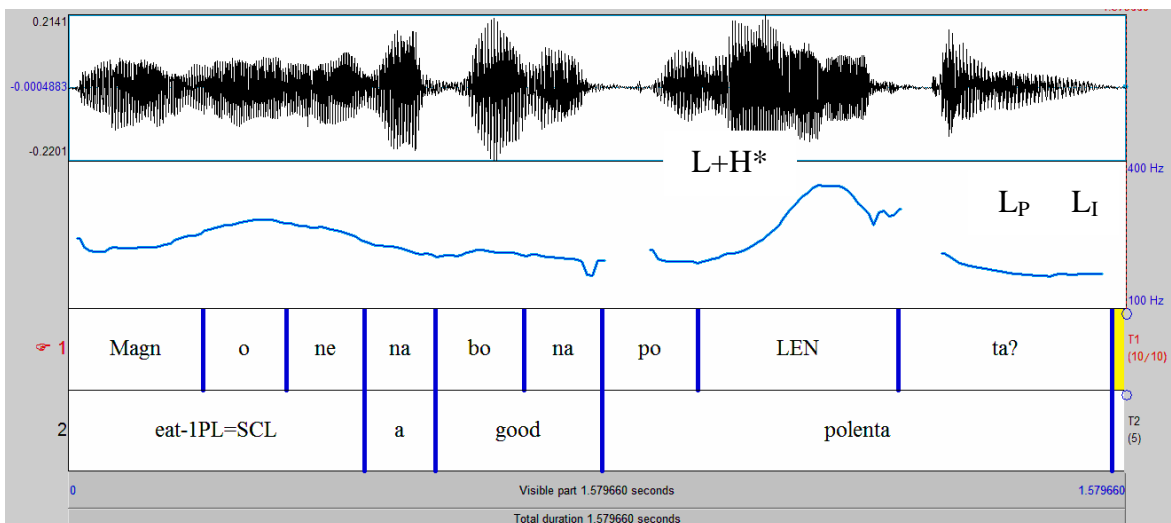


Figure 9.54: Fascian 8 Cazet Magnone na bona poLENTa?

(33) Final stress

(Fascian)

a. Ruau doMAN?
arrive-2PL tomorrow
'Will you arrive TOMORROW?'

a'.
 x
 x
 x x x x
[[Ru au]_P [do MAN]_P]_I
 | ||
 L+H* L_P L_I

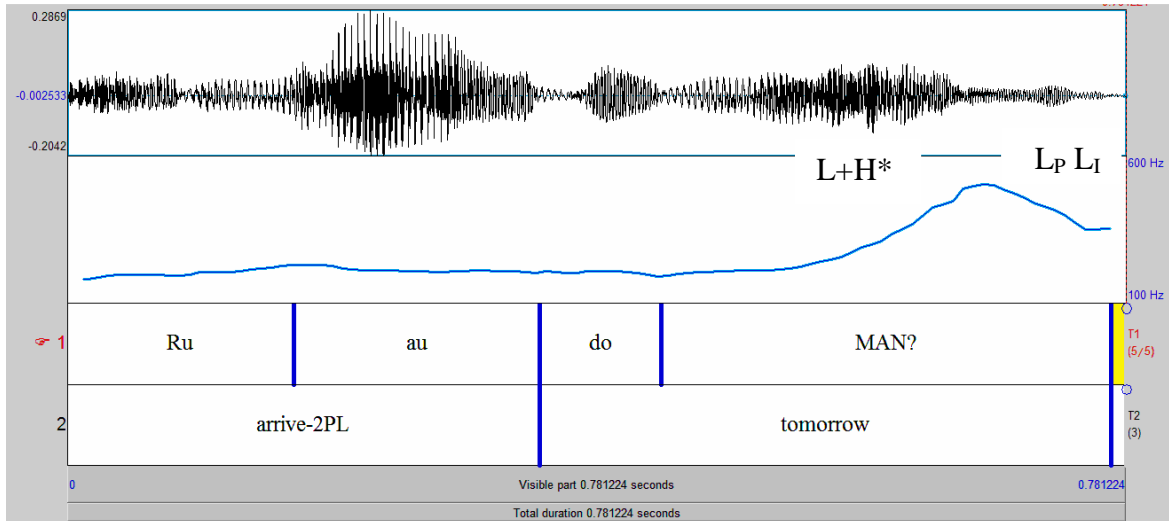


Figure 9.55: Fascian 10 Ruau doMAN?

In sum, Fascian narrow focus yes/no-questions exhibit the peak-shaped contour in cases of tonal crowding, otherwise we observe the rise. Note that, on a par with Gherdëina (cf. table 9.16) in cases of late narrow focus with penultimate stress, also the syllable type matters for the way the tune is implemented.

| Position of the focused constituent | Position of main stress | Syllable type | Contour |
|-------------------------------------|-------------------------|---------------|---------|
| Early | Penultimate | open / closed | |
| | Final | open / closed | |
| Late | Penultimate | open | |
| | | closed | |
| | Final | closed | |

Table 9.18: Variation in the implementation of the L+H* L_P L_I tune in Fascian narrow focus yes/no-questions (nuclear stressed syllable highlighted in grey)

9.5.4 Nònes

In Nònes narrow focus yes/no-questions, the implementation of the L+H* L_P L_I tune depends mainly on the position of main stress.

9.5.4.1 Nònes early narrow focus yes/no-questions

Nònes early narrow focus yes/no-questions show a rise in cases of penultimate stress on open syllables (34a, figure 9.56); in all other cases, we observe a peak-shaped contour in the nuclear region.

(34) Penultimate stress on open (a) and closed (b) syllables (Nònes)

- a. LaOres a maia?
work-2SG PREP stitch
‘Do you KNIT?’
- a.’
- | | | | | | |
|------|----------------|------|----------------|---|---|
| x | | | | | |
| x | | | | | |
| x | x | x | x | x | x |
| [[La | O res a] | [mai | ia] | | |
| | | | | | |
| L+H* | L _P | | L _I | | |

b. MAGNes na bona minestra?
 eat-2SG a good soup
 ‘Are you EATING a good soup?’

b'. x
 x
 x x x x x x x
 [[MAGN es na]_P [bo na mi nes tra]_P]_I
 | | | |
 L+H* L_P L_I

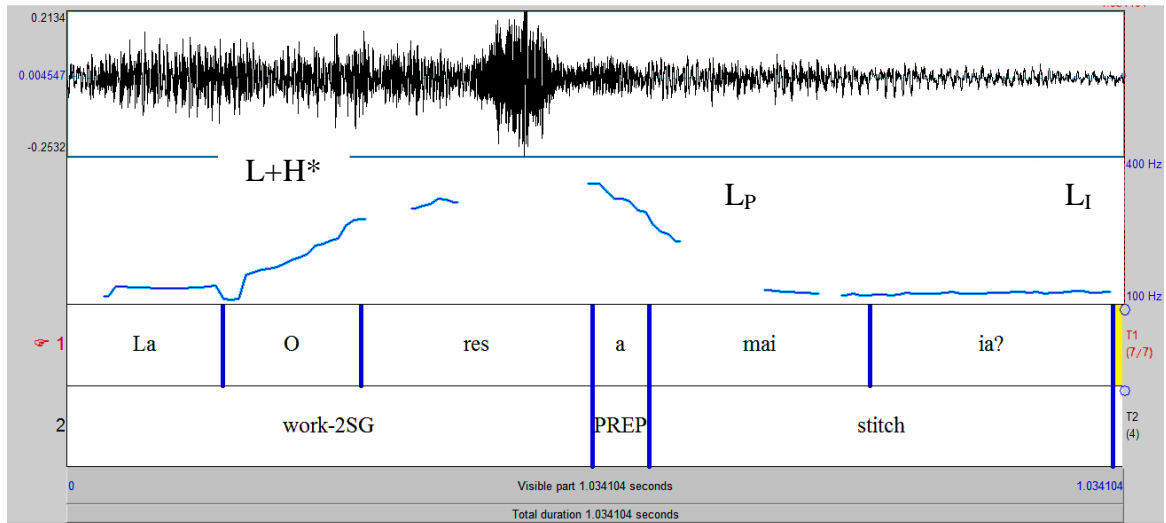


Figure 9.56: Nònes 4 LaOres a maia?

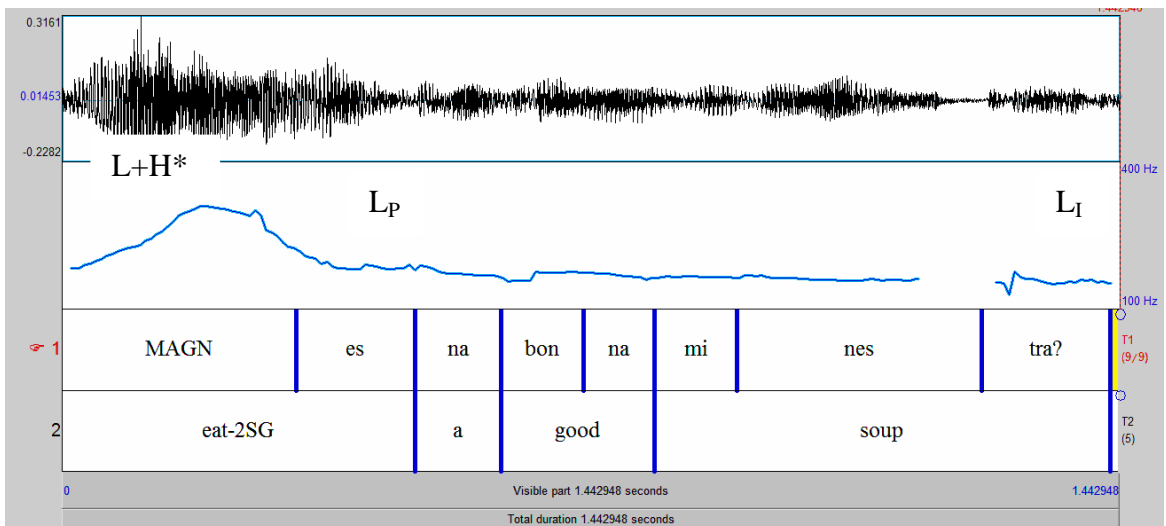


Figure 9.57: Nònes 6 MAGNes na bona minestra?

(35) a. ManDAU na maia a la mare? (Nònes)
 send-2PL a pullover to the mother
 ‘Do you SEND the pullover to mother?’

a'.
 x
 x
 x x x x x x x x
 [[Gi man DAU]_P [na mai ia]_P [a vos sa ma re]_P]_I
 | | |
 L+H* L_P L_I

b. MagnAR na bona minestra?
 eat-INF a good soup
 ‘Are we going to EAT a good soup?’

b'.
 x
 x
 x x x x x x x
 [[Magn AR]_P [na bon na mi nes tra]_P]_I
 | | |
 L+H* L_P L_I

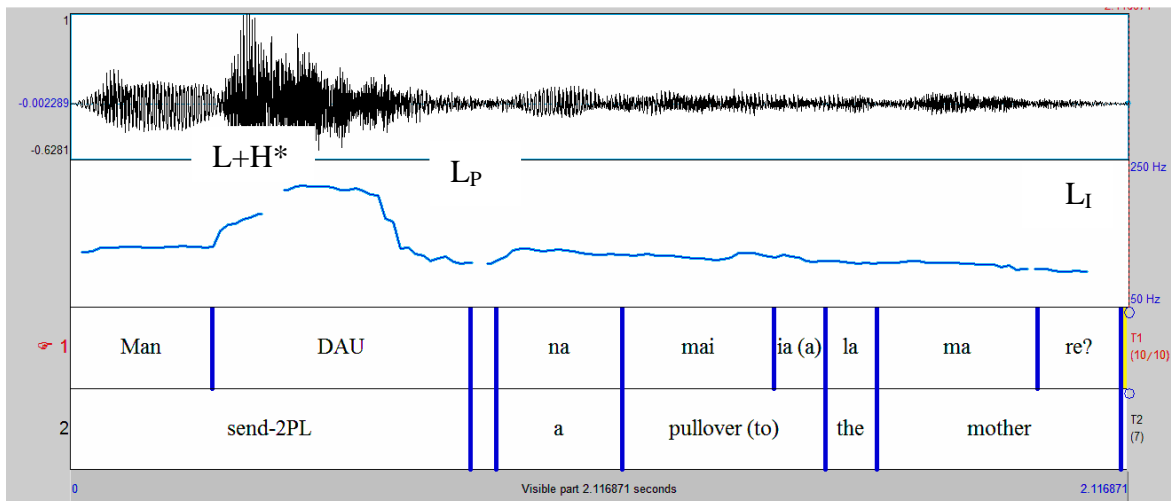


Figure 9.58: Nònes 1 ManDAU na maia (a) la mare?

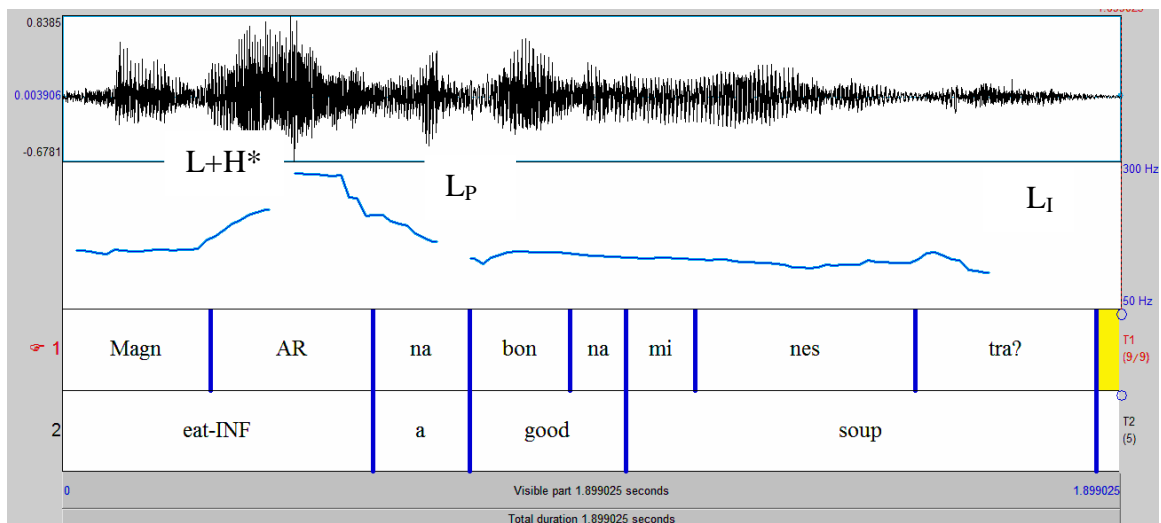


Figure 9.59: Nònes 1 MagnAR na bona minestra?

9.5.4.2 Nònes late narrow focus yes/no-questions

Nònes late narrow focus yes/no-questions with penultimate stress (36, figures 9.60–61) exhibit the rise whereas final stress involves the peak (37, figures 9.62–63).

(36) Penultimate stress on open (a) and closed (b) syllables (Nònes)

a. Ge mandes na maia a to MAMA?
 DAT send-2SG a pullover to your mother
 ‘Do you send a pullover to your MUM?’

a'.
 X X X X X X X X
 [[Ge man des na]_P [mai ia(a) to]_P [MA ma]_P]_I
 | |
 L+H* L_P L_I

b. Magn=el la poLENta?
 eat-3SG=SCL the polenta
 ‘Is he eating POLENTA?’

b'.
 X X X X X X
 [[Magn el la]_P [po LEN ta]_P]_I
 | |
 L+H* L_P L_I

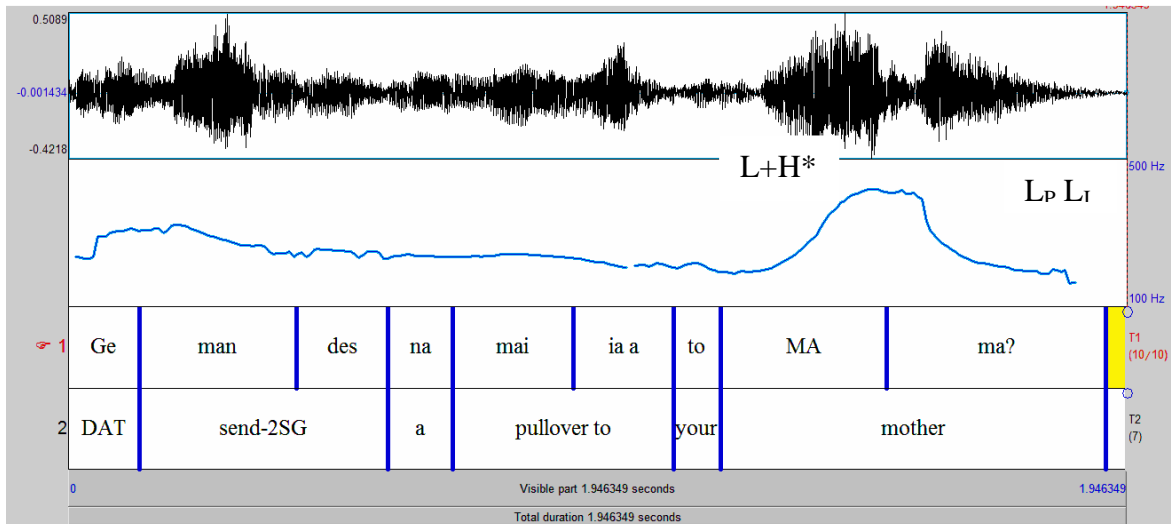


Figure 9.60: Nònes 2 Ge mandes na maia a to MAMA?

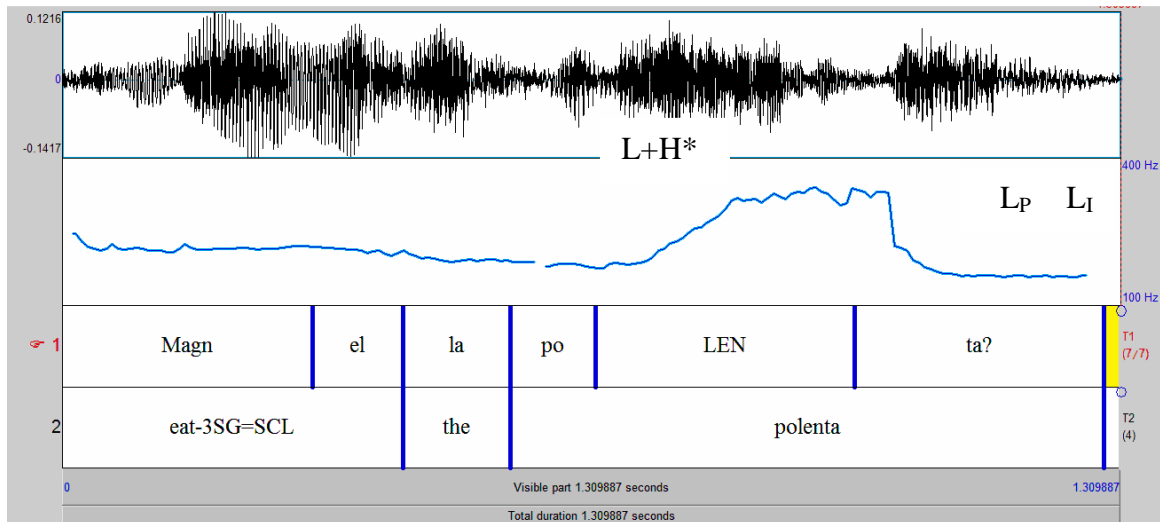


Figure 9.61: Nònes 2 Magnel la poLENTa?

(37) a. As magnà tut l forMAI? (Nònes)

have-2SG eaten all the cheese
 'Have you eaten the whole CHEESE?'

a'.
 X
 X
 X X X X X X
 [[As magn à tut l]_P [for MAI]_P]_I
 | |
 L+H* L_P L_I

b. Nan=te a RoMEN?
 go-1PL=SCL to Romeno
 'Are we going to ROMENO?'

b'.
 X
 X
 X X X X X
 [[Nan te a]_P [Ro MEN]_P]_I
 | |
 L+H* L_P L_I

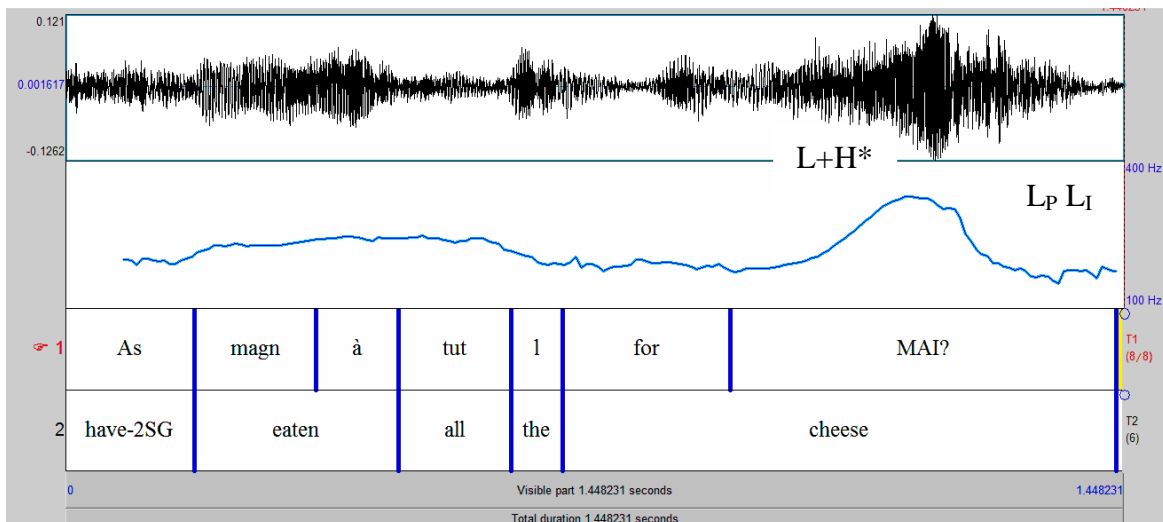


Figure 9.62: Nònes 2 As magnà tut l forMAI?

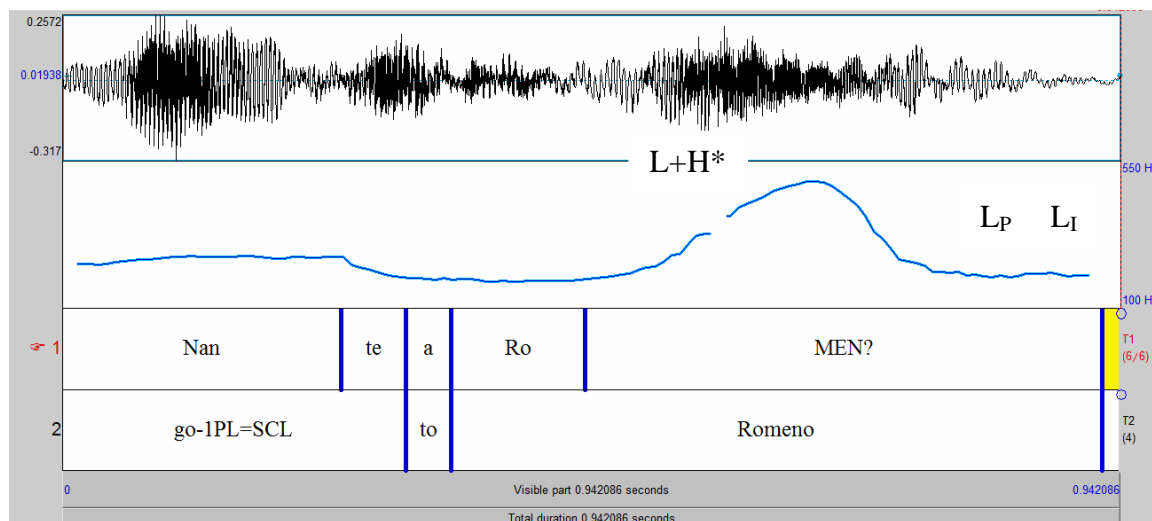


Figure 9.63: Nònes 7 Nante a RoMEN?

Table 9.19 summarises the details of the implementation of the L+H* L_P L_I tune in Nònes narrow focus yes/no-questions.

| Position of the focused constituent | Position of main stress | Syllable type | Contour |
|-------------------------------------|-------------------------|---------------|---------|
| Early | Penultimate | open | |
| | | closed | |
| | Final | open / closed | |
| Late | Penultimate | open / closed | |
| | Final | open / closed | |

Table 9.19: Variation in the implementation of the L+H* L_P L_I tune in Nònes narrow focus yes/no-questions (nuclear stressed syllable highlighted in grey)

9.6 Conclusion

9.6.1 The neutral focus yes/no-question tune and the (neutral focus) statement-question contrast

Neutral focus yes/no-questions in all four varieties share the L+H* L_IH_I tune.

| The neutral focus yes/no-question tune | | |
|---|----------------------|-------------------------------|
| Varieties | Nuclear pitch accent | Edge tones |
| Gherdëina Badiot Fascian Nònes | L+H* | L _I H _I |

Table 9.20: The neutral focus yes/no-question tune in the varieties under consideration

The tonal implementation of this tune, however, was found to differ depending on factors such as the position of the main stressed syllable in its phonological phrase (penultimate vs. final) or the syllable type (open vs. closed). In contexts of tonal crowding, especially when main stress falls on the final syllable (‘final clash contexts’), adjustment strategies such as tonal compression or tonal truncation are used in order to facilitate the realisation of tones, however, varieties differ with respect to the adjustment strategy chosen. Table 9.21 shows the three different patterns identified and the adjustment strategies to which they are due.

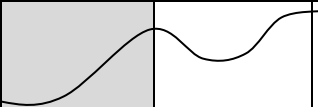
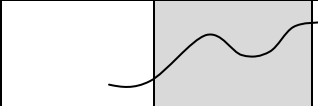
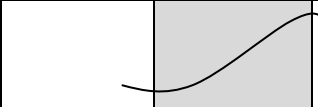

| Position of main stress | Pattern | Tune | Contour | Adjustment strategy |
|-------------------------|-----------|---------------------------------------|--|---------------------|
| Penultimate | Pattern 1 | L+H* L _I H _I |  | — |
| Final | Pattern 1 | L+H* L _I H _I |  | tonal compression |
| | Pattern 2 | L+H* L _I H _I |  | tonal truncation |
| | Pattern 3 | L+H* L _I H _I |  | tonal truncation |

Table 9.21: Variation in the implementation of the L+H* L_IH_I tune in neutral focus yes/no-questions (nuclear stressed syllable shaded in grey)

Regarding the contrast between neutral focus yes/no-questions and neutral focus statements, all four varieties differ both in nuclear pitch accent and in edge tone(s). While statements involve a fall and a terminally low F_0 , yes/no-questions exhibit a rise and a terminally high pitch.

| Varieties | Sentence type | Nuclear pitch accent | Edge tone(s) |
|---------------------|-------------------------|----------------------|-------------------------------|
| Gherděina Badiot | Statements | H+L* | L _I |
| Fascian Nònes | Yes/no-questions | L+H* | L _I H _I |

Table 9.22: The neutral focus statement-question contrast in the varieties under scrutiny

Moreover, we have seen that the presence of (morpho)syntactic marking, e.g. an enclitic subject pronoun indicating inverted word order and hence signalling interrogative force, does not influence the prosody; the tune and the temporal alignment are the same irrespective of whether (morpho)syntactic marking is present or not. This finding suggests that the prosody and the (morph)syntax are autonomous.

9.6.2 The narrow focus yes/no-question tune and the (narrow focus) statement-question contrast

Narrow focus yes/no-questions involve a rise through the main stressed syllable of the focused constituent followed by low pitch, transcribed in terms of an L+H* L_P L_I tune.

| The narrow focus yes/no-question tune | | |
|---|----------------------|-------------------------------|
| Varieties | Nuclear pitch accent | Edge tones |
| Gherděina Badiot Fascian Nònes | L+H* | L _P L _I |

Table 9.23: The narrow focus yes/no-question tune in the varieties under scrutiny

On a par with narrow focus statements (cf. section 8.2) also narrow focus yes/no-questions involve insertion of a phonological phrase boundary to the right of the focused constituent.

- (38) Phrasing rule
- Insert a phonological phrase boundary after a focused constituent.
 - Associate an L_P tone to this phonological phrase boundary.

Similarly as in neutral focus statements, the tonal implementation of the $L+H^* L_P L_I$ tune differs depending on the position of the main stressed syllable in its phonological phrase and the syllable type. As shown in table 9.24, two different patterns have been observed, a rise and a peak.

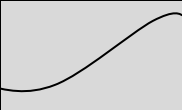
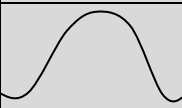
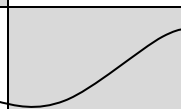
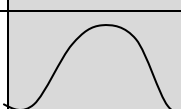
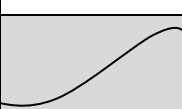
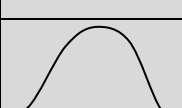
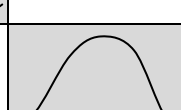
| Position of the focused constituent | Position of main stress | Contour | |
|-------------------------------------|-------------------------|--|---|
| Early | Penultimate |  | G, B, F, N |
| | |  | N |
| | Final | G, B |  |
| | | F, N |  |
| Late | Penultimate |  | G, B, F, N |
| | |  | G, F, N |
| | Final | G, B, F, N |  |

Table 9.24: Variation in the implementation of the $L+H^* L_P L_I$ tune in narrow focus yes/no-questions (nuclear stressed syllable highlighted in grey)

Early narrow focus and late narrow focus differ in the patterns observed just in cases of final stress: while early narrow focus yes/no-questions may exhibit a rise, late narrow focus yes/no-questions only show the peak which is due to tonal compression in final clash contexts. In Gherdëina, Fascian and Nònes, also the syllable type (open vs. closed) has been found to matter for the tonal implementation with closed syllables usually showing a

peak, whereas open syllables are more prone to a rise. Narrow focus yes/no-questions and narrow focus statements share the same tune in all four varieties. Hence, in case of narrow focus, the distinction between statements and yes/no-questions is not marked intonationally (see section 11.5 for further discussion).

| Varieties | Focus type | Sentence type | Nuclear pitch accent | Edge tone(s) |
|---|--------------|---------------|-------------------------------|-------------------------------|
| Gherdëina Badiot Fascian Nònes | Narrow focus | Statements | L+H* | L _P L _I |
| Yes/no-questions | | L+H* | L _P L _I | |

Table 9.25: The narrow focus statement-question contrast in the varieties under scrutiny

9.6.3 The contrast between neutral focus and narrow focus yes/no-questions

In all four varieties, neutral focus and narrow focus yes/no-questions share the rising bitonal L+H* nuclear pitch accent but differ in edge tones: while neutral focus yes/no-questions exhibit a final rise, transcribed in terms of an L_IH_I phrase boundary tone combination, narrow focus yes/no-questions involve terminally low pitch (L_I). Finally, narrow focus yes/no-questions include a phonological phrase boundary to the right of the focused constituent which neutral focus yes/no-questions do not exhibit.

Interestingly, unlike in statements, where the distinction between neutral and narrow focus is marked by different nuclear pitch accents (H+L* vs. L+H*), in yes/no-questions, focus is not marked intonationally. Note that the same observation was made also by Hayes & Lahiri (1991:75) regarding Bengali.

| Varieties | Focus type | Nuclear pitch accent | Edge tone(s) |
|---------------------|------------|----------------------|-------------------------------|
| Gherdëina Badiot | Neutral | L+H* | L _I H _I |
| Fascian Nònes | Narrow | L+H* | L _P L _I |

Table 9.26: The neutral focus statement-question contrast in the varieties under scrutiny

9.6.4 Prosodic cues to interrogative force

In section 9.3.1, a typology of cues to interrogation was established based on the findings in the literature with respect to various languages. Although in Gherdëina, Badiot, Fascian and Nònes, neutral focus yes/no-questions differ from neutral focus statements in nuclear pitch accent, the rising bitonal L+H* accent cannot be the main cue to interrogative force given that the same accent also appears in narrow focus statements. Hence, we can consider the final rise – transcribed in terms of an L_IH_I phrase boundary combination – as the crucial prosodic marker of interrogative force. Gherdëina, Badiot, Fascian and Nònes can thus be classified in the typology together with Pisa Italian and Florentine Italian.

| Type | Cue | Example varieties |
|----------|----------------------|--|
| A | Nuclear pitch accent | Bari Italian, Palermo and Catania Italian |
| B | Edge tone(s) | Pisa Italian, Florentine Italian, Gherdëina, Badiot, Fascian, Nònes |
| C | Temporal alignment | Neapolitan Italian |
| D | Scaling | Spanish, Korean |

Table 9.27: Typology of prosodic cues to interrogative force in yes/no-questions

Chapter 10

The prosody of wh-questions

While the prosody of yes/no-questions has been studied with respect to a lot of languages including Standard Italian and its varieties (cf. Magno Caldognetto et al. 1978; Maturi 1988; De Dominicis 1992; Caputo 1994, 1999; Grice 1995; Endo & Bertinetto 1997), wh-questions have received only scarce attention in research on intonation. Ladd (2008:253) highlights the scarcity of empirical data on the prosody of interrogatives: “there is not much reliable information about sentence stress in questions in many languages; typological research in this area lacks a broad empirical foundation.” As for Italian, wh-questions are a rather recent research topic (cf. Marotta 2002) and the literature offers just few data in this respect.

In the light of this situation, it is the scope of the present work to provide and discuss new data from Romance varieties that up to now have not yet been investigated. The present chapter provides a prosodic analysis of wh-questions both across varieties and across wh-question formation strategies. I examine the various wh-question formation strategies (wh-SCI(-*pa/po*), *wh-pa/po-SV*, *wh-che-SV*, WH-SCI and wh-cleft constructions) (cf. chapters 5 and 6) and compare their pitch contours. The goal of this analysis is to find out whether a difference in syntactic structure between the individual question formation strategies is paralleled by a difference in intonation. In this way, I study the relation between the syntax and the prosody in question formation and the role the two components play for interrogative clause typing.

The chapter is organised as follows: section 10.1 is concerned with the position of nuclear stress in wh-questions from a cross-linguistic perspective and section 10.2 reviews the

literature on the wh-question tune in Italian and Italian varieties (10.2.1) as well as in other Romance languages and beyond (10.2.2). After that, I examine the prosody of the main wh-question formation strategies in the four varieties under consideration: wh-SCI-*(pa/po)*-questions (10.3), wh-*pa/po*-questions (10.4), wh-cleft questions (10.5) and wh-*che*-questions (10.6). Section 10.7 concludes the chapter and summarises the main findings.

10.1 The position of nuclear stress in wh-questions

Cross-linguistically, there are two basic tendencies in the intonational marking of wh-questions which differ in whether primary stress is on the wh-expression or not (Ladd 2008:226ff.):

| | Type 1 | Type 2 |
|-----------------------------------|--------------------------|----------------------|
| Location of primary stress | not on the wh-expression | on the wh-expression |

Table 10.1: Typology of languages with respect to the relative position of primary stress and the wh-expression

The first type includes languages with wh-movement, in which the wh-expression does not bear the most prominent accent and is not the focus of the utterance. This situation can be observed in English, for instance, where “the location of primary stress [...] does not coincide with the [syntactically] focused constituent” (Culicover & Rochemont 1983:140) and where the prominent accent falls on the last semantic argument or, in the absence of a postverbal argument, on the verb itself. Hence, the clause-initial wh-expression in English neutral focus wh-questions is only syntactically focused and does not underlie simultaneous prosodic focusing (Mycock 2007:230). This observation is surprising, given that “[l]ogic seems to suggest that the [syntactically focused] WH-word is the focus of the question, and yet, in English at least, the WH-word does not normally bear the most

prominent accent” (Ladd 2008:226; cf. also Zubizarreta 1998:92). English wh-questions are of the type (1a) rather than (1b) “though the latter would seem to be demanded by a purely focus-based account of accent placement” (Ladd 2008:226) (cf. also ‘Focus to Stress Alignment’, section 1.3.3.2).

- (1) a. Where are you GOING?
 b. WHERE are you going?

Hence, as noted by Cullicover & Rochemont (1983:139ff.), the prosody of English wh-questions with a single wh-expression is consistent with the neutral focus pattern of prosody (‘broad focus’ in their terms) according to which main stress falls on the last content word.

In the second type of languages, the wh-expression does carry main stress and these languages can be categorised into three subgroups (all examples taken from Ladd 2008:227f.):

- (i) Languages featuring the wh-*in-situ*-property such as Turkish (2a) or Bengali (2b), where the wh-expression is prosodically marked with an F₀ rise.

- (2) a. Halil’e NE verdiniz? (Turkish)
 Halil-to what you-gave
 ‘What did you give to Halil?’
 b. Ram KAKE dekhlo? (Bengali)
 Ram whom saw
 ‘Whom did Ram see?’

- (ii) Languages, which in unmarked contexts exhibit wh-fronting but may have wh-*in-situ* and main stress on the wh-expression in certain contexts, e.g. echo-questions in English.

- (3) a. You did WHAT? (English)
 b. They went WHERE?

(iii) Other languages exhibit main stress on the fronted wh-expression, e.g. Romanian (4) (under the condition that the utterance is fairly short) and Greek (5).

- (4) a. UNDE mergi? (Romanian)
 ‘Where are you going?’
 b. CINE a chemat?
 ‘Who called?’
- (5) a. PU ine? (Greek)
 ‘Where is it?’
 b. TI idhes?
 ‘What did you see?’

Thus, as far as the position of nuclear stress in wh-questions is concerned, there are basically two typological patterns: in the first pattern exhibited by languages such as English, the stress principles of wh-questions are the same as in other sentence types, i.e. nuclear stress falls on the rightmost content word. The second pattern as observed in languages like Greek or Romanian, in contrast, feature nuclear stress on the wh-expression and therefore have a “special [stress pattern] rule” in wh-questions.

| Position of the wh-expression | Location of nuclear stress | Languages |
|-------------------------------|----------------------------|------------------|
| fronted | rightmost content word | English |
| <i>in-situ</i> | wh-expression | Turkish, Bengali |
| fronted | wh-expression | Romanian, Greek |

Table 10.2: The location of nuclear stress in wh-*in-situ* and wh-fronting languages

The four varieties under consideration here have a somewhat different pattern: in neutral wh-questions, main stress falls on the finite verb and not on the rightmost content word as in statements, nor on the wh-expression.

10.2 The wh-question tune

Wh-questions are often assumed to have a falling pitch contour similar to statements (cf. Marotta & Sorianello 2001:89). Bolinger (1978) finds that fourteen out of the seventeen languages in his sample exhibit the same intonation as statements. Ultan's (1978) data in this respect are less clear-cut in that only half of the 53 languages considered show a preference for a finally falling contour. However, given that the position of main stress may depend on the position of the wh-expression in the utterance, we need to distinguish between wh-fronting and wh-*in-situ* languages. In what follows, I provide a brief overview of the literature on wh-questions in Standard Italian, other Italian varieties (10.2.1) and other Romance languages (10.2.2).

10.2.1 Italian and Italian varieties

10.2.1.1 Standard Italian

According to Endo & Bertinetto (1997), Standard Italian wh-questions exhibit an intonational peak on the initial part of the utterance, i.e. on the wh-expression, and after that a globally descending contour, which might involve a final rise. On the basis of Chapallaz's (1964) classification of the "basic tunes" in Standard Italian, D'Imperio (2002:40) transcribes the wh-question tune in terms of H+L* (L-)L% [(L_P) L_I].

10.2.1.2 Northern and central varieties of Italian

Northern and central varieties of Italian investigated in the intonation literature with respect to wh-questions include the varieties of Padova (Endo & Bertinetto 1997; Magno Caldognetto 1978), Milano (Endo & Bertinetto 1997), Pisa (Gili Fivela 2008; Sardelli 1998), Siena (Marotta & Sorianello 2001), Lucca (Marotta 2002; Marotta & Sorianello 1999, 2001) and Florence (Magno Caldognetto 1978).

Tuscan Italian

Marotta (2001, 2002) and Marotta & Sorianaello (1999, 2001) study the intonation of wh-questions in the Tuscan Italian varieties of Lucca and Siena and observe that the pitch contour associated with a wh-question in these varieties differs depending on three main factors: (i) the type of wh-expression, (ii) the illocutionary force and (iii) the length of the utterance.

Marotta and Sorianaello's observation that the pitch contour or prosodic structure associated with a wh-question interacts with the illocutionary force (i.e. its pragmatic value) is crucial for our purposes. They report that if the utterance-initial wh-expression bears narrow focus, it is accentuated and associated with an H*, or, less frequently, with an L*+H. If the wh-expression does not represent the focus of the utterance (neutral focus wh-questions), it is deaccentuated and main stress instead falls on the verb and the H* is associated with the verb. Variation is observed as regards the final part of the contour and Marotta (2001) attributes this variation to the rhythmical properties of the utterance. If the stressed syllable is not followed by another unstressed syllable and is hence utterance-final, the (L+H)* L₁ tune is truncated on the pitch accent because there is no segmental material available for the edge tone to anchor. Consequently, we observe the final rise instead of the final fall. A terminal rise in wh-questions has been found by Magno Caldognetto et al. (1978) also with respect to Padova and Florence Italian.

10.2.1.3 Southern varieties of Italian

Southern varieties of Italian investigated in the literature include the varieties of Napoli (Caputo 1994, 1999; D'Imperio & House 1997; D'Imperio 1999), Bari (Grice & Savino 1995, 1997), Lecce (Stella & Gili Fivela 2007), Cosenza (Sorianaello 2001), Palermo (Grice 1995) and Cagliari (Contini 1971, 1983; Schirru 1982).

Lecce Italian

Stella & Gili Fivela (2007) study the prosody of Lecce Italian with particular regard to interrogatives using the *Map Task* methodology (Anderson et al. 1991). They report for both yes/no-questions and wh-questions a falling-rising nuclear contour which they analyse in terms of an H+L* L-H% [L_P H_I] tune. Moreover, in wh-questions, they also observe a falling contour transcribed in terms of an L-L% [L_P L_I] boundary tone combination.

10.2.2 Other languages

10.2.2.1 Spanish

Question intonation has been described to be very variable among the varieties of Spanish (Sosa 1999). According to the literature on Spanish intonation, wh-questions involve an F₀ rise on the wh-expression and multiple options utterance-finally (cf. Henriksen 2010:129). As far as Manchego Peninsular Spanish is concerned, Henriksen observes two different contours in wh-questions: (a) an early fall and (b) a late fall, which he analyses in terms of H+L* L_I and L+H* L_I, respectively (Henriksen 2010:174ff.). What is more, comparing wh-questions to statements, Henriksen (2010:128) finds that “wh-questions were uttered at a higher initial F₀ level than statements and declarative questions”.

10.2.2.2 European Portuguese

European Portuguese neutral focus wh-questions and statements share the H+L* nuclear pitch accent, with the L tone consistently aligned with the nuclear syllable and the fall-initial peak typically occurring within the pretonic syllable and a final H_I (Frota 2002). The statement-question distinction is attributed to the final boundary tone, i.e. a rise (wh-question) or a fall (statement).

10.2.2.3 French

French wh-questions exhibit two types of pitch contours in wh-questions: a falling and a rising contour (Beysade et al. 2007). The falling contour involves a phrasal H- [H_P] on the wh-expression and an L* “on the primary stressed syllable of one of the next three accentual phrases” (Beysade et al. 2007:167) followed by an L% [L_I] (6a, figure 10.1). The rising contour, in contrast, exhibits a phrasal L- [L_P] on the wh-expression and an H* followed by an H% [H_I] (6b, figure 10.2).

- (6) a. Qu’ entendez=vous par là? (French)
 what mean-2PL=you by this
 ‘What do you mean by this?’
 b. Qu’ en est=il exactement?
 what of-it be-3SG=SCL exactly
 ‘How is it exactly?’

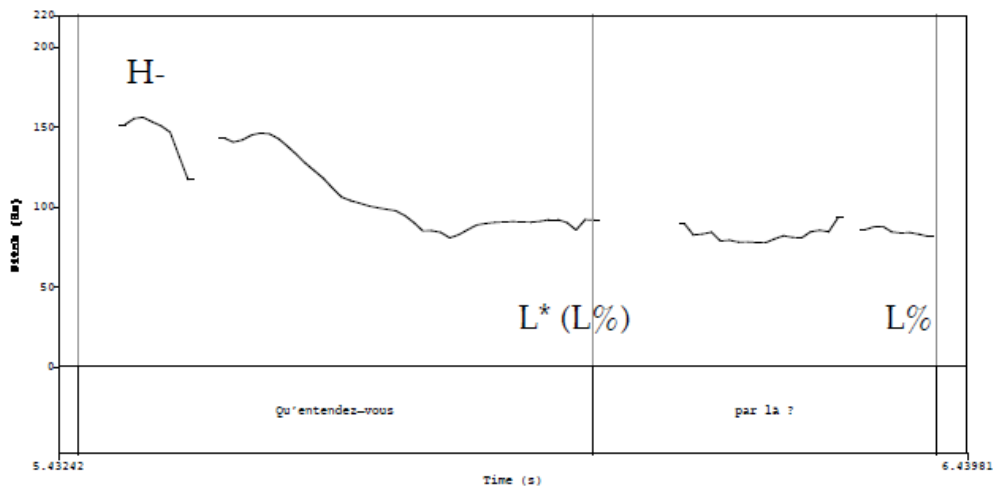


Figure 10.1: Qu’entendez-vous par là? (Beysade et al. 2007:168)

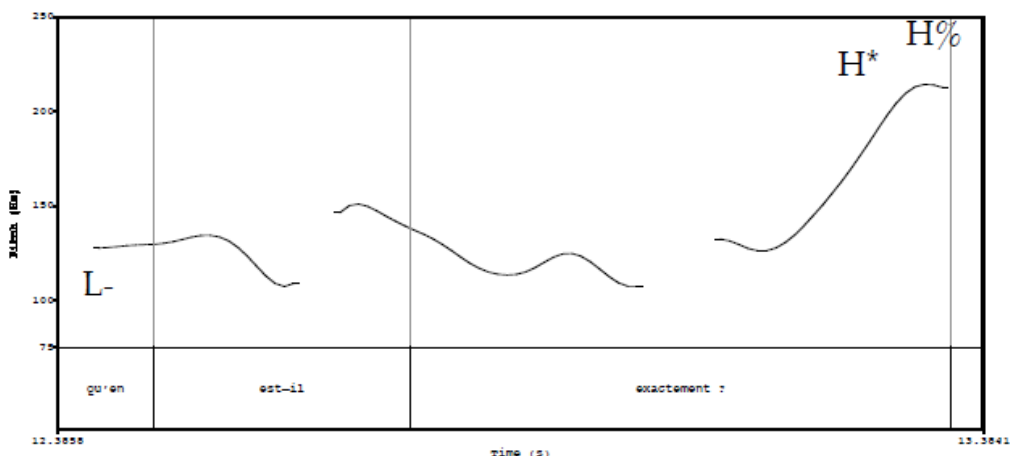


Figure 10.2: Qu’en est-il exactement? (Beysade et al. 2007:169)

10.2.2.4 German

Accounts of German wh-question intonation include Wunderlich (1988), Uhmann (1991), Féry (1993), Grabe (1998), Kügler (2003), Grice et al. (2005a). The German wh-question tune has been analysed in terms of a falling bitonal H*+L followed by an L_I (Uhmann 1991; Féry 1993). Grice et al. (2005a) propose a slightly different account of neutral wh-questions such as (7) in terms of an H* L-% [L_PI] tune.

- (7) German (Grice et al. 2005a:71)
 Wo hast du den WAgen gePARKT?
 where have-2SG you the car park-PTCP
 ‘Where did you park the car?’

Table 10.3 provides an overview of the wh-question tune in Standard Italian, Italian varieties and other languages.

| Language / Variety | | Nuclear pitch accent | Edge tone(s) | Comment | |
|---------------------|--------------------|----------------------|----------------------------------|--|--------------------------------|
| Italian | Standard Italian | H+L* | L _P L _I | | |
| | Northern varieties | Pisa | H+L* | L _P L _I | |
| | | Lucca Siena | H* H*+L L*+H | L _I | depending on the wh-expression |
| | Southern varieties | Lecce | H+L* | L _P H _I L _P L _I | |
| | | Cosenza | L+H* | L _I | |
| Spanish | | H+L* L+H* | L _I | early fall late fall | |
| French | | H* L* | H _I L _I | rising falling | |
| European Portuguese | | H+L* | H _I | | |
| German | | H*+L H* | L _I | | |

Table 10.3: The wh-question tune in Romance languages and varieties

We can now turn to the wh-question tune in Gherdëina, Badiot, Fascian and Nònes examining the four main wh-question formation strategies in these varieties, wh-SCI-*pa/po* (section 10.3), wh-*pa/po* (10.4), wh-clefts (10.5) and wh-*che* (10.6). I show that in wh-questions, two different nuclear pitch accents occur, L+H* and H+L*, and two different

boundary tone combinations, $L_P L_I$ and $L_I H_I$. The default tune in neutral wh-questions, which occurs in the vast majority of cases in all four varieties, is $L+H^* L_P L_I$.

10.3 The default question formation strategy: wh-SCI(-*pa/po*)

As shown in chapter 5, the default question formation strategy in Gherdëina, Badiot, Fascian and Nònes involves three (morpho)syntactic operations: (a) wh-fronting, (b) subject clitic-verb-inversion (SCI) and (c) the particle *pa/po*. Section 10.3.1 provides a general characterisation of the pitch contour in wh-SCI(-*pa/po*)-questions in the four varieties. After that, section 10.3.2 investigates whether the presence vs. absence of the particle *pa/po* influences the pitch contour in any relevant way. The subsequent two sections discuss whether the variation in the syntactic position of the particle in wh-questions involving compound tenses (10.3.3) and modal verb constructions (10.3.4) is correlated by a difference in prosody.

10.3.1 General characterisation of the pitch contour in wh-SCI-*pa/po*-questions

In all varieties, wh-SCI-*pa/po*-questions exhibit main stress on the finite verb. This observation is noteworthy, given that in many other languages such as English, main stress is reported to fall on the last content word of the utterance (cf. sections 7.2.2, 10.1). In wh-SCI-*pa/po*-questions, the pitch rises through the nuclear stressed syllable and attains its peak at the end of it, suggesting an analysis in terms of a rising bitonal $L+H^*$ nuclear pitch accent. After that, the pitch falls down immediately towards the phonological phrase boundary (L_P) and continues on a low level until the end of the utterance (L_I). I provide examples for Gherdëina (8, figure 10.3), Badiot (9, figure 10.4), Fascian (10, figure 10.5) and Nònes (11, figure 10.6).

- (8) a. Cie maies' *a* da marënda? (Gherdëina)
 what eat-2SG PA PREP lunch
 'What are you having for lunch?'

a'. x
 x x
 x x x x x x x x
 [[Cie mai ies s'a]_P [da ma rën da]_P]_I
 | | |
 L+H* L_P L_IH_I

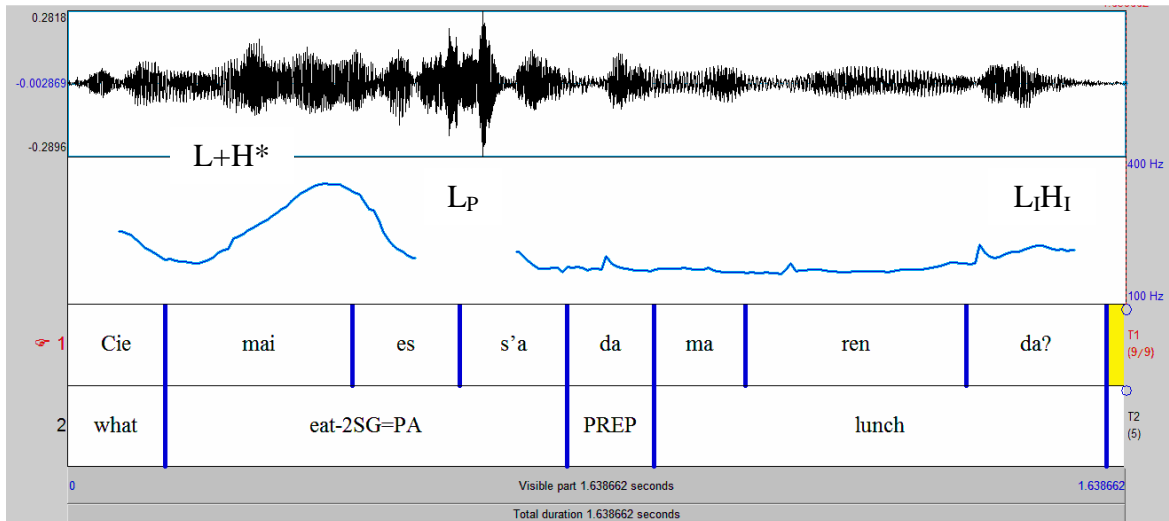


Figure 10.3: Gherdëina 1 Cie maies' *a* da marënda?

- (9) a. Ći mang=el *pa* da marëna? (Badiot)
 what eat-3SG=SCL PA PREP lunch
 'What is he having for lunch?'

a'. x
 x x
 x x x x x x x x
 [[Ći man gel pa]_P [da ma rë na]_P]_I
 | | |
 L+H* L_P L_IH_I

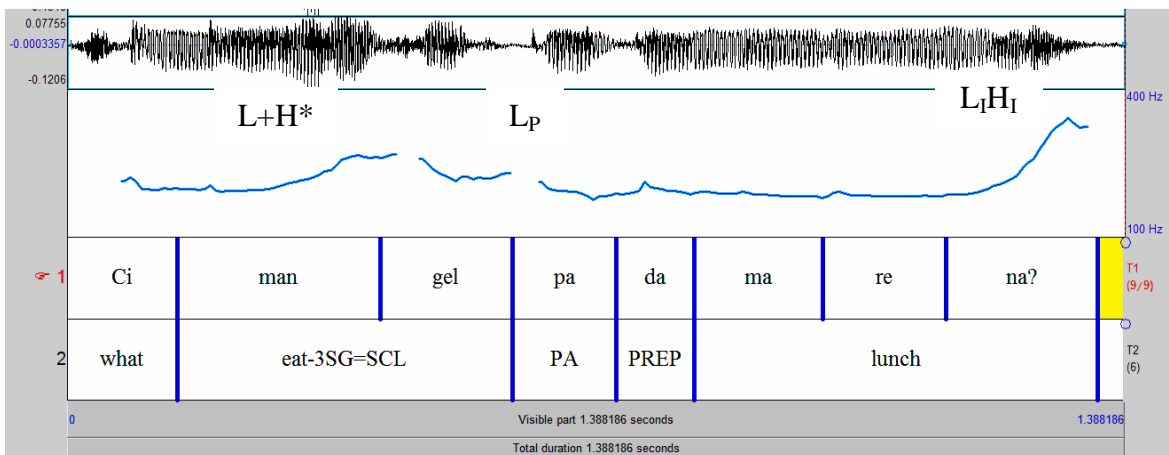


Figure 10.4: Badiot 8 Ći mangel *pa* da marëna?

(10) a. Che suzed=el *pa?* (Fascian)
 what happen-3SG=SCL PA
 ‘What happens?’

a'.
 X
 X
 X X X X X
 [[Che su ze del pa]_P]_I
 | |
 L+H* L_I

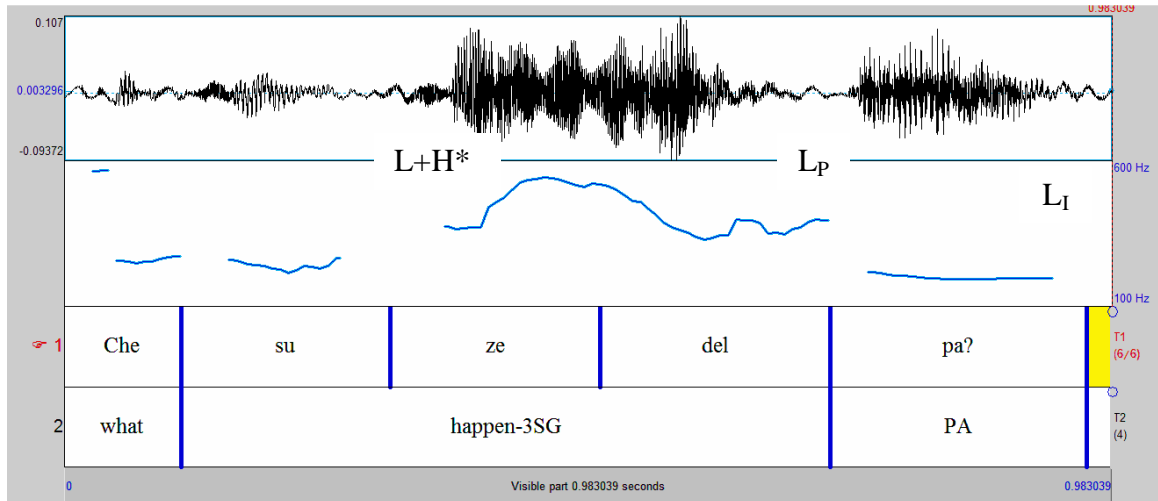


Figure 10.5: Fascian 3 Che suzedel *pa?*

(11) a. Che magnes *po* ancuei? (Nònes)
 what eat-2SG PO today
 ‘What are you eating today?’

b.
 X
 X X X X X X
 [[Che magn es po] _P [an cuei] _P]_I
 | | |
 L+H* L_P L_I

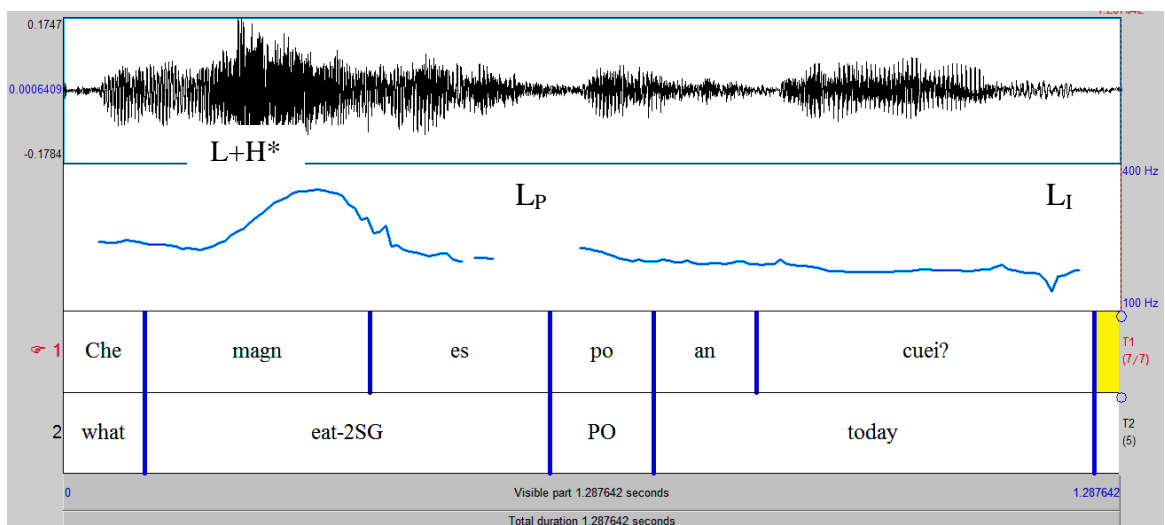


Figure 10.6: Nònes 2 Che magnes *po* ancuei?

When main stress falls on the final syllable of the phonological phrase, the tones of the nuclear pitch accent and the phonological phrase boundary tone are realised in close proximity ('tonal crowding') and as before, this situation is adjusted by tonal compression. Consequently, the F_0 maximum is attained in the middle of the main stressed syllable and falls down immediately towards the phrase boundary (L_P) giving rise to a peak-shaped contour in the nuclear region.

- (12) a. Cie fej *pa* l terzo mut? (Gherdëina)
 what do-3SG PA the third boy
 'What is the third boy doing?'
 b.
- | | | | | | |
|------|----------------|---|---|---|----------------|
| x | | | | | x |
| x | | | | | x |
| x | x | x | x | x | x |
| | | | | | |
| | | | | | |
| L+H* | L _P | | | | L _I |
- [[Cie fej pa]_P [l ter zo mut]_P]_I

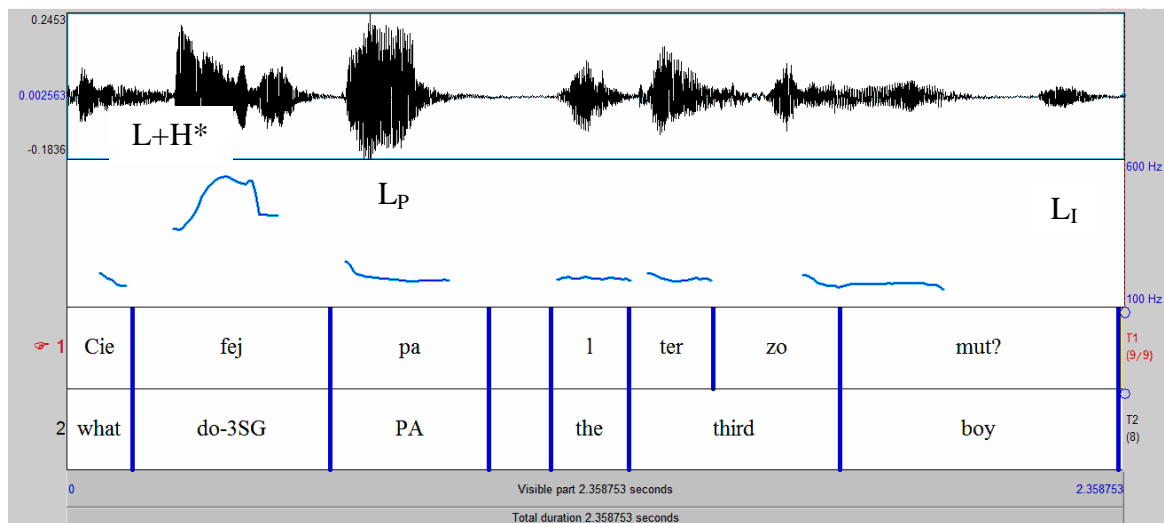


Figure 10.7: Gherdëina 1 Cie fej *pa* l terzo mut?

Apart from the $L+H^* L_P L_I$ tune, Fascian and Nònes exhibit a second pattern in standard wh-SCI-*pa/po*-questions in which the pitch falls through the main stressed syllable and ends on the speaker's baseline. I label this contour in terms of an $H+L^* L_P L_I$ tune.

- (13) a. Che suze=lo *po?* (Fascian)
 what happen-3SG=SCL PO
 ‘What happens?’

a'.
 X
 X
 X X X X X X
 [[Che su ze de lo po]_P]_I
 | |
 H+L* L_P L_I

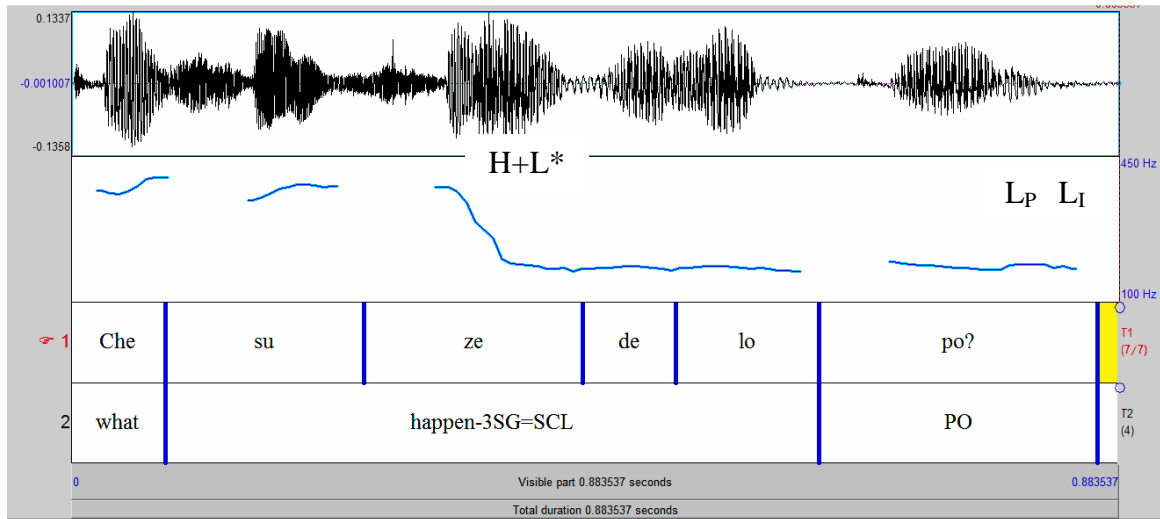


Figure 10.8: Fascian 10 Che suze=lo *po?*

- (14) a. Ndo nen=te *po?* (Nònes)
 where go-1PL=SCL PO
 ‘Where are we going?’

b.
 X
 X
 X X X X X
 [[En do nen te po]_P]_I
 | |
 H+L* L_P L_I

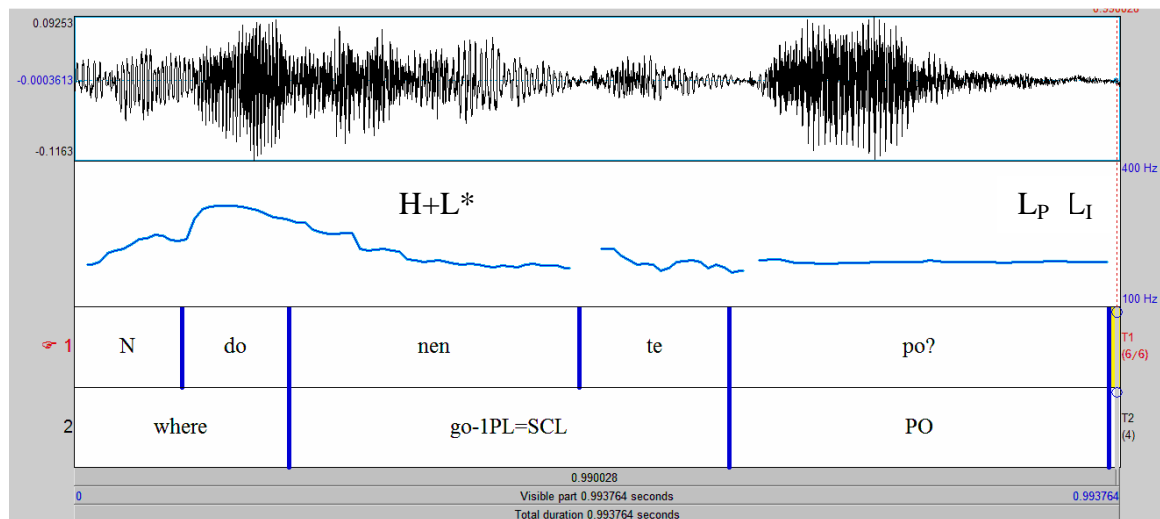


Figure 10.9: Nònes 2 Ndo nente *po?*

Given that there are two different tunes in Nònes *wh-SCI-pa/po*-questions, the question arises as to what governs the use of one or the other tune. Tune 2 occurs on a par with tune 1 in standard *wh-SCI-pa/po*-questions with the same stress properties, and with both open and closed nuclear syllables. Although tune 2 is far less frequent than tune 1, one and the same speaker may use both tunes suggesting that we are dealing here with a case of intra-speaker variation. Further prosodic research is needed to determine the conditions of use of the one and the other tune.

Table 10.4 summarises the tunes found in neutral focus *wh-SCI-pa/po*-questions.

| Varieties | Syntactic structure | Prosodic structure | | | |
|------------------|-----------------------------|----------------------------|--------|----------------------|-------------------------------|
| | Question formation strategy | Position of nuclear stress | Tune | Question tune | |
| | | | | Nuclear pitch accent | Edge tones |
| Gherdëina | <i>wh-SCI-pa/po</i> | verb | Tune 1 | L+H* | L _P L _I |
| Badiot | | | | | |
| Fascian | | | Tune 2 | H+L* | L _P L _I |
| Nònes | | | | | |
| Fascian Nònes | | | | | |

Table 10.4: The tune in *wh-SCI-pa/po*-questions in the varieties under consideration

Having identified the tune of *wh-SCI-pa/po* we can now proceed to examine whether the pitch contour differs if the particle *pa/po* is lacking.

10.3.2 The presence vs. absence of the particle *pa/po*

Recall from chapter 3 that the four varieties differ with regard to the use of the particle *pa/po*: in Fascian and Nònes, the use of the particle is conventionalised but not compulsory, whereas in Gherdëina and Badiot, the particle is obligatory for a standard interpretation of a *wh*-question. To examine the way in which the prosodic characteristics are related to the presence or absence of the particle *pa/po*, I compare syntactic minimal pairs (cf. 15) consisting of two structurally equal *wh*-questions involving SCI but differing with respect to the presence (15a) vs. absence (15b) of the particle *pa/po*.

- (15) a. Olà vas=to *pa?* (Fascian)
 where go-2SG=SCL PA
 ‘Where are you going?’
 b. Olà vas=to?
 where go-2SG=SCL

10.3.2.1 Fascian

In Fascian, the pitch contour is exactly the same, irrespective of whether the particle is present (16a, figure 10.10) or not (16b, figure 10.11) (cf. table 10.5).

- (16) a. Che suzede=l *pa?* (Fascian)
 what happen-3SG=SCL PA
 ‘What happens?’
 a'.
 x
 x
 x x x x x
 [[Che su ze del pa]_P]_I
 | |
 L+H* L_P L_I

- b. Che sozede=l? (Fascian)
 what happen-3SG=SCL
 ‘What happens?’
 b'.
 x
 x
 x x x x
 [[Che so ze del]_P]_I
 | |
 L+H* L_P L_I

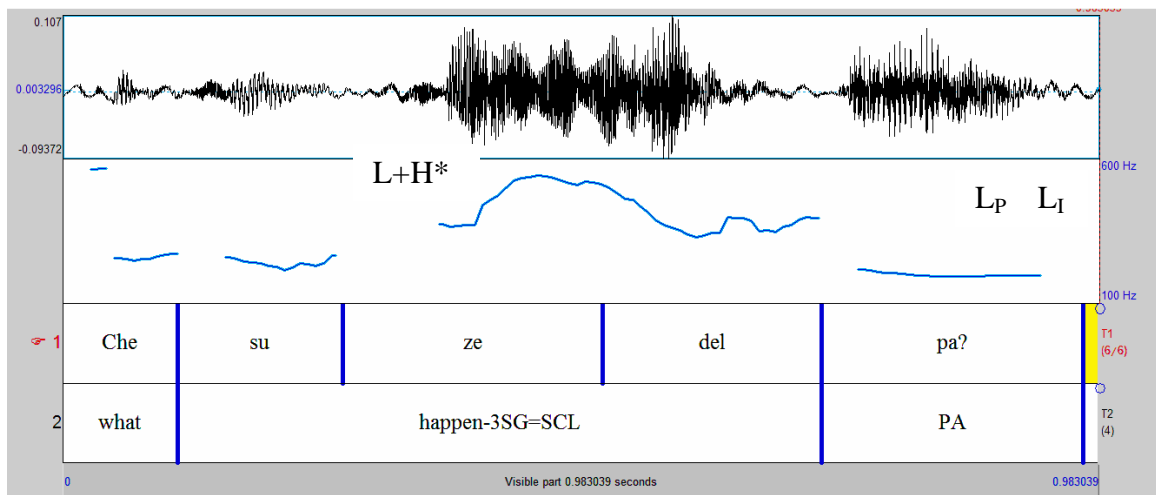


Figure 10.10: Fascian 3 Che suzedel *pa?*¹

¹ The relatively high F₀ before *pa/po* in figure 10.10 can be attributed to the stop of *pa*, which perturbs the pitch contour.

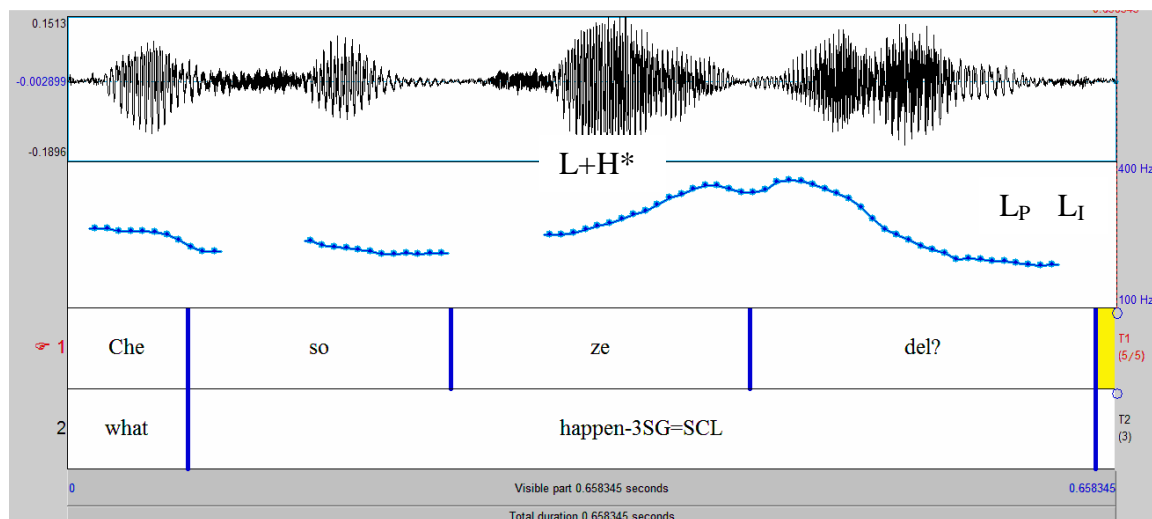


Figure 10.11: Fascian 5 Che suzedel?

| Variety | Syntactic structure | Prosodic structure | | |
|---------|-----------------------------|----------------------------|----------------------|-------------------------------|
| | Question formation strategy | Position of nuclear stress | Question tune | |
| | | | Nuclear pitch accent | Edge tones |
| Fascian | wh-SCI- <i>pa/po</i> | verb | L+H* | L _P L _I |
| | wh-SCI | | | |

Table 10.5: The tune in Fascian wh-questions exhibiting and lacking the particle *pa/po*

10.3.2.2 Nònes

In Nònes, wh-questions exhibiting the particle differ from wh-questions lacking the particle in the terminal part of the contour: while Nònes wh-questions featuring the particle end on a low pitch level, wh-questions lacking the particle end on a high pitch level. This can either be a final rise or a high plateau after the nuclear rise. This difference can be captured by assuming an L_I in questions featuring the particle and an L_IH_I combination or an H_I in questions lacking the particle. The difference regarding the edge tone between wh-questions featuring and lacking the particle *po* is observed in both, Nònes tune 1 (17, figures 10.12–13) and tune 2 (17, figures 10.14–15).

(17) a. Ch' as dit *po?*
 what have-2SG say-PTCP PO
 'What did you say?'

(Nònes)

a'. x
 x
 x x x
 [[Ch'as dit po]_P]_I
 | ||
 L+H* L_P L_I

b. Che as dit?
 what have-2SG say-PTCP
 'What did you say?'

b'. x
 x
 x x x
 [[Che as dit]_P]_I
 | ||
 L+H*H_P H_I

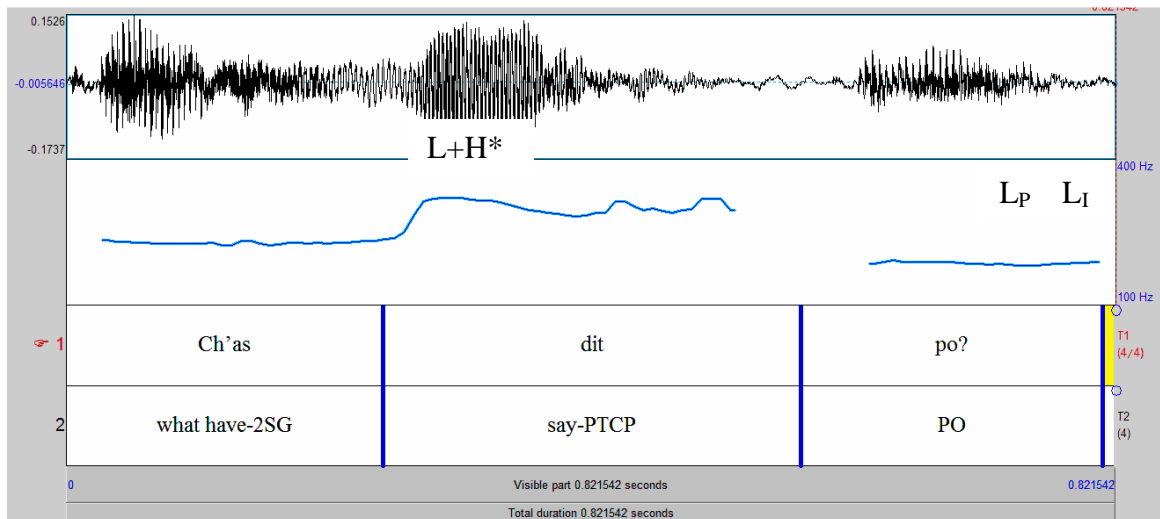


Figure 10.12: Nònes 7 Ch' as dit *po?*

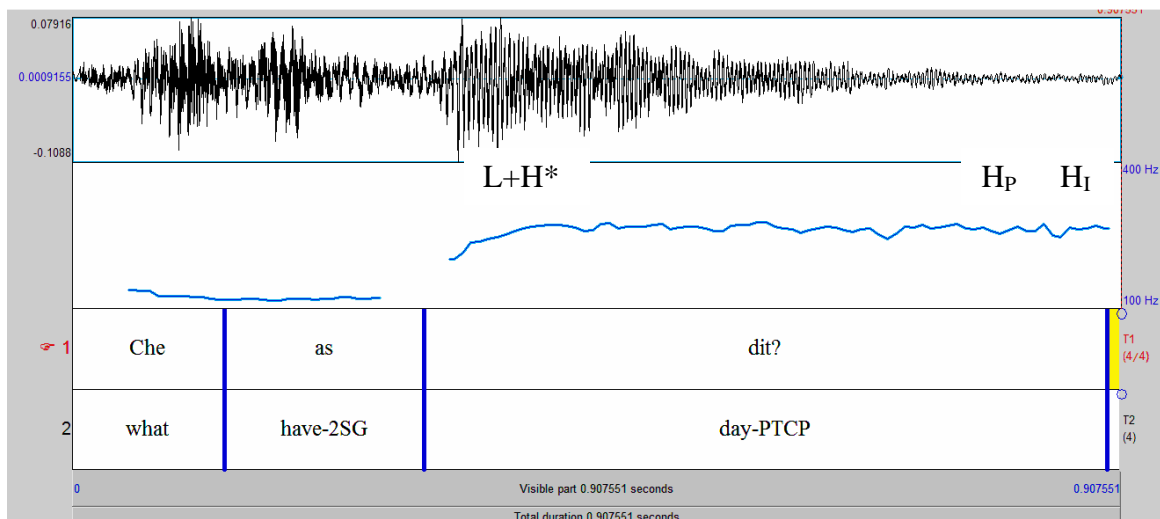


Figure 10.13: Nònes 5 Che as dit?

(18) a. Come ve clamau *po?*
 how REFL call-2PL PO
 ‘What’s your name?’

(Nònes)

a'.
 x x x x x x
 [[Co me ve]_P [cla mau po]_P]_I
 | |
 H+L* L_P L_I

b. Come ve clamau?
 how REFL call-2PL

b'.
 x x x x x
 [[Co me ve]_P [cla mau]_P]_I
 | |
 H+L* L_IH_I

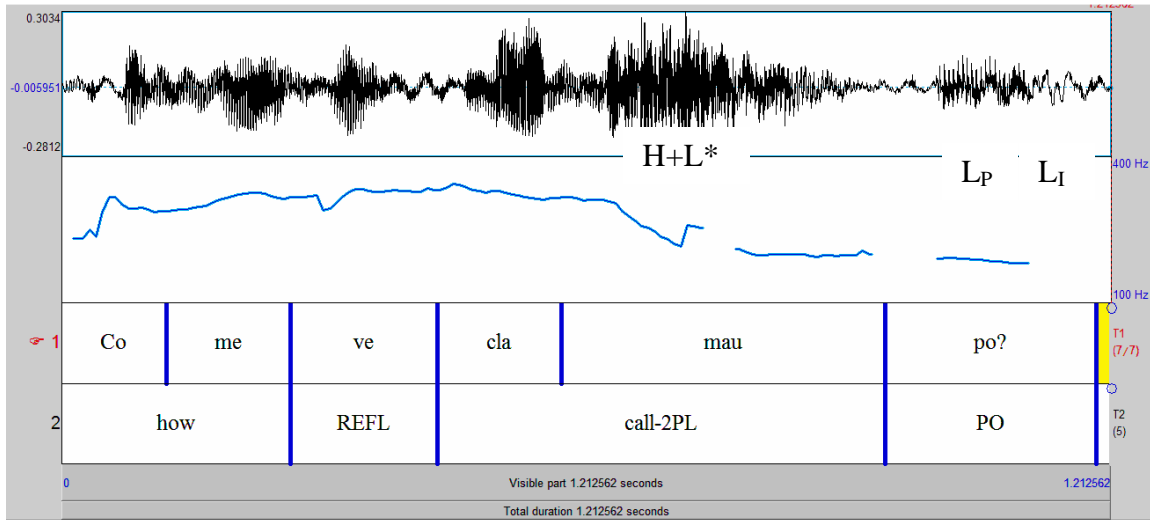


Figure 10.14: Nònes 7 Come ve clamau *po?*

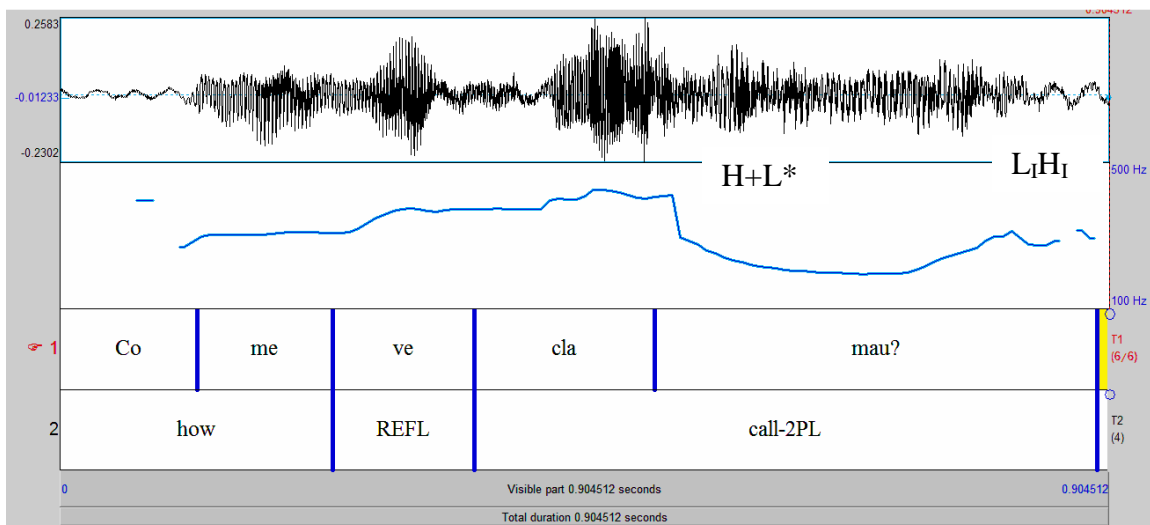


Figure 10.15: Nònes 7 Come ve clamau?

The fall through the nuclear stressed syllable in figure 10.15 is much steeper than in 10.14 because of tonal crowding on the main stressed syllable when the nuclear pitch accent and the edge tones need to be realised in close proximity. Nònes readjusts this final clash context by tonal compression.

In sum, if the particle *po* is absent in Nònes wh-questions, the pitch contour exhibits a final rise (L_IH_I) or a high plateau (H_P H_I) whereas F₀ ends on a low level (L_I) if the particle is present. Crucially, the difference in the final portion of the contour between Nònes wh-questions exhibiting and lacking the particle *po* suggests that the final rise and the use of the particle *po* are in complementary distribution. Hence, *po*, on a par with the final rise, can be taken as an interrogative clause typing element.

| | Syntactic structure | Prosodic structure | | | |
|---------|-----------------------------|----------------------------|--------------|----------------------|-------------------------------|
| Variety | Question formation strategy | Position of nuclear stress | Contour type | Question tune | |
| | | | | Nuclear pitch accent | Edge tones |
| Nònes | wh-SCI- <i>po</i> | verb | Tune 1 | L+H* | L _P L _I |
| | wh-SCI | | | | H _P H _I |
| | wh-SCI- <i>po</i> | | Tune 2 | H+L* | L _P L _I |
| | wh-SCI | | | | L _I H _I |

Table 10.6: The tune in Nònes wh-questions exhibiting and lacking the particle *po*

10.3.2.3 Gherdëina

In Gherdëina (and Badiot), the particle *pa* is obligatory for a standard interpretation of a wh-question. When the particle is omitted, the wh-question receives a different semantic/pragmatic interpretation (cf. chapters 3, 5). With the particle, we find neutral focus and main stress on the verb, whereas in questions without the particle, narrow focus is on the wh-expression along with main stress. Consequently, Gherdëina and Badiot wh-questions featuring the particle differ from those lacking it also in the anchoring site of the nuclear pitch accent.

As regards the contrast between wh-questions featuring and lacking the particle, we observe two patterns: in the first case, both question types exhibit the same tune but differ in the position of main stress and hence in the anchoring site of the nuclear pitch accent. In the second case, the two wh-question types differ not only with respect to the position of main stress but also in the terminal part of the contour. Case 1 is exemplified by the syntactic minimal pair in (19): both wh-questions involve a rising bitonal L+H* accent. However, in the wh-question featuring the particle, the nuclear pitch accent is associated with the stressed syllable of the verb (19a, figure 10.16), while without the particle, the nuclear pitch accent is associated with the stressed syllable of the wh-expression (19b, figure 10.17). Moreover, in the latter, the wh-expression is in narrow focus and involves insertion of a phonological phrase boundary to the right of the focused constituent similar to narrow focus statements (cf. section 8.2). In both, F₀ ends on a low level, transcribed in terms of L_I.

- (19) a. Co va=les' **a** a Roma? (Gherdëina)
 how go-3PL.F=SCL PA to Rome
 'How are they going to Rome?'
- a'. x
 x x x x x x x
 [Co va les s'a]_P [a Ro ma]_P_I
 | | |
 L+H* L_P L_I
- b. CO va=les a Roma?
 how go-3PL.F=SCL to Rome
 'How are they going to Rome?' (astonishment)
- b'. x
 x
 x x x x x x
 [[Co]_P [va les a Ro ma]_P]_I
 | | |
 L+H* L_P L_I

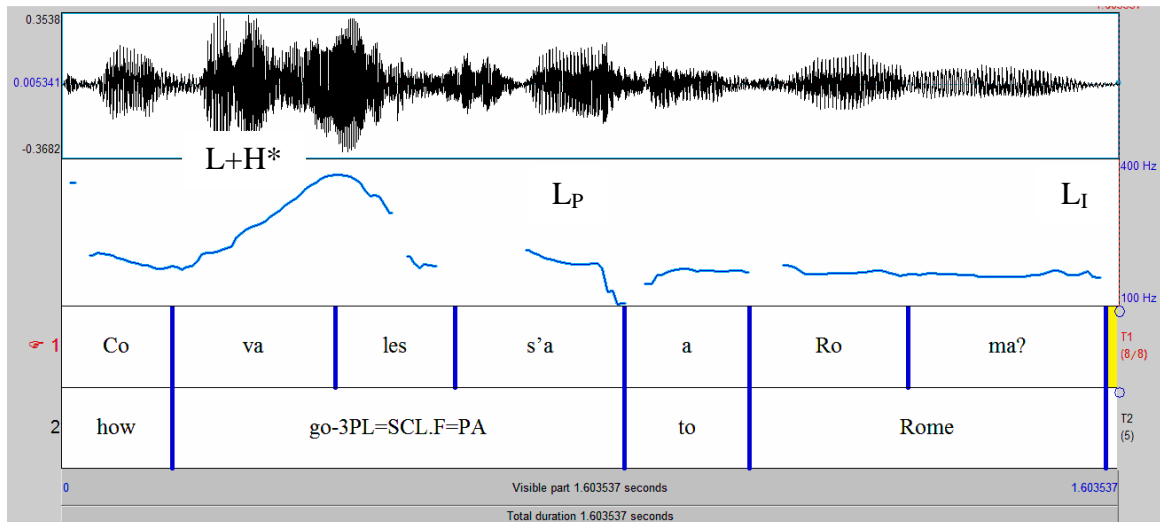


Figure 10.16: Gherdëina 1 Co vales'a a Roma?

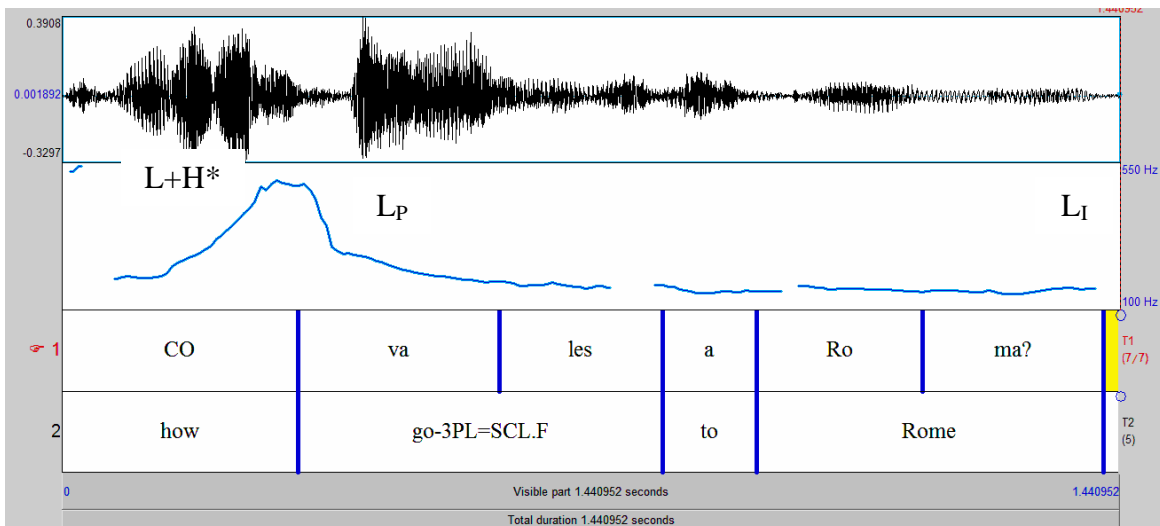


Figure 10.17: Gherdëina 1 CO vales a Roma?

In the second, less frequent, case, the wh-questions differ in the position of main stress and, in addition, also in the terminal part of the contour. With *pa*, the pitch falls down after the peak in the nuclear stressed syllable (20a, figure 10.18), without it, there is a high-level pitch after the nuclear peak until the end of the utterance (20b, figure 10.19). I account for this high plateau in terms of H_I .

(20) a. Tant à **pa** maià l nēine? (Gherdëina)
 how-much have-3SG PA eaten the grandfather
 ‘How much did grandfather eat?’

a'.
 x
 x
 x x x x x x
 [[Tant à pa mai ià l]_P [nēin]_P]_I
 | | |
 L+H* L_P L_I

b. TANT à maià l nēine?
 how-much have-3SG eaten the grandfather
 ‘How much did grandfather eat?’ (astonishment)

b'.
 x
 x
 x x x x x
 [[TANT]_P [à mai ià l nēin]_P]_I
 | | |
 L+H* H_P H_I

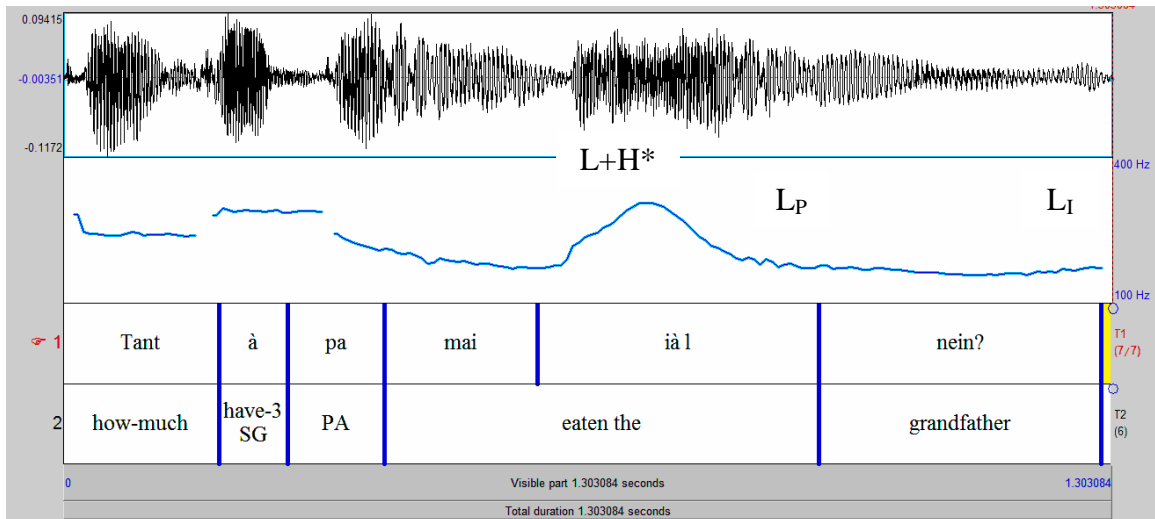


Figure 10.18: Gherdëina 2 Tant à *pa* maià l nēin?

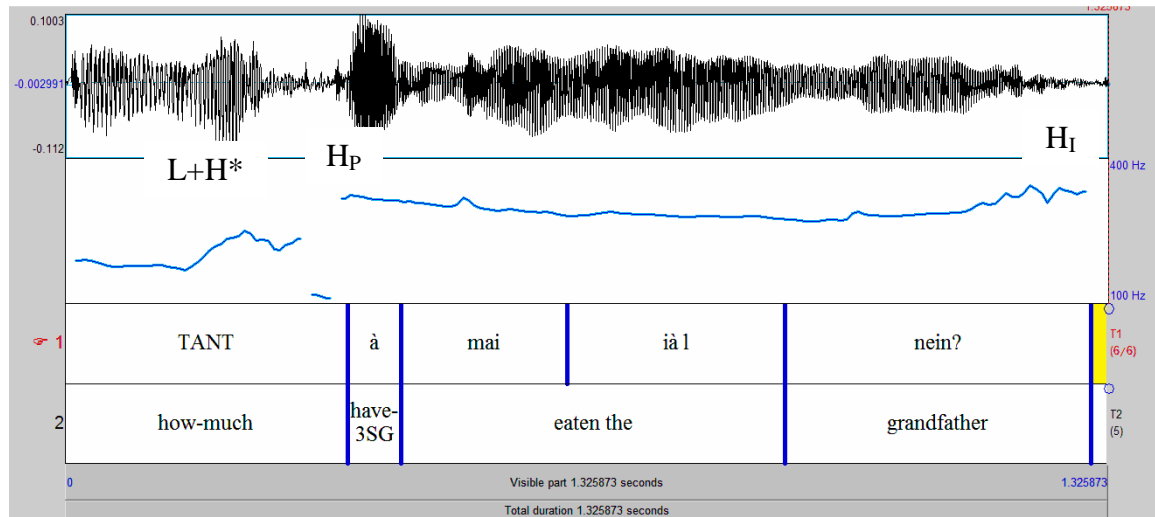


Figure 10.19: Gherdëina 2 TANT à maià l nēine?

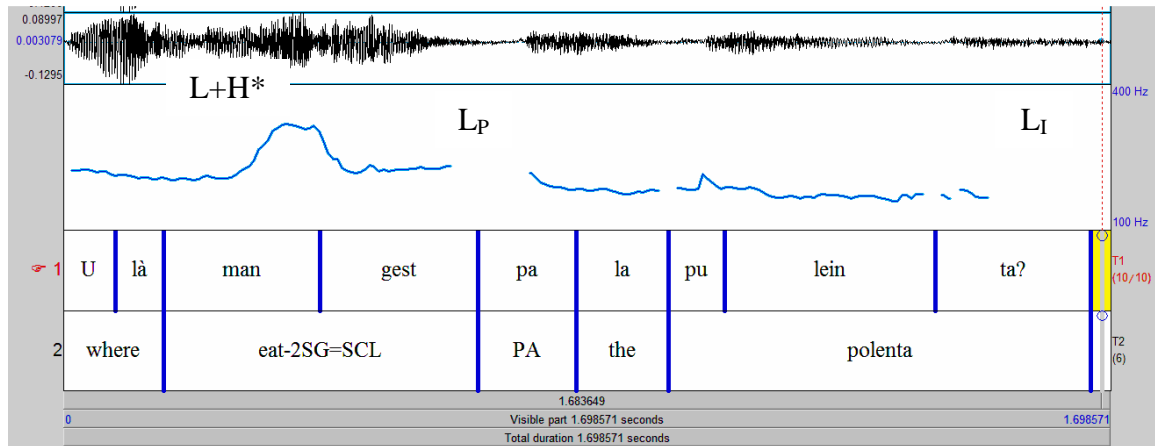


Figure 10.20: Badiot 6 Ulà mangest *pa* la pulëinta?

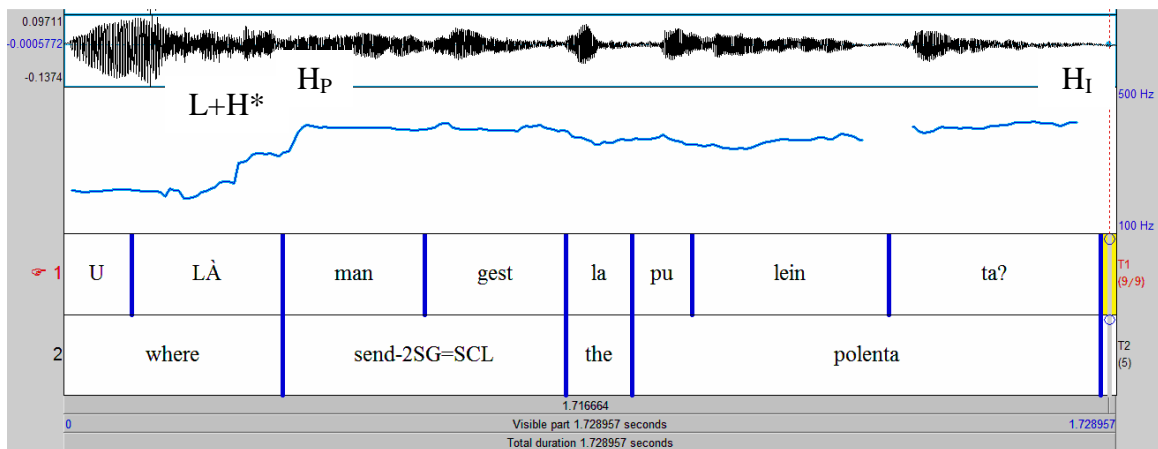


Figure 10.21: Badiot 6 ULÀ mangest la pulëinta?

| Variety | Focus type | Syntactic structure Question formation strategy | Prosodic structure | | | |
|---------|------------|--|----------------------------|--------------|----------------------|-------------------------------|
| | | | Position of nuclear stress | Contour type | Question tune | |
| | | | | | Nuclear pitch accent | Edge tones |
| Badiot | neutral | wh-SCL- <i>pa</i> | verb | Pattern 2 | L+H* | L _P L _I |
| | narrow | wh-SCL | wh-expression | | | H _P H _I |

Table 10.8: The tune in Badiot wh-questions exhibiting and lacking the particle *pa*

10.3.2.5 Preliminary conclusion

Since the particle *pa/po* is considered a distinctive trait of wh-questions in all varieties and given that the particle is obligatory in Gherdëina and Badiot, the presence of the particle can nowadays be taken as the default case (cf. chapter 5). However, the varieties differ with respect to the relation between wh-questions featuring the particle *pa/po* and those lacking it. Fascian represents the simplest case as here, the two question types do not differ

neither in semantic interpretation nor in their prosodic characteristics. In Nònes, the situation is more complex: while the semantic interpretation of the two types of wh-questions is the same, the pitch contours differ. The question without the particle ends in L_I , whereas the other displays a final rise (H_I) suggesting that the use of the particle *po* and the terminal rise are in complementary distribution. In Gherdëina and Badiot, finally, where the particle is obligatory for a standard interpretation of the question, wh-questions featuring the particle differ from those lacking it in semantic interpretation, focus properties and prosodic characteristics. With no particle, the position of main stress and hence the anchoring site of the nuclear pitch accent is on the wh-expression rather than on the verb, the wh-expression is in narrow focus and these questions are used as echo-questions (cf. section 3.8.4). Moreover, although the nuclear pitch accent is the same in both types ($L+H^*$), there is a difference in the boundary tones: wh-questions lacking the particle may end on a high pitch level (H_I), whereas in wh-questions involving the particle, there is a final low (L_I).

Table 10.9 summarises the findings of this section; $[+pa]$ indicating the presence of the particle and $[-pa]$ the absence of the particle in wh-questions.

| Varieties | Syntactic structure | | Prosodic structure | | | | | |
|------------------|---------------------|--------|-------------------------|---------------|----------------------|---------|------------|------------------------|
| | | | Position of main stress | | Nuclear pitch accent | | Edge tones | |
| | | | $[+pa]$ | $[-pa]$ | $[+pa]$ | $[-pa]$ | $[+pa]$ | $[-pa]$ |
| Fascian | neutral | | verb | verb | $L+H^*$ | | $L_P L_I$ | |
| Nònes | | | | | $L+H^*$ | | $L_P L_I$ | $H_P H_I$ |
| | | | | | $H+L^*$ | | $L_P L_I$ | $L_I H_I$ |
| Gherdëina | neutral | narrow | | wh-expression | $L+H^*$ | | $L_P L_I$ | $L_P L_I$ $H_P H_I$ |
| Badiot | | | | | $L+H^*$ | | $L_P L_I$ | $H_P H_I$ |

Table 10.9: The difference between wh-questions exhibiting and lacking the particle *pa/po* in the varieties under consideration

In sum, in all varieties except for Fascian, the absence of the particle *pa* in wh-questions corresponds to a difference in the final boundary tone: a low tone when the particle is

present, and a final rise when the particle is absent. The particle *pa/po* and the final rise are hence in complementary distribution suggesting that the particle, on a par with the final rise, can be considered as an interrogative clause typing element.

10.3.3 Variation in wh-questions involving compound tenses

Recall that in wh-questions involving compound tenses, the particle *pa/po* occurs after the auxiliary and before the participle in Gherdëina, Badiot and Fascian, whereas in Nònes, the particle comes only after the participle. The postverbal position of the particle is straightforward from a syntactic perspective, but the postparticipial position of the particle in Nònes could not be accounted for (cf. section 5.4). Here, I revisit this phenomenon from the perspective of the prosody-syntax interface and argue that the postparticipial position of the particle in Nònes can be attributed to a rule of prosodic well-formedness, overriding the syntactic placement of the particle.

Consider the examples and pitch tracks for wh-questions involving compound tenses in Gherdëina (22, figure 10.22), Badiot (23, figure 10.23), Fascian (24, figure 10.24) and Nònes (25, figure 10.25). In all varieties, wh-questions involving compound tenses exhibit main stress on the participle and thus the nuclear pitch accent aligns with the stressed syllable of the participle rather than with the finite verb. We observe the same $L+H^*$ L_P L_I nuclear pitch accent as wh-questions involving simple tenses.

- (22) a. Ulà es' **a** maià da marënda? (Gherdëina)
 where have-2SG PA eaten PREP lunch
 'Where did you have lunch?'
 b.
- | | | | | | | | | | | | |
|---|---|---|---|---|------|----------------|---|---|----------------|---|---|
| | | x | | | | | | | | | |
| | x | | x | | | x | | | | | |
| x | x | x | x | x | x | x | x | x | x | x | x |
| [[U là es s'a mai ià da] _P [ma rën da] _P] _I | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | L+H* | L _P | | | L _I | | |

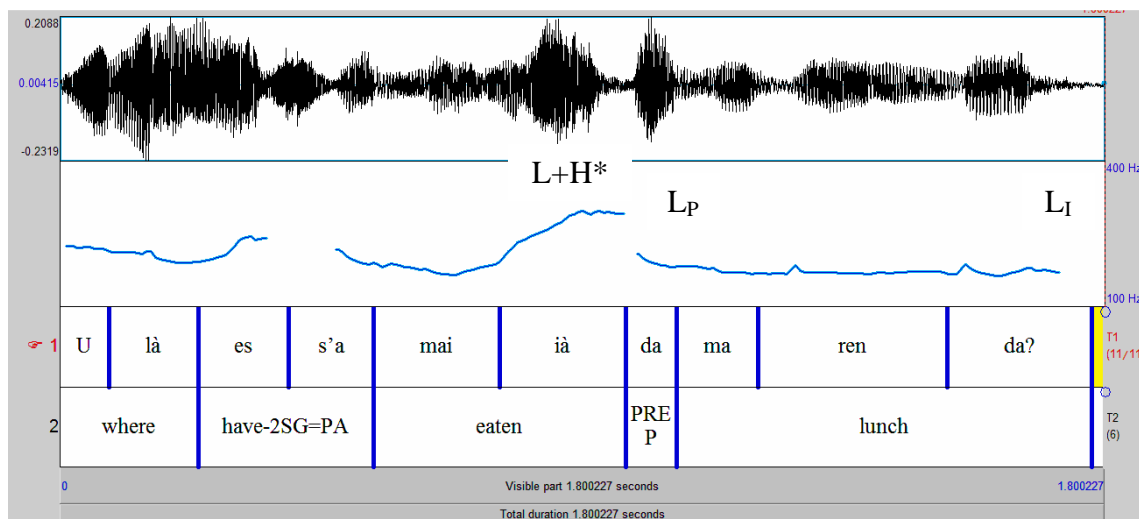


Figure 10.22: Gherdëina 1 Ulà es'a maià da marënda?

- (23) a. Che à *pa* mangé mi marili? (Badiot)
 who have-3SG PA eaten my apricots
 'Who ate my apricots?'

a'.
 X
 X X X
 X X X X X X X X X
 [[Chi à pa man gé mi]_P [ma ril li]_P]_I
 | | |
 L+H* L_P L_I

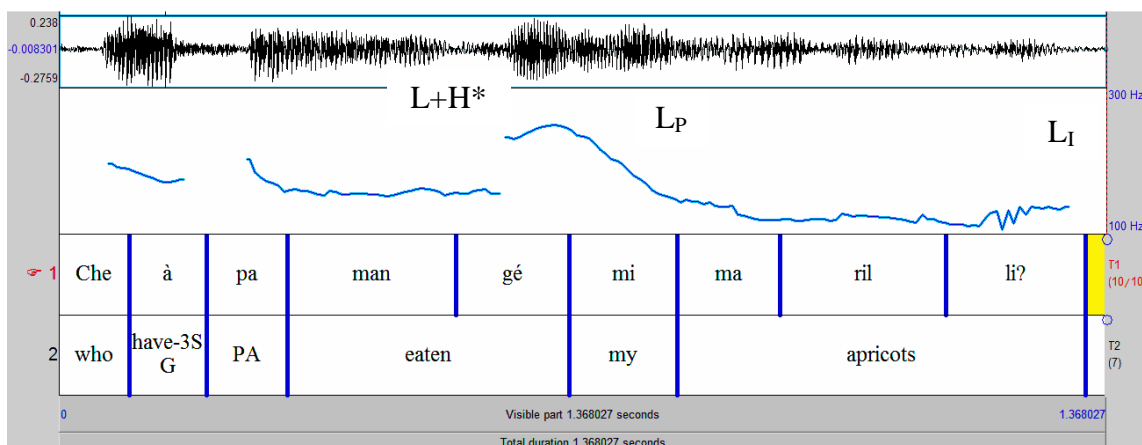


Figure 10.23: Badiot 3 Che à *pa* mangé mi marili?

- (24) a. Che é=l *po* suzedu angérn? (Fascian)
 what be-3SG=SCL PO happened yesterday
 'What happened yesterday?'

b.
 X
 X X X
 X X X X X X X X
 [[Che él po su ze du]_P [an gérn]_P]_I
 | | |
 L+H* L_P L_I

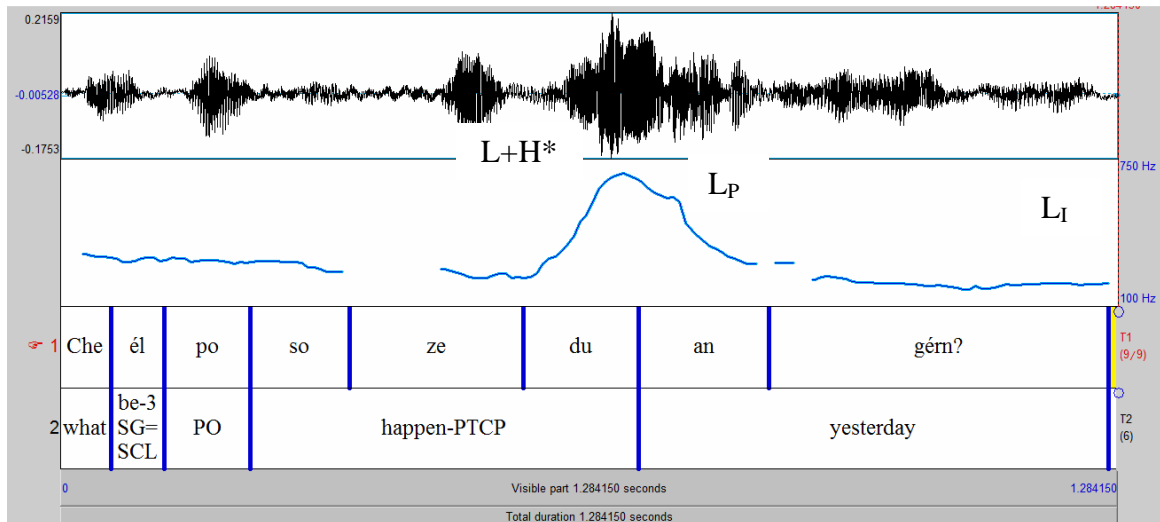


Figure 10.24: Fascian 3 Che él *po* suzedu angérn?

(25) a. Ndo à=i magnà *po* l formai? (Nònes)
 where have-3PL=SCL eaten PO the cheese
 'Where did they eat the cheese?'

b.

| | | | | | | | | | | | | | | | | | | | | | |
|--|--|-------------------------------------|---|---|---|---|---|---|---|---|---|---------------------------------------|---|---|---|---|---|---|---|---|---|
| | | | | X | | | | | | | | | | X | | | | | | | |
| | | X | | X | | X | | X | | X | | X | | X | | X | | | | | |
| | | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| | | [[N do ài magn à po l] _p | | | | | | | | | | [for mai] _p] _i | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
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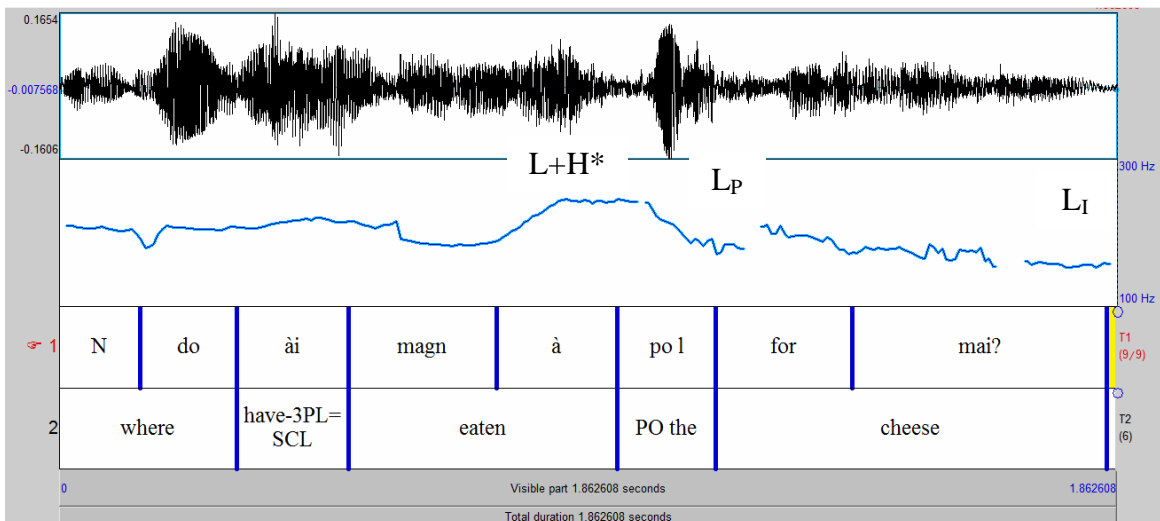


Figure 10.25: Nònes 2 Ndo ài magnà *po* l formai?

| Varieties | Syntactic structure | | Prosodic structure | | |
|--------------------------------|-----------------------------|---------------------------------------|----------------------------|----------------------|-------------------------------|
| | Question formation strategy | Position of the particle <i>pa/po</i> | Position of nuclear stress | Question tune | |
| | | | | Nuclear pitch accent | Edge tones |
| Gherdëina Badiot Fascian | wh-SCI- <i>pa/po</i> -PTCP | postverbal | participle | L+H* | L _P L _I |
| Nònes | wh-SCI-PTCP- <i>pa</i> | postparticipial | | | |

Table 10.10: The tune in wh-questions involving compound tenses in the varieties under consideration

My account of the postparticipial position of the particle *po* in Nònes builds on the following observation: while in Gherdëina, Badiot and Fascian, the particle can either precede (e.g. in wh-questions involving compound tenses) or follow (e.g. in simple tenses) main stress, the relative position of the particle and main stress in Nònes is always constant: *po* always follows main stress. This observation suggests that in Nònes, a rule of prosodic well-formedness requires that the particle is always placed to the right of main stress. More specifically, I assume that *po* encliticises to the right phonological phrase boundary following the main stressed syllable.

(26) Particle placement in Nònes: place the particle *po* to the right of main stress.

The derivation of this position can be envisaged as follows: the syntax makes available a phrase structure in which the particle is in postverbal position like in the other varieties. However, in Nònes, the prosodic particle placement rule in (26) overrides the syntactic particle placement and consequently, the particle occurs in postparticipial position rather than in postverbal position.

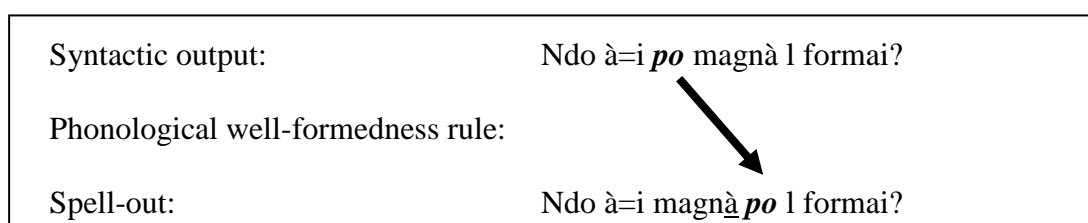


Figure 10.26: The derivation of the postparticipial position of the particle *po* in Nònes (main stress underlined)

Similarly to what Zec & Inkelas (1990) claim for Serbo-Croatian clitics (cf. section 1.3.1), the present case provides thus evidence for the assumption that (prosodic) phonology can influence syntax and that a phrase structure provided by the syntax is allowed only if it is prosodically well-formed as well.

10.3.4 Variation in wh-questions involving modal verb constructions

The derivation suggested for the postparticipial position of the particle can also account for the fact that in wh-questions involving modal verb constructions (cf. section 3.7.2.3), Nònes exhibits the particle in postinfinitival position (27b, figure 10.28) rather than postverbally like the other varieties, exemplified in (27a, figure 10.27) by Fascian. In wh-questions involving modal verb constructions, main stress falls on the infinitive and the tune observed is L+H* L_P L_I in all varieties.

(27) a. Can vél=ela *pa* vegnir? (Fascian)
 when want-3SG=SCL.F PA come-INF
 ‘When does she want to come?’

a'.
 x x x x x x x x
 x x x x x x x x
 [[Can vé le la pa]_P [ve gnir?]_P]_I
 | |
 L+H* L_P L_I

b. Can vuel=ela nir *po?* (Nònes)
 when want-3SG=SCL.F come-INF PO

b'.
 x x x x x x x x
 x x x x x x x x
 [[Can vuel e la]_P [nir po]_P]_I
 | |
 L+H* L_I

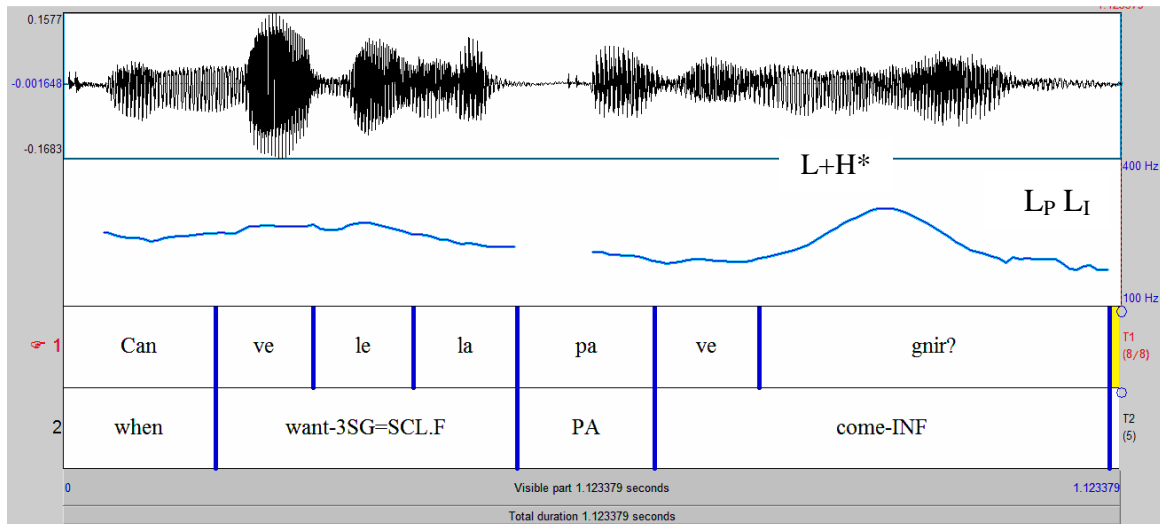


Figure 10.27: Fascian 5 Can velela *pa* vegnir?

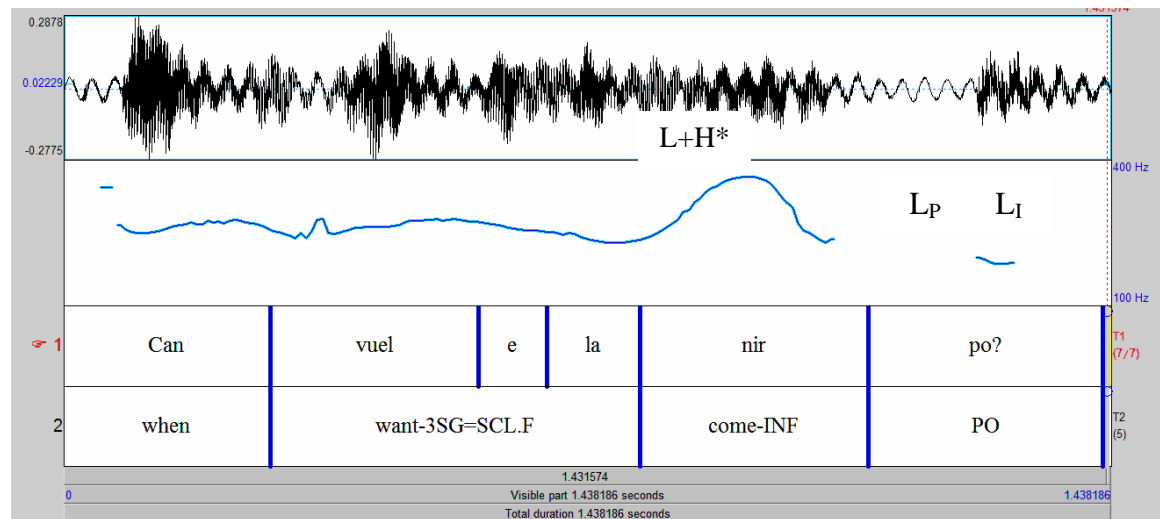


Figure 10.28: Nònes 7 Can vuelela nir *po*?

| Varieties | Syntactic structure | | Prosodic structure | | |
|-----------|-----------------------------|---------------------------------------|----------------------------|----------------------|-------------------------------|
| | Question formation strategy | Position of the particle <i>pa/po</i> | Position of nuclear stress | Question tune | |
| | | | | Nuclear pitch accent | Edge tones |
| Fascian | wh-SCI- <i>pa/po</i> -INF | postverbal | infinitive | L+H* | L _P L _I |
| Nònes | wh-SCI-INF- <i>po</i> | postinfinitival | | | |

Table 10.11: The tune in wh-questions involving modal verb constructions in the varieties under consideration

On a par with what I have proposed for the postparticipial position (cf. figure 10.26), I assume that the syntax provides a Nònes phrase structure with the particle in postverbal position like in the other varieties. Given the rule in (26), however, the particle occurs in postinfinitival position at Spell-Out.

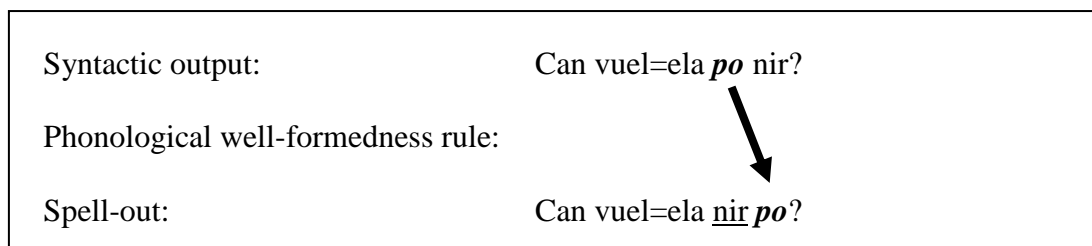


Figure 10.29: The derivation of the postinfinitival position of the particle *po* in Nònes (main stress underlined)

In conclusion, the difference between Gherdëina, Badiot and Fascian on the one hand and Nònes on the other as to the placement of the particle can be accounted for by assuming that in the former three varieties, the placement of the particle *pa/po* is governed by the syntax only whereas in Nònes, the placement of the particle is the result of prosodic influence on syntactic structure.

10.4 Wh-*pa/po*-questions and marking of narrow focus

In wh-*pa/po*-questions, the particle appears in the position directly after the wh-expression, but, as can be seen from table 10.12, the varieties under consideration differ with respect to (i) the extent to which this is possible and (ii) word order following the sequence wh-*pa/po*.

| Varieties | wh- <i>pa/po</i> in isolation or in non-finite clauses | wh- <i>pa/po</i> in finite clauses | |
|---------------------|--|------------------------------------|------------|
| | | wh-expression | Word order |
| Gherdëina | √ | | |
| Badiot/Marèo | √ | | |
| Fascian Brach/Cazet | √ | with all | SV |
| Fascian Moenat | √ | with all | VS |
| Nònes | √ | with some only | SV |

Table 10.12: The syntactic properties of wh-*pa/po*-questions in the varieties under consideration

In Fascian and Nònes, *wh-pa/po*-questions involve narrow focus on the *wh*-expression whereas Gherdëina and Badiot employ other means to express narrow focus. In what follows, I address the prosody of *wh-pa/po*-questions, investigating first the tune (section 10.4.1) and then the issue as to whether the word order differences after the sequence *wh-pa/pa* between Fascian Cazet/Brach on the one hand and Fascian Moenat on the other are correlated by a difference in prosody (10.4.2).

10.4.1 The tune of *wh-pa/po*-questions

10.4.1.1 *Wh-pa/po* in isolation

In reduced verbless *wh*-questions consisting only in the sequence *wh-pa/po* (*‘wh-pa/po* in isolation’) (28, figures 10.30–31), main stress falls on the stressed syllable of the *wh*-expression and we observe the same $L+H^* L_P L_I$ tune as in the default question formation strategy *wh-SCI-pa/po* (cf. section 10.3).²

(28) a. Ciuldì *pa*? (Gherdëina)

why PA
 ‘Why?’
 a’. x
 x
 x x x
 [[Ciul dì pa]_P]_I
 | | |
 L+H* L_P L_I

b. Olà *pa*? (Badiot)

where PA
 ‘Where?’
 b’. x
 x
 x x x
 [[O là pa]_P]_I
 | | |
 L+H* L_P L_I

² Note that at least in Gherdëina and Badiot, *‘wh-pa/po* in isolation’ does not involve narrow focus on the *wh*-expression. In Fascian and Nònes, these *wh*-questions can convey narrow focus, but this requires major prosodic stress to be placed on the *wh*-expression.

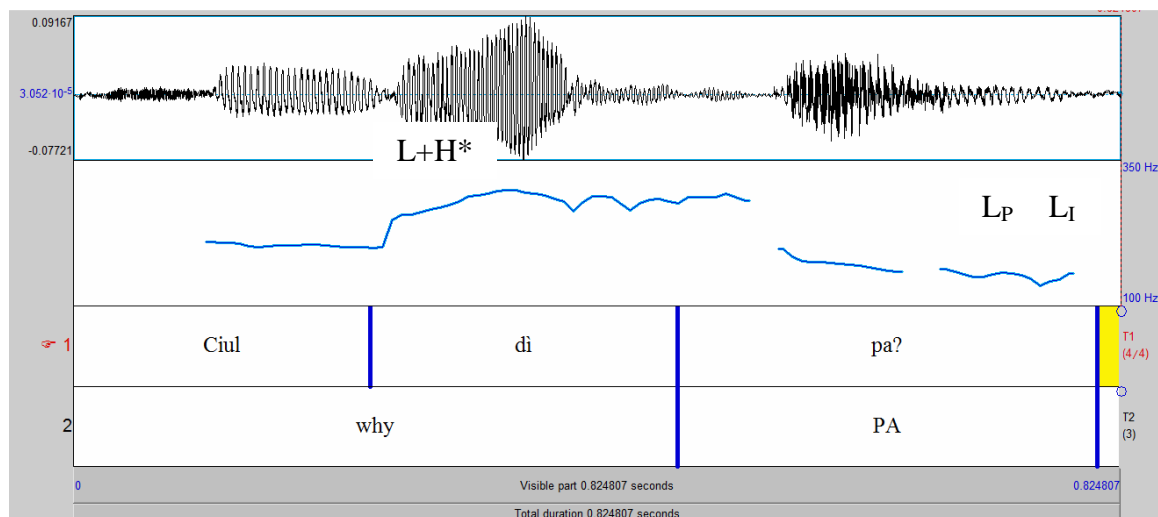


Figure 10.30: Gherdëina 3 Ciuldì *pa?*

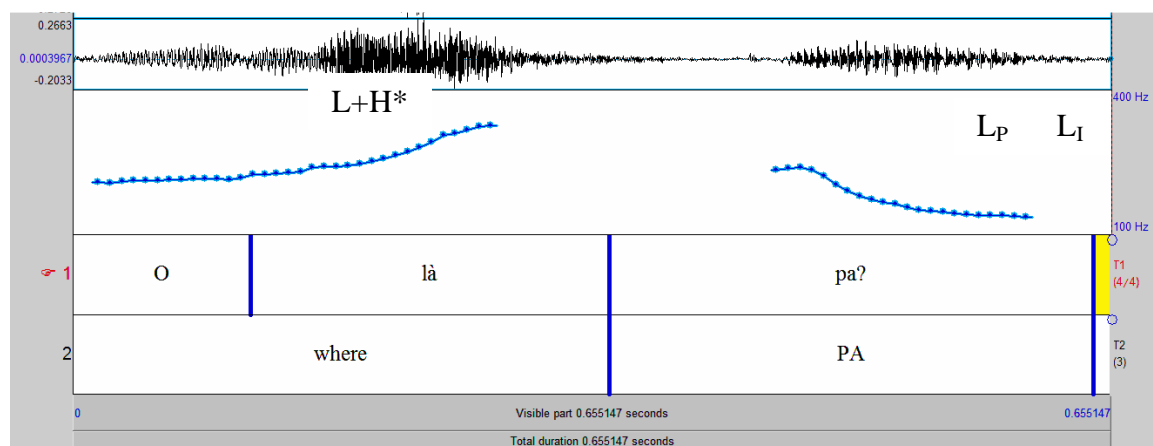


Figure 10.31: Badiot 4 Olà *pa?*

| Varieties | Focus type | Syntactic structure | | Prosodic structure | | |
|---|------------------------|-----------------------------|---------------------------------------|----------------------------|----------------------|-------------------------------|
| | | Question formation strategy | Position of the particle <i>pa/po</i> | Position of nuclear stress | Question tune | |
| | | | | | Nuclear pitch accent | Edge tones |
| Gherdëina Badiot Fascian Nònes | neutral - narrow | <i>wh-pa/po</i> | <i>wh-pa/po</i> - position | <i>wh</i> -expression | L+H* | L _P L _I |

Table 10.13: The tune in *wh-pa/po*-questions, '*wh-pa/po* in isolation'

10.4.1.2 *wh-pa/po* in non-finite clauses

The second context in which the sequence *wh-pa/po* is allowed in the varieties Gherdëina and Badiot concerns *wh*-questions involving a non-finite clause (29, figures 10.32–33).

Here, main stress falls on the last content word rather than on the *wh*-expression and

hence, also the nuclear pitch accent is aligned with the last prominent phrasal unit rather than with the finite verb. In Gherdëina, the contour ends on a low pitch level (L_I) (29a, figure 10.32) whereas Badiot exhibits a terminal rise ($H_P H_I$) (29b, figure 10.33).

(29) a. Ciuldì *pa* abiné adum millions de paroles? (Gherdëina)
 why PA collect-INF together millions of words
 ‘Why should one collect millions of words?’ (rhetorical question)

a'.
 x x x x x x x x x x x
 x x x x x x x x x x x
 [[Ciul dì pa(a)]_P [a bi né a dum]_P [mi lions de pa ro les]_P]_I
 | |
 L+H* L_P L_I

b. Cìodì *pa* acumulé miliuns de parores? (Badiot)
 why PA accumulate-INF millions of words
 ‘Why should one collect millions of words?’ (rhetorical question)

b'.
 x x x x x x x x x x x
 x x x x x x x x x x x
 [[Cìo dì pa]_P [a cu mu lé]_P [mi liuns d pa ro res]_P]_I
 | |
 L+H* H_P H_I

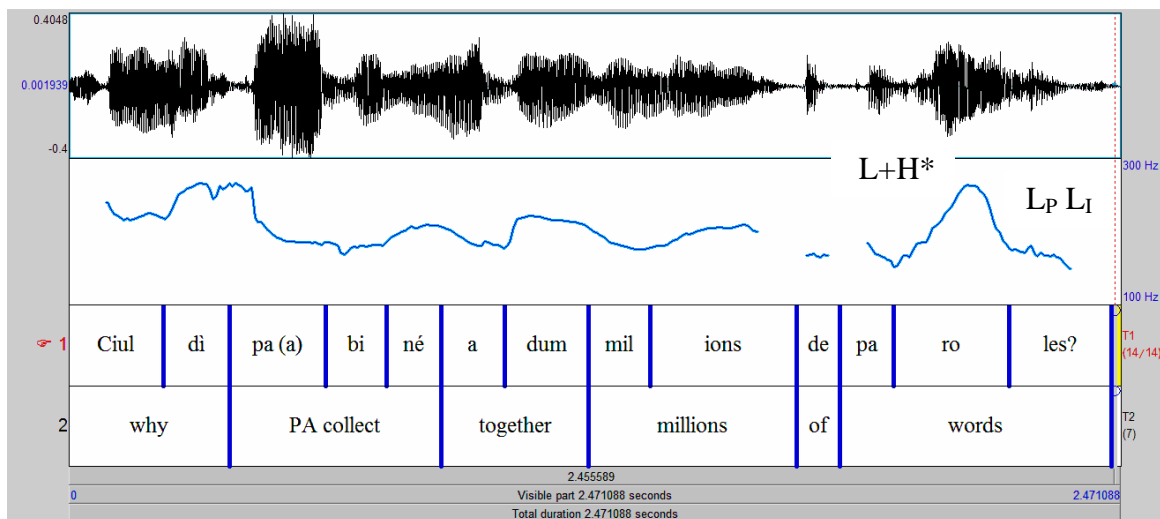


Figure 10.32: Gherdëina 5 Ciuldì *pa* abiné adum millions de paroles?

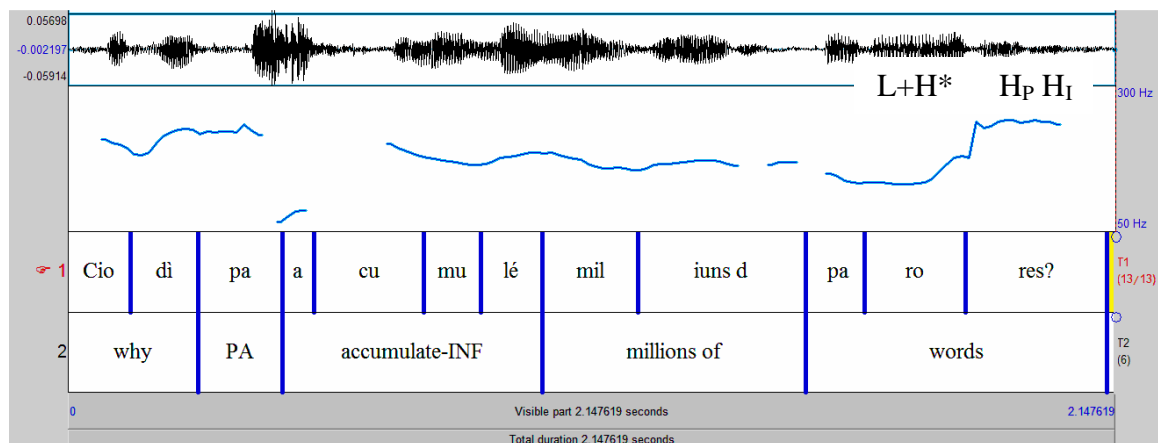


Figure 10.33: Badiot 3 Ćiodì *pa* acumulé miliuns de parores?

The difference between Gherdëina and Badiot regarding the terminal part of the contour can be captured by different edge tone specifications.

| Varieties | Syntactic structure | | Prosodic structure | | |
|-----------|-----------------------------|---------------------------------------|----------------------------|----------------------|-------------------------------|
| | Question formation strategy | Position of the particle <i>pa/po</i> | Position of nuclear stress | Question tune | |
| | | | | Nuclear pitch accent | Edge tones |
| Gherdëina | wh- <i>pa</i> -INF | wh- <i>pa</i> -position | last content word | L+H* | L _P L _I |
| Badiot | | | | | H _P H _I |

Table 10.14: The tune in wh-*pa/po*-questions, wh-*pa/po* in non-finite clauses

10.4.1.3 Wh-*pa/po*-questions involving finite clauses

Fascian and Nònes exhibit the sequence wh-*pa/po* not only in reduced verbless wh-questions (section 10.4.1.1) and in wh-*pa/po*-questions with non-finite clauses (10.4.1.2), but also in wh-questions involving finite clauses. In Nònes, this type of question is possible only with some wh-expressions, whereas Fascian exhibits it across the board with all question words. In wh-*pa/po*-questions, the wh-expression is in narrow focus and main stress falls on the question word. The particle *pa/po* attaches to the location of main stress.

(30) a. Ndo *po* i à magnà l formai? (Nònes)
 where PO they have-3PL eaten the cheese
 ‘Where did they eat the cheese?’

a'. X
 X
 X X X X X X X X X
 [[N do po]_P [i à magn à l for mai]_P]_I
 | | |
 L+H* L_P L_I

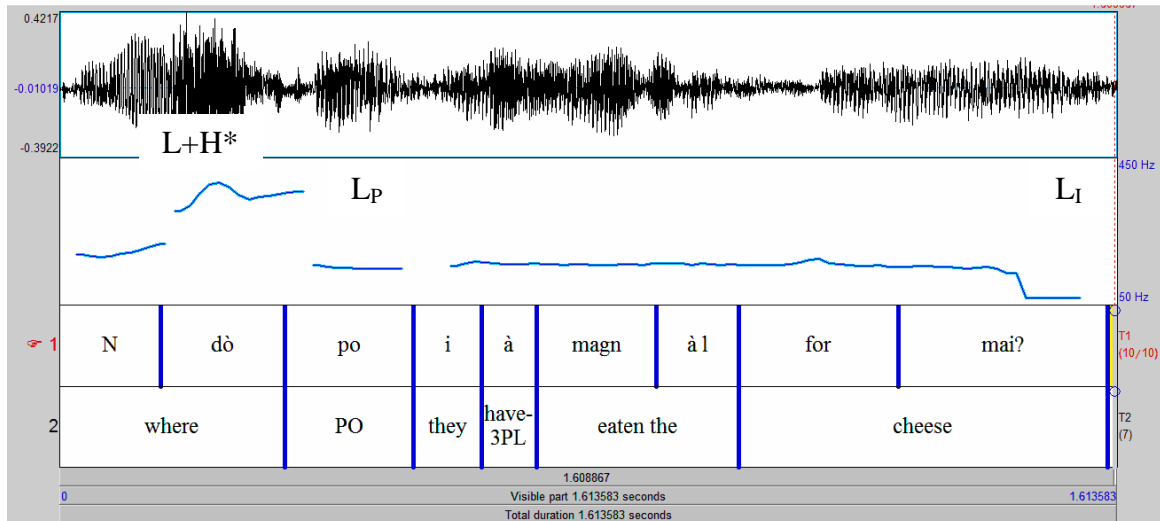


Figure 10.34: Nònes 6 *Ndo po i à magnà l formai?*

We can hence characterise the tune in Nònes *wh-po*-questions involving finite clauses in the following way:

| Variety | Focus type | Syntactic structure | | Prosodic structure | | |
|---------|------------|-----------------------------|--|----------------------------|----------------------|-------------------------------|
| | | Question formation strategy | Position of the particle <i>pa</i> (<i>po</i>) | Position of nuclear stress | Question tune | |
| | | | | | Nuclear pitch accent | Edge tones |
| Nònes | narrow | <i>wh-po</i> -SV | <i>wh-po</i> -position | <i>wh</i> -expression | L+H* | L _P L _I |

Table 10.15: The tune in Nònes *wh-po*-questions, *wh-po* in finite clauses

In contrast to Nònes, Fascian *wh-pa/po*-questions exhibit a final rise (L_IH_I). Moreover, there are two types of contours differing in temporal alignment as to the onset of the nuclear rise. I assume that we are dealing here with the same L+H* L_P L_IH_I tune but that in pattern 2 (31b, figure 10.36), the nuclear rise is implemented later than in pattern 1 (31a,

figure 10.35) due to tonal crowding on the main stressed syllable. Pattern 2 is much less frequent than pattern 1 and observed only with specific speakers, suggesting that the choice between the patterns is free variation.

(31) a. Can *pa* les fémenes les va a Moena? (Fascian)
 when PA the women they go-3PL to Moena
 ‘When are the women going to Moena?’

a'. x
 x
 x x x x x x x x x x x
 [[Can pa]_P [les fé me nes les va (a) Mo e na]_P]_I
 | | |
 L+H* L_P L_IH_I

b. Can *po* le fémene le va a Moena?
 when PO the women they go-3PL to Moena
 ‘When are the women going to Moena?’

b'. x
 x x
 x x x x x x x x x x
 [[Can po]_P [le fé me ne le va a Mo e na]_P]_I
 | | |
 L+H* L_P L_IH_I

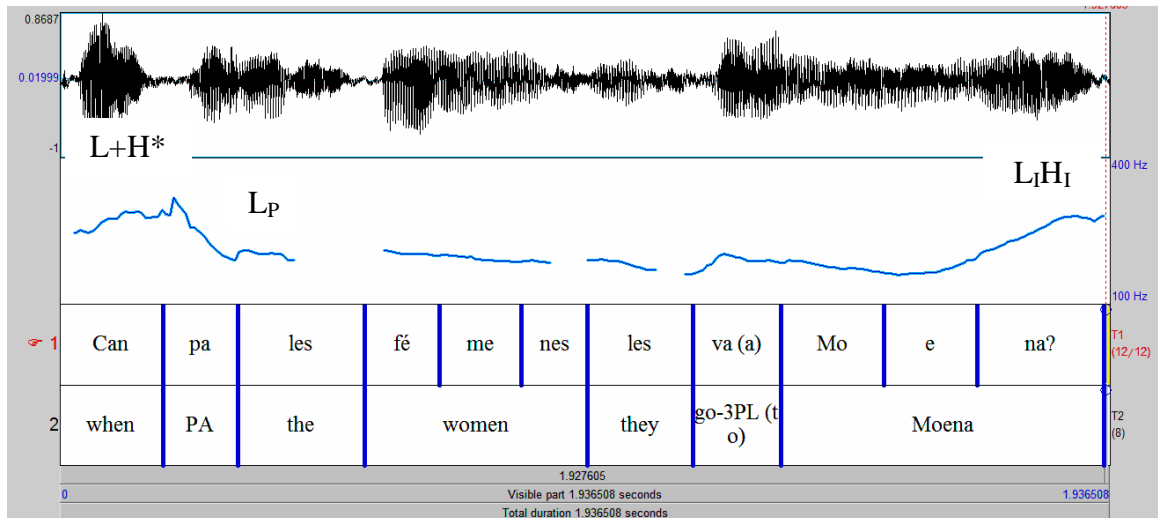


Figure 10.35: Fascian 1 Can *pa* les fémenes les va a Moena?

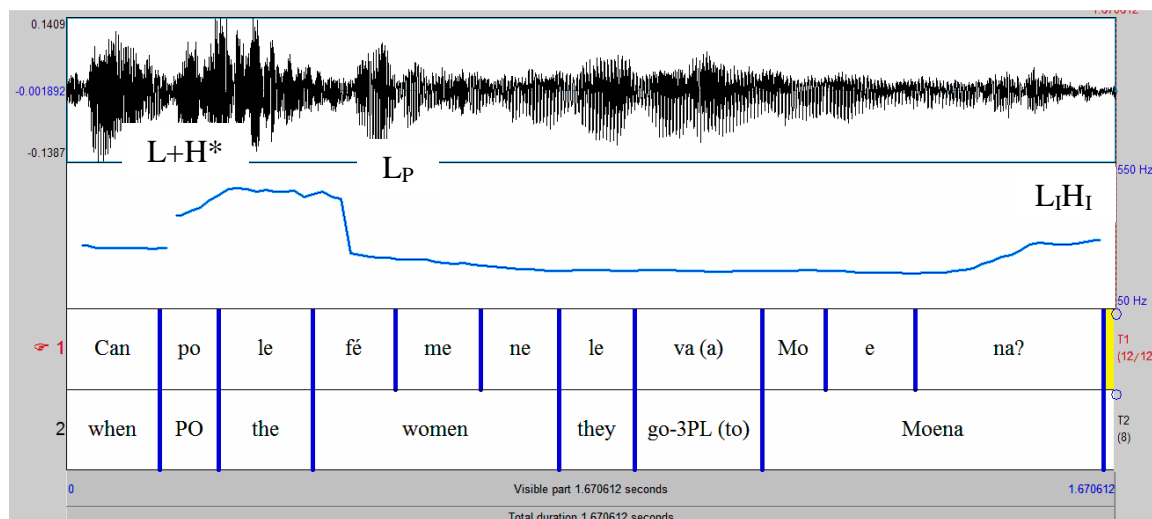


Figure 10.36: Fascian 2 Can *po* le fémene le va a Moena?

| Varieties | Focus type | Syntactic structure | | Prosodic structure | | |
|----------------|------------|-----------------------------|---------------------------------------|----------------------------|----------------------|--|
| | | Question formation strategy | Position of the particle <i>pa/po</i> | Position of nuclear stress | Question tune | |
| | | | | | Nuclear pitch accent | Edge tones |
| Fascian | narrow | <i>wh-pa/po-SV</i> | <i>wh-pa/po</i> -position | <i>wh</i> -expression | L+H* | L _p L ₁ H ₁ |

Table 10.16: The tune in Fascian *wh-pa/po*-questions, *wh-pa/po* in finite clauses

10.4.2 Variation in word order in *wh-pa/po*-questions

Recall from chapter 5 that in Fascian Cazet (32a) and Brach (32b), *wh-pa/po* is followed by direct word order (SV), whereas Fascian Moenat *wh-po*-questions involve inverted word order (SCI) (32c).³

- (32) a. Can ***pa*** te chiamés la mama? (Fascian 1 Cazet)
 when PA you call-2SG the mother
- b. Can ***pa*** tu chiamé la mama? (Fascian 2 Brach)
 when PA you call-2SG the mother
- c. Can ***po*** chiamé=to la mama? (Fascian 12 Moenat)
 when PO call-2SG=SCL the mother
 ‘When do you call mother?’

³ Note that some speakers of Fascian Brach and Cazet may occasionally also use the Moenat-style *wh-po*-SCI-construction.

- (i) Can ***po*** chiamés=te la mama? (Fascian 4 Brach)

As I show in the following, this word order difference in *wh-pa/po*-questions between the subvarieties of Fascian seems to correlate with a difference in prosody: Fascian Cazet and Brach *wh-pa/po*-questions involve a rising nuclear pitch accent (cf. 31, figures 10.35–36), whereas Moenat *wh-po*-questions (33, figure 10.37) exhibit a falling one. In fact, the Brach/Cazet and the Moenat patterns are very similar and seem to differ just in temporal alignment with the Moenat pattern shifted to the left with respect to the Brach/Cazet one.

- (33) a. Can *po* vegne=to? (Fascian Moenat)
 when PO come-2SG=SCL
 ‘When are you coming?’
 b. x
 x
 x x x x x
 [[Can po]_P [vegn e to]_P]_I
 | | |
 H+L* L_P L_IH_I

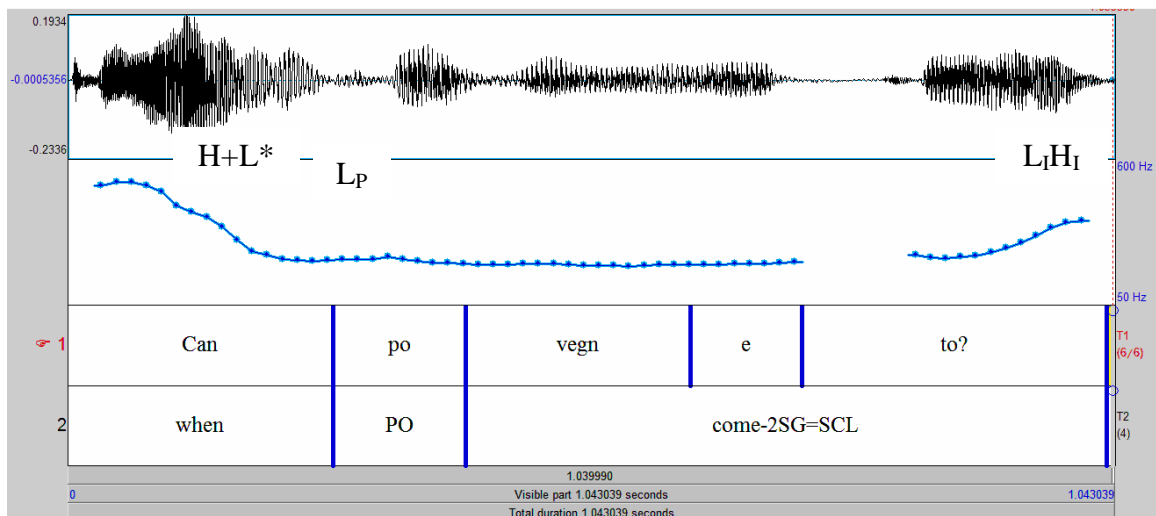


Figure 10.37: Fascian Moenat 10 Can *po* vegneto?

At first sight, the difference in word order between Fascian Moenat *wh-po*-questions (SCI) and Fascian Brach and Cazet (SV) seems to be correlated by a difference in pitch contour suggesting an interdependency between the syntax and the prosody.

However, there is reason to assume that the prosodic differences between Moenat and Brach/Cazet *wh-po*-questions are not due to the word order type involved but should rather be considered idiosyncratic properties of the individual varieties. In fact, in those cases

where speakers of Brach or Cazet uttered a *wh-pa/po*-question involving the Moenat *wh-po*-SCI-syntax (maybe because of insecurity or error), the pitch contour was not of the Moenat $H+L^* L_P L_I H_I$ -type but of their own – Cazet or Brach – $L+H^* L_P L_I H_I$ -type. (34a, figure 10.38) shows a *wh-pa/po*-question involving Cazet/Brach direct word order uttered by a speaker of Cazet, (34b, figure 10.39) is a *wh-pa/po*-question with Moenat-style inverted word order uttered by a speaker of Cazet/Brach and (34c, figure 10.40) is a *wh-pa/po*-question with Moenat-style inversion uttered by a speaker of Moenat.

- (34) a. Perché **pa** l vel ben a la Maria? (Fascian Brach/Cazet)
 why PA he want-3SG good to the Maria
 ‘Why does he love Maria?’
 a’. x
 x
 x x x x x x x x x
 [[Per ché pa l]_P [vel ben a la Ma ri ia]_I]_I
 | | |
 L+H* L_P L_IH_I
- b. Perché **pa** vel=el ben a Maria? (Fascian Brach/Cazet with
 why PA want-3SG=SCL good to Maria Moenat word order)
 b’. x
 x
 x x x x x x x x
 [[Per ché pa]_P [vel el ben a Ma ri ia]_I]_I
 | | |
 L+H* L_P L_IH_I
- c. Perché **po** vö=ela ben a Maria? (Fascian Moenat)
 why PO want-3SG=SCL.F good to Maria
 c’. x
 x
 x x x x x x x x x
 [[Per ché po]_P [vö lel la ben a Ma ri ia]_I]_I
 | | |
 H+L* L_P L_IH_I

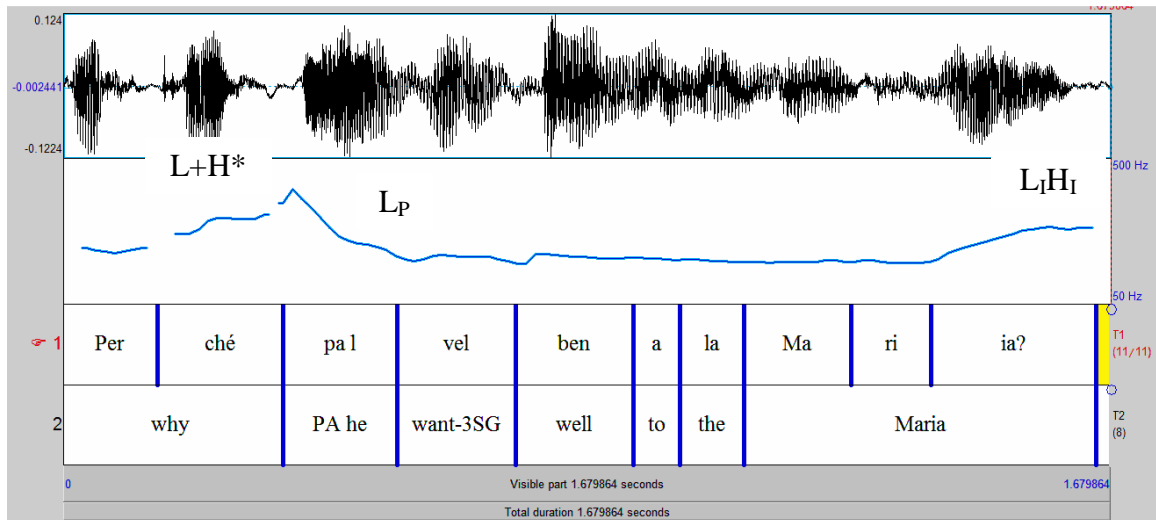


Figure 10.38: Fascian 1 Cazet Perché *pa l vel ben a la Maria?*

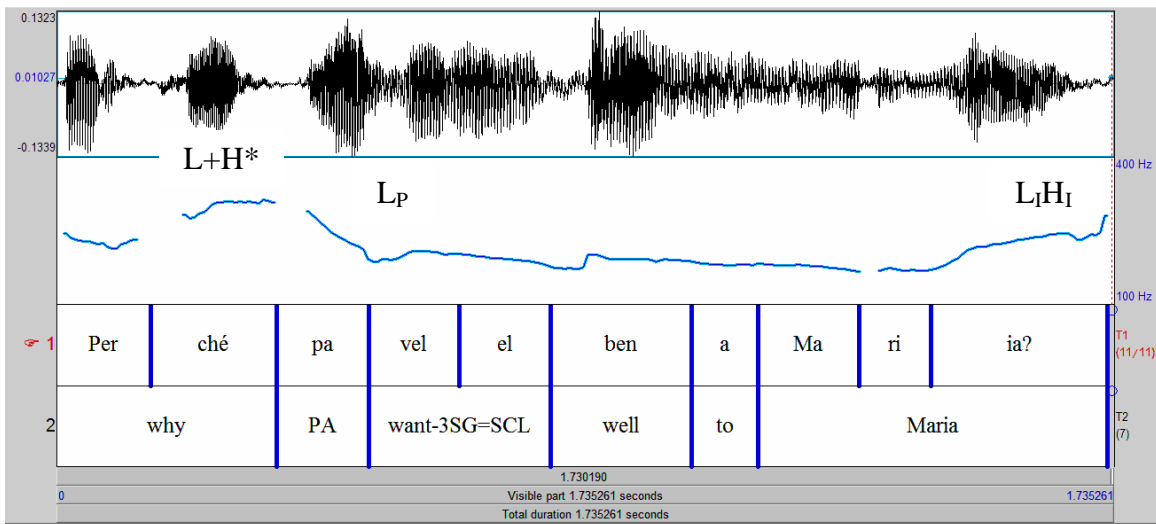


Figure 10.39: Fascian 1 Cazet Perché *pa velel ben a Maria?*

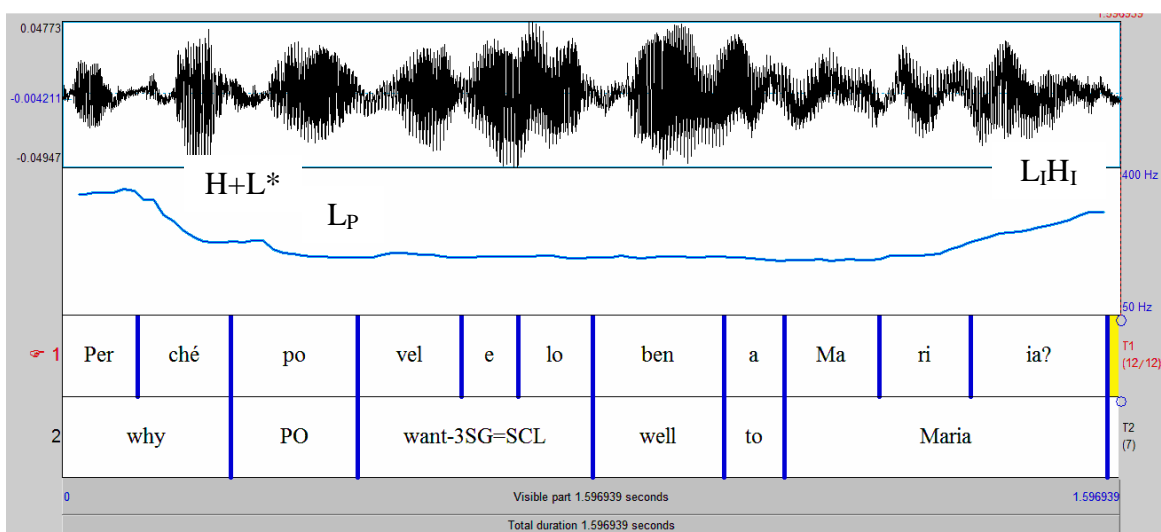


Figure 10.40: Fascian 7 Moenat Perché *po velelo ben a Maria?*

In conclusion, the observation that speakers of Brach/Cazet exhibit the Brach tune even when uttering a *wh*-question with Moenat syntax suggests that the tune is not tied to the syntactic structure but is an autonomous level of grammar. Hence, the variation in nuclear pitch accent between Fascian Brach/Cazet on the one hand and Moenat on the other should be considered a case of dialectal variation rather than influence by the syntax. Table 10.17 summarises the syntactic and prosodic properties of Fascian *wh-pa/po*-questions.

| Variety | Focus type | Syntactic structure | | Prosodic structure | | |
|---------------------|------------|-----------------------------|------------|----------------------------|----------------------|--|
| | | Question formation strategy | Word order | Position of nuclear stress | Nuclear pitch accent | Edge tones |
| Fascian Brach/Cazet | narrow | <i>wh-pa</i> -SV | direct | wh-expression | L+H* | L _p L _I H _I |
| Fascian Moenat | | <i>wh-po</i> -SCI | inverted | | H+L* | |

Table 10.17: The tune in Fascian *wh-pa/po*-questions involving finite propositions

10.5 The tune of *wh*-cleft questions

The present section is concerned with *wh*-cleft questions, which are used in Fascian and Nònes, but not in Gherdëina and Badiot, to convey narrow focus.⁴ *Wh*-cleft constructions consist of two parts: (a) the copula construction involving the *wh*-expression, the copula verb followed by an enclitic subject pronoun (if present) and the particle *pa/po* and (ii) the complementizer *che* followed by a finite clause involving direct word order (SV).

- (35) a. Chi è=l *pa* che magna n minestron a Roma? (Fascian)
 who be-3SG=SCL PA that eat-3SG a soup in Rome
 ‘Who has a soup in Rome?’
- b. Ndo é=l *po* che vas? (Nònes)
 where be-3SG=SCL PO that go-2SG
 ‘Where are you going?’

⁴ Note that in many varieties spoken in northern Italy, among them Fascian and Nònes, the cleft construction has further grammaticalised or pragmaticised in subject-questions, in that it has lost its narrow focus meaning and is now used as the default question formation strategy in questions asking for the subject of the sentence.

In *wh*-cleft constructions, main stress falls on the copula verb rather than on the *wh*-expression. Hence, unlike *wh-pa/po*-questions, where the position of main stress coincides with the element in narrow focus (the *wh*-expression) in accordance with ‘Focus to Stress Alignment’ (cf. section 1.3.3.2), in *wh*-cleft questions, narrow focus on the *wh*-expression is not signalled by main prominence but rather by syntactic means, i.e. the cleft. In what follows, I first address Nònes (section 10.5.1), and then Fascian (10.5.2).

10.5.1 Nònes *wh*-cleft questions

Nònes *wh*-cleft questions exhibit two different intonational contours, which can both be analysed in terms of L+H* L_P L_I. In contour 1 (36a, figure 10.41), the pitch rises through the nuclear stressed syllable on the copula verb and falls towards the L_P target and continues on a low level until the end of the utterance. The less frequent contour 2 (36b, figure 10.42) differs from contour 1 in a high plateau on the whole copula construction comprising the complementizer *che* which can be attributed to tonal repulsion: the high H*-target is implemented later due to tonal crowding on the main stressed syllable *él*.

- (36) a. Ndo é=l **po** che i noni i à (Nònes)
 where be-3SG=SCL PO that the grandfathers they have-3PL
 magnà na minestra?
 eaten a soup
 ‘Where did the grandfathers eat a soup?’
- a’.
 x
 x x x x x x x x x x x x x
 [[N do é=l po]_P [che i no ni (i)]_P [à magn à na mi nes tra]_P]_I
 | | |
 L+H* L_P L_I
- b. Ndo é=l **po** che as magnà vergot?
 where be-3SG=SCL PO that have-2SG eaten something
 ‘Where did you eat something?’
- b.
 x
 x x x x x x x x x x
 [[N do é=l po]_P [che as magn à ver got]_P]_I
 | | |
 L+H* L_P L_I

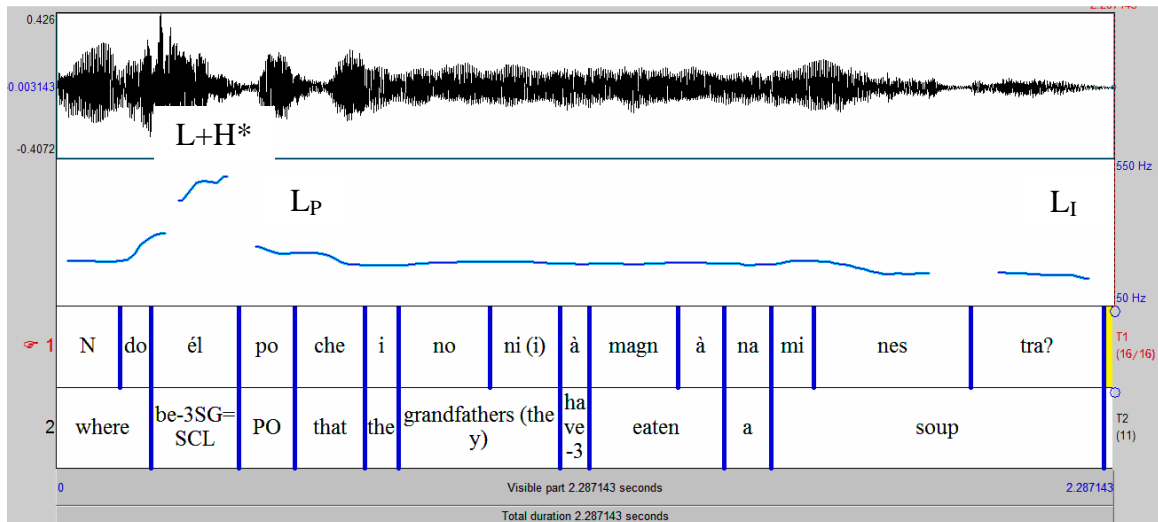


Figure 10.41: Nònes 6 *Ndo él po che i noni i à magnà na minestra?*

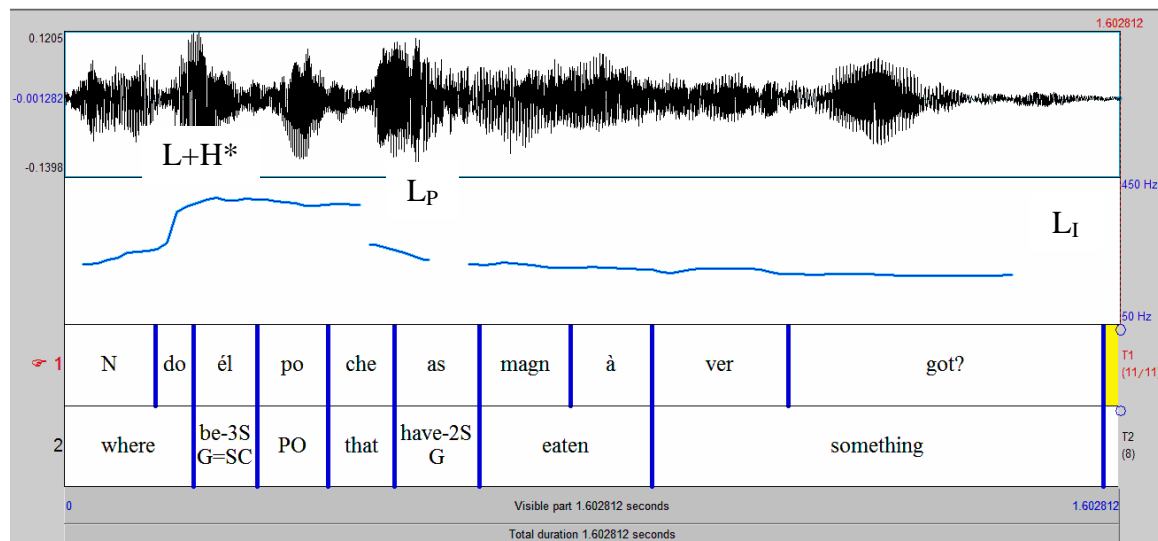


Figure 10.42: Nònes 2 *Ndo él po che as magnà ver got?*

| Variety | Focus type | Question formation strategy | Position of the particle <i>po</i> | Position of main stress | Question tune | |
|---------|------------|-----------------------------|------------------------------------|-------------------------|----------------------|-------------------------------|
| | | | | | Nuclear pitch accent | Edge tones |
| Nònes | narrow | wh-cleft | postverbal | copula verb | L+H* | L _p L _i |

Table 10.18: The tune in Nònes wh-cleft questions

10.5.2 Fascian wh-cleft questions

In Fascian wh-cleft questions, there is free variation between two different kinds of contours. Contour 1, the default, is very similar to contour 1 in Nònes, except for the terminal rise.

(37) a. Chi é=l *pa* de ele che laora a maia? (Fascian)
 who be-3SG=SCL PA of them that work-3SG PREP stitch
 ‘Who of them knits?’

a'. x
 x
 x x x x x x x x x x x
 [[Chi él pa de e le]_P [che lao ra a mai ia]_P]_I
 | | |
 L+H* L_P L_IH_I

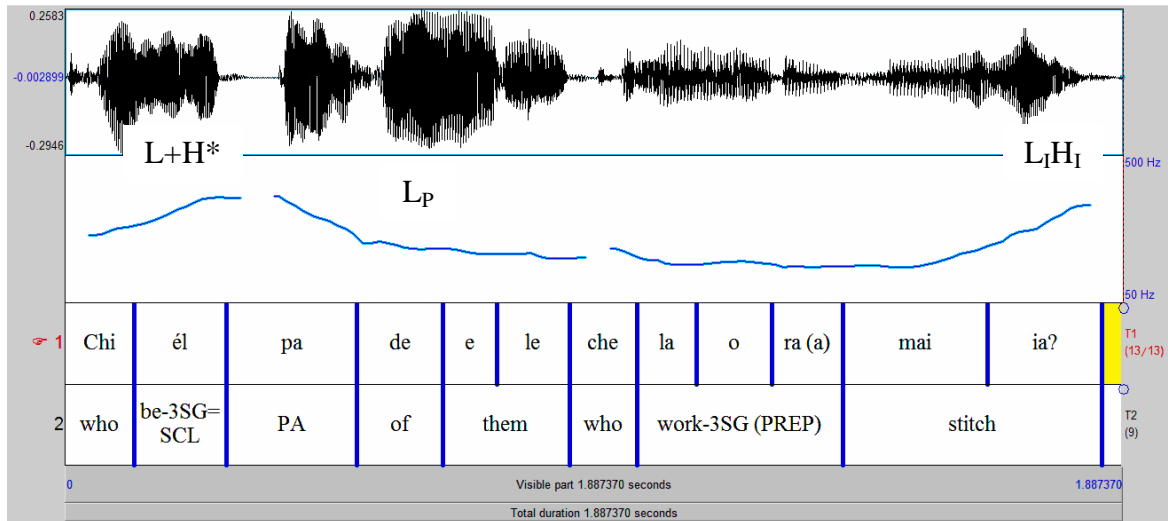


Figure 10.43: Fascian 4 Chi él *pa* de ele che laora a maia?

Contour 2 (38) differs from contour 1 in the falling nuclear contour (H+L*). It ends either in a final rise (38a, figure 10.44) or on a low pitch level (38b, figure 10.45).

(38) a. Can é=l che no t=as magnà nia? (Fascian Brach)
 When be-3SG=SCL that not you=have-2SG eaten nothing
 ‘When did you eat nothing?’

a'. x
 x
 x x x x x x x x x
 [[Can é=l]_P [che no t=as magn à ni a]_P]_I
 | | |
 L+H* L_P L_I

b. Can é=lo *po* che le fémene le va a Moena? (Fascian Moenat)
 when be-3SG=SCL PO that the women they go-3PL to Moena Moenat)
 ‘When are the women going to Moena?’

b'. x
 x
 x x x x x x x x x x x x x
 [[Can é lo po]_P [che le fé me ne le [va (a) Mo e na]_P]_I
 | | |
 L+H* L_P L_IH_I

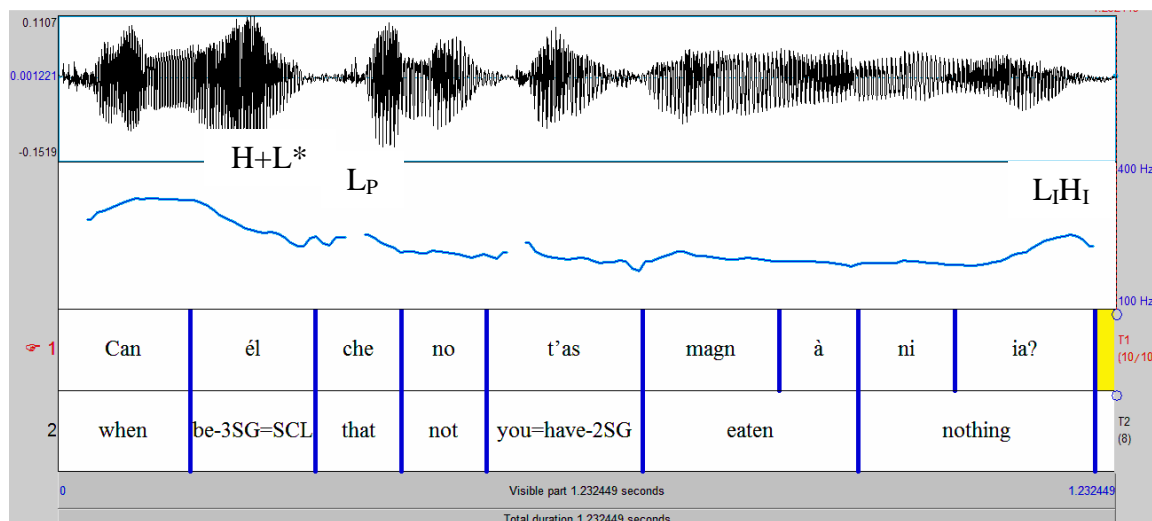


Figure 10.44: Fascian 5 Brach Can él che no t'as magnà nia?

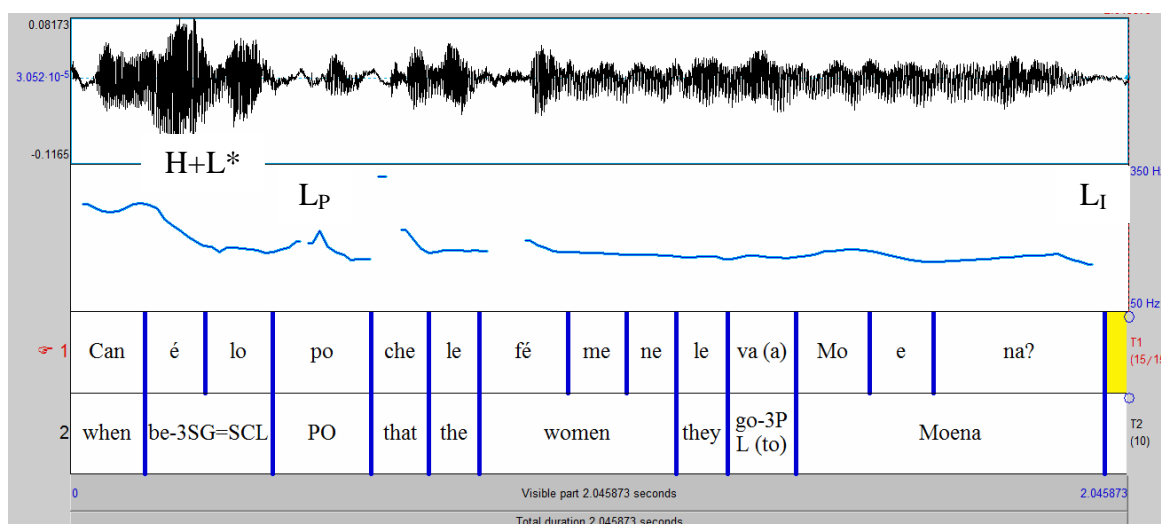


Figure 10.45: Fascian 12 Moenat Can é lo po che le fé me ne le va a Moena?

Table 10.19 summarises the syntactic and prosodic characteristics of Fascian wh-cleft questions.

| Variety | Focus type | Question formation strategy | Position of the particle <i>po</i> | Position of main stress | Contour | Question tune | |
|---------|------------|-----------------------------|------------------------------------|-------------------------|-----------|----------------------|---|
| | | | | | | Nuclear pitch accent | Edge tones |
| Fascian | narrow | wh-cleft | postverbal | copula verb | Contour 1 | L+H* | L _p L ₁ H ₁ |
| | | | | | Contour 2 | H+L* | L _p L ₁ (H ₁) |

Table 10.19: The tune in Fascian wh-cleft questions

10.6 The tune of Fascian *wh-che*-questions

In the Brach and Cazet subvarieties of Fascian, *wh-che*-questions coexist with *wh-SCI(-pa/po)*-questions, and are both used as neutral focus *wh*-questions with a standard interpretation (cf. chapter 6). Fascian *wh-che*-questions exhibit main stress on the finite verb. The pitch falls through the nuclear stressed syllable (H+L*), continues on a low level and rises again at the end of the utterance (39, figure 10.46). Although the final rise is observed in the majority of utterances, it is not obligatory (figure 10.47) and its occurrence depends on the speaker.

- (39) a. Can **che** te chiales la mama? (Fascian Brach/Cazet)
 when COMP you call-2SG the mother
 ‘When do you call mother?’

a'.
 x
 x
 x x x x x x x
 [[Can che te chia mes la ma ma]P]_I
 Figure 10.46 H+L* L_IH_I
 Figure 10.47 H+L* L_I

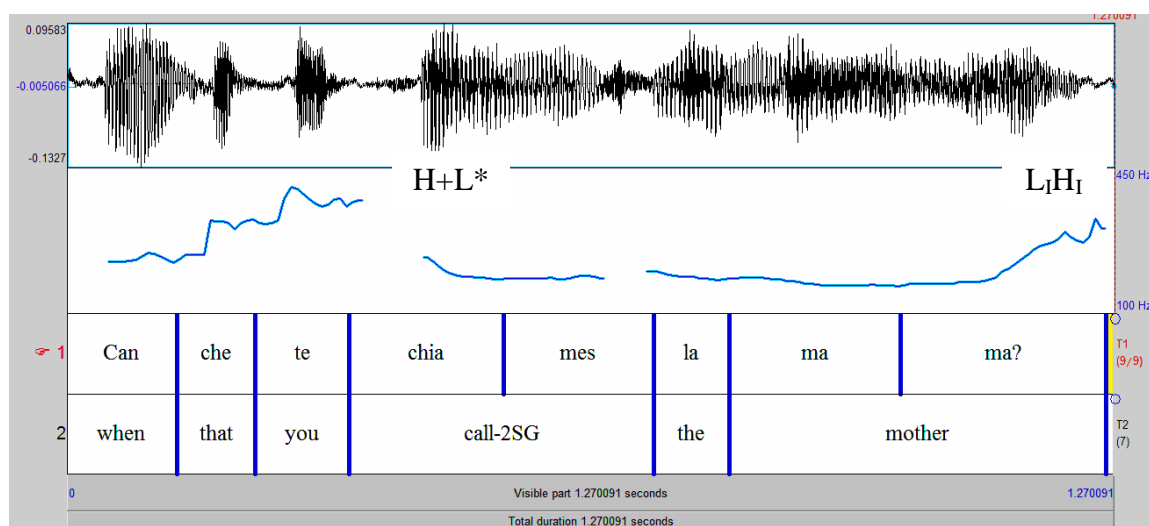


Figure 10.46: Fascian 1 Can che te chiales la mama?

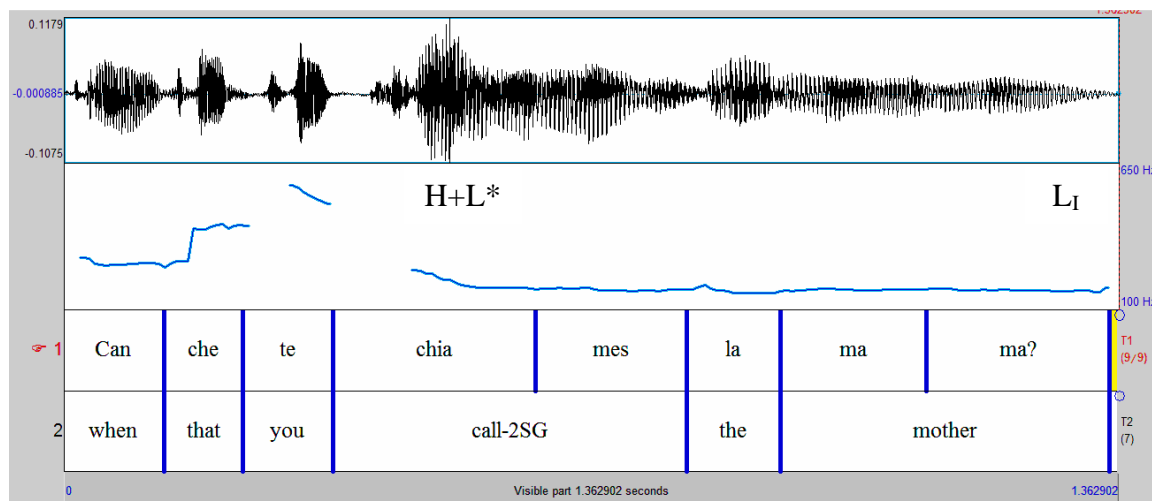


Figure 10.47: Fascian 8 Can che te chiales la mama?

Table 10.20 summarises the properties of the Fascian *wh-che*-question tune.

| Variety | Focus type | Question formation strategy | Word order | Position of main stress | Question tune | |
|---------|------------|-----------------------------|------------|-------------------------|----------------------|----------------------------------|
| | | | | | Nuclear pitch accent | Edge tones |
| Fascian | neutral | <i>wh-che</i> | direct | finite verb | H+L* | L ₁ (H ₁) |

Table 10.20: The tune in Fascian *wh-che*-questions

10.7 Conclusion

In the following, I summarise the results of this chapter regarding the prosody of *wh*-questions addressing the tunes identified (10.7.1), the principles behind the placement of the particle *pa/po* (10.7.2), the contrast between neutral and narrow focus (10.7.3) and the relation between the prosody and the syntax in interrogative clause typing (10.7.4).

10.7.1 The tunes

The contours found with the various *wh*-question formation strategies include two different types of nuclear pitch accents, i.e. the bitonal rising L+H* and the bitonal falling H+L* accents, as well as three different types of boundary tone combinations, i.e. a low (L_P L_I) and a high (H_P H_I) final contour and a final rise (L_IH_I).

| Nuclear pitch accents | Boundary tones |
|-----------------------|-------------------------------|
| L+H* | L _P L _I |
| H+L* | H _P H _I |
| | L _I H _I |

Table 10.21: Inventory of nuclear pitch accents and boundary tones in Gherdëina, Badiot, Fascian and Nònes wh-questions

The most frequently observed tune both across wh-question formation strategies and across varieties is L+H* L_P L_I which can hence be considered as the default. Table 10.22 shows the syntactic and prosodic properties of the wh-question formation strategies examined.

| Question formation strategy | Focus | Word order | Position of the particle <i>pa/po</i> | Position of main stress | Variety | Tune | |
|-------------------------------------|--------------------|------------|---------------------------------------|-------------------------|---------|----------------------|--|
| | | | | | | Nuclear pitch accent | Edge tones |
| wh-SCI-<i>pa/po</i> | neutral | SCI | postverbal | verb | GBFN | L+H* | L _P L _I |
| | | | | | FN | H+L* | L _P L _I |
| wh-SCI | neutral | SCI | – | verb | F | L+H* | L _P L _I |
| | | | | | N | L+H* H+L* | L _I H _I L _I H _I |
| | narrow | | | wh-expression | G | L+H* L+H* | L _P L _I H _P H _I |
| | | | | | B | L+H* | H _P H _I |
| wh-SCI-<i>pa/po</i>-PTCP | neutral | SCI | postverbal | participle | GBF | L+H* | L _P L _I |
| wh-SCI-PTCP-<i>po</i> | | | postparticipial | | N | L+H* | L _P L _I |
| wh-SCI-<i>pa/po</i>-INF | neutral | SCI | postverbal | infinitive | GBF | L+H* | L _P L _I |
| wh-SCI-INF-<i>po</i> | | | postinfinitival | | N | L+H* | L _P L _I |
| wh-<i>pa/po</i> in isolation | neutral/ narrow | – | wh- <i>pa/po</i> -position | wh-expression | GBFN | L+H* | L _P L _I |
| wh-<i>pa/po</i>-INF | neutral | – | wh- <i>pa/po</i> -position | last content word | GBFN | L+H* | L _P L _I |
| wh-<i>pa/po</i>-SV | narrow | SV | wh- <i>pa/po</i> -position | wh-expression | N | L+H* | L _P L _I |
| | | SCI | | | FC/B | L+H* | L _P L _I H _I |
| wh-<i>po</i>-SCI | | | | | FM | H+L* | L _P L _I H _I |
| wh-cleft | narrow | SCI | postverbal | copula verb | N | L+H* | L _P L _I |
| | | | | | F | L+H* H+L* | L _P L _I L _P L _I |
| wh-<i>che</i>-SV | neutral | SV | – | verb | F | H+L* H+L* | L _I L _I H _I |

Table 10.22: Overview of wh-question-tunes in Gherdëina (G), Badiot (B), Fascian (F) (Cazet (C) / Brach (B) / Moenat (M)) and Nònes (N)

10.7.2 The position of the particle *pa/po* in wh-questions

We have seen in chapter 5 that the postparticipial and the postinfinitival positions of the particle *po* in Nònes could not be accounted for in a satisfactory way from the perspective of syntax alone. The prosodic analysis in the present chapter has shown that the crucial difference between the varieties resides in the relative ordering of the particle and main stress. Figure 10.48 shows the various question formation strategies and the relative ordering of main stress (underlined) and the particle *pa/po*. Blue arrows indicate that the particle follows main stress while red arrows indicate that the particle precedes main stress.

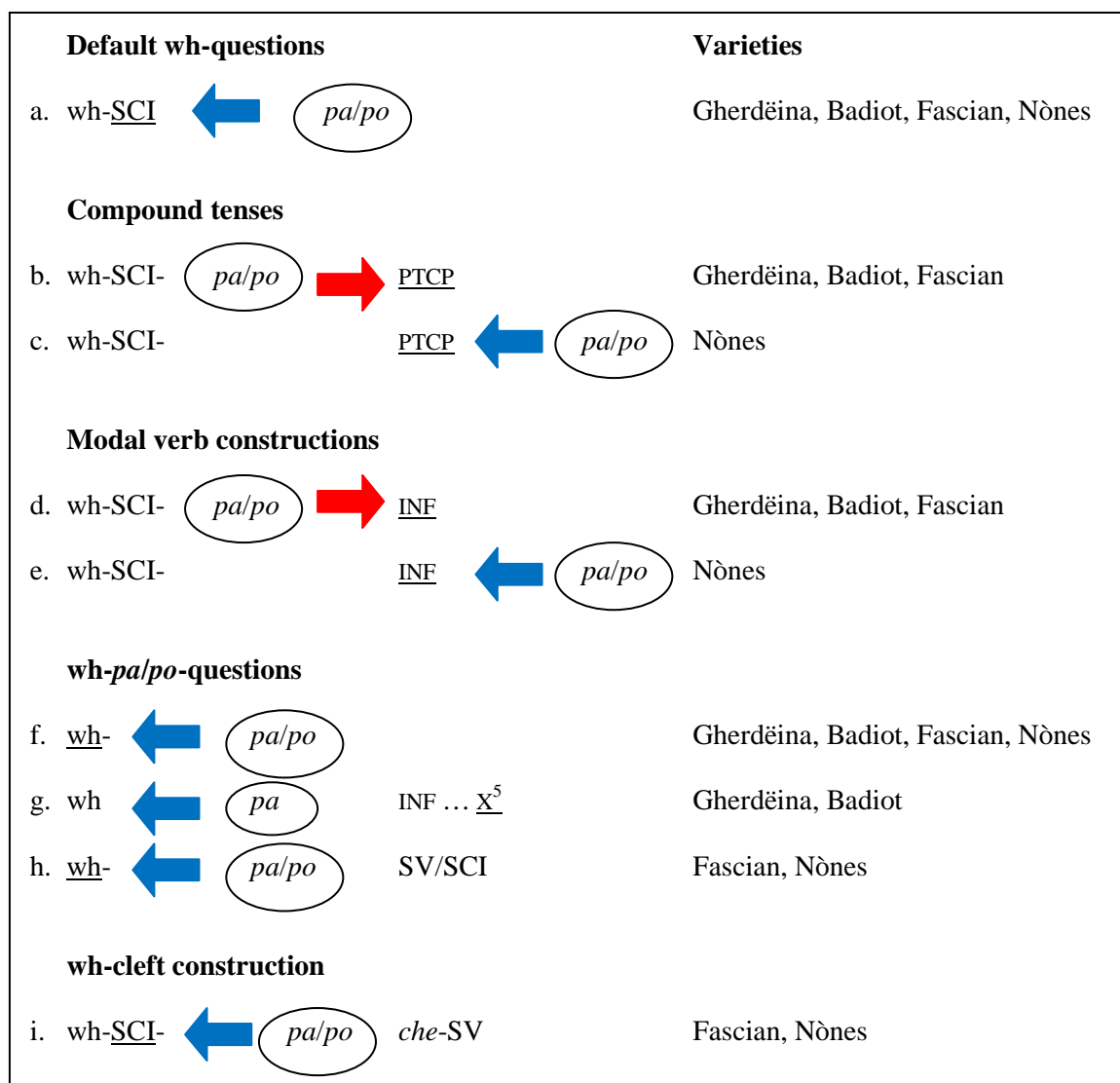


Figure 10.48: Wh-question formation strategies and relative ordering of the particle *pa/po* and main stress

⁵ X: Main stress falls on the last content word.

I have argued that the variation as to the relative position of the particle *pa/po* and main stress between Gherdëina, Badiot and Fascian on the one hand and Nònes on the other is due to the fact that particle placement in these varieties is governed by different factors.

In Gherdëina and Badiot, the position of the particle is determined by the syntax alone and the particle appears in the default position after SCI, irrespective of whether main stress precedes (a) or follows (b, d) suggesting that the prosody does not affect particle placement. In ‘wh-*pa* in isolation’ (f), the particle necessarily follows the wh-expression because the question word is the only element in the utterance. In wh-*pa*-questions involving a non-finite clause (g), the particle appears in the wh-*pa/po*-position but does not interfere with stress or the focus properties of the utterance. Main stress falls on the last content word and the sequence wh-*pa* in this case seems to be part of a fixed expression.

Hence, in Gherdëina and Badiot, the position of the particle is not affected by the prosody.

Fascian is in line with Gherdëina and Badiot in that the particle occurs after SCI irrespective of whether main stress precedes (a, i) or follows (b, d). However, when the wh-expression is in narrow focus and receives main stress, the particle occurs after the wh-expression rather than after SCI suggesting that in Fascian, the position of the particle depends on the interpretational properties of the question and on where focus is placed: in neutral focus wh-questions, the particle occurs in the default position after SCI whereas in narrow focus wh-questions, the particle directly follows the wh-expression. In the latter, the particle and main prominence collaborate to express narrow focus on the wh-expression.⁶

⁶ In Gherdëina and Badiot, in contrast, Fascian-style narrow focus wh-*pa/po*-questions (h) are not admitted. Apart from the fact that particle placement in Gherdëina and Badiot is governed only by the syntax there would be no reason for the particle to appear in the wh-*pa*-position. Given that in Gherdëina and Badiot, the particle has grammaticalised into a question marker for standard wh-questions it cannot contribute to mark narrow focus on the wh-expression. In fact, if narrow focus is to be placed on the wh-expression, then the particle has to be omitted in these two varieties.

Nònes shows a uniform pattern according to which the particle always occurs after main stress, stated in terms of the prosodic well-formedness condition in (40).

- (40) Particle placement in Nònes:
Place the particle *po* to the right of main stress.

It is because of this principle that in wh-questions involving compound tenses or modal verb constructions, the particle appears in the postparticipial or postinfinitival position in Nònes, rather than postverbally as in the other varieties. As to the exact position of the particle, I assume that it encliticises to the right boundary of the phonological phrase containing the main stressed syllable.

In sum, the four varieties under scrutiny can be classified into three categories with respect to the factors governing the placement of the particle:

| Type | Varieties | Particle placement |
|--------|------------------|--|
| Type 1 | Gherdëina/Badiot | governed by the syntax, not affected by the prosody |
| Type 2 | Fascian | sensitive to the interpretation and the focus properties of the question |
| Type 3 | Nònes | sensitive to the position of main stress |

Table 10.23: Typology with respect to the role of prosody for placement of the particle *pa/po* in wh-questions

10.7.3 The neutral focus-narrow focus contrast

In the four varieties, the contrast between neutral and narrow focus manifests itself in a difference as to the position of main prominence and hence in the anchoring site of the nuclear pitch accent rather than in a difference in tune: L+H* (and, to a lesser extent, H+L*) occurs in both neutral focus and narrow focus wh-questions.

The four varieties dispose of both syntactic and prosodic means to place narrow focus on the wh-expression. Gherdëina and Badiot WH-SCI-questions, in which narrow focus and main prominence are aligned in accordance with the ‘Focus to Stress Alignment’ principle (cf. section 1.3.3.2), constitute an instance of purely prosodic focus marking. In Fascian

and Nònes wh-cleft constructions, in contrast, narrow focus is expressed by purely syntactic means, i.e. a cleft. In this case, however, the ‘Focus to Stress Alignment’ principle does not apply given that main stress does not fall on the wh-expression but on the copula verb. Fascian and Nònes wh-*pa/po*-questions, finally, can be considered a mixed type given that narrow focus is marked prosodically by main prominence on the wh-expression and also (morpho)syntactically by means of the particle *pa/po* in the wh-*pa/po*-position.

| Wh-question formation strategy | Varieties | Narrow focus | |
|--------------------------------|---------------------|--|------------------------------|
| | | Syntactic marking | Prosodic marking |
| WH-SCI | Gherdëina Badiot | – | main stress on wh-expression |
| wh- <i>pa/po</i> | Fascian Nònes | <i>pa/po</i> in wh- <i>pa/po</i> -position | main stress on wh-expression |
| wh-cleft | Fascian Nònes | cleft construction | – |

Table 10.24: Syntactic and prosodic marking of narrow focus

10.7.4 The interaction of prosody and syntax in interrogative clause typing

The syntactic variation regarding wh-question formation in the four varieties has provided us with an excellent testing ground to study the relation between the syntax and the prosody in question formation. We have started out with the working hypothesis that in the absence of syntactic marking of interrogative force such as subject-verb-inversion or the particle *pa/po*, the prosody might “take over” and compensate for the absence of syntactic marking by providing some sort of specific prosodic marking of interrogative force. Observations like the following have pointed in this direction: first, in Nònes, wh-questions involving the particle *po* end on a low pitch level (L_I), whereas wh-questions lacking the particle show a final rise (L_IH_I), the nuclear pitch accent being L+H* in both cases. This observation could be taken to suggest that in Nònes wh-questions, the final rise makes up for the lacking particle in order to mark interrogative force. A similar conclusion might be

drawn regarding Fascian Brach/Cazet *wh-pa/po*-questions, which involve direct word order but a final rise (L_1H_1). In this case, the final rise could be interpreted as prosodic marking of interrogative force compensating for the fact that direct word order clearly cannot clause type the utterance as a question.

However, from a general perspective, the findings in the present chapter point into another direction. The crucial result of the analysis proposed here resides in the observation that the intonational tune is independent of the syntactic structure. This is suggested by the observation that various *wh*-question formation strategies differing considerably in syntactic structure and involving SCI or direct word order all exhibit one and the same tune, $L+H^* L_P L_1$. The prosodic difference between these question formation strategies (and also between the four varieties) rather concerns the issue of how this tune is actually aligned with the text. The nuclear pitch accent is aligned with main prominence and the location of main prominence depends on the interpretation and the focus properties of the question. To give an example, in neutral focus *wh-SCI-pa/po*-questions, main stress falls on the verb which is thus aligned with $L+H^*$, whereas in narrow focus *wh-pa/po*-questions, the *wh*-expression bears main prominence and is consequently aligned with $L+H^*$. Alignment might also be crucial for interrogative clause typing in Fascian *wh-che*-questions which exhibit direct word order and, apart from the cases, in which the optional final rise occurs, the same $H+L^* L_1$ tune as statements. Crucially, in *wh*-questions, $H+L^*$ is aligned with the verb while in statements, it is aligned with the rightmost content word. Ultimately, the *wh*-expression could be held responsible for interrogative clause typing but this hypothesis is hard to test. As noted in chapter 3, a possible line of research could investigate the role of the *wh*-expression for interrogative clause typing by means of psycholinguistic or neurolinguistic methods such as measurement of event-related potentials (ERPs).

Chapter 11

Conclusions

In this dissertation, I have investigated the syntactic and prosodic properties of interrogatives in four varieties spoken in northern Italy: Gherdëina, Badiot, Fascian and Nònes. This study was motivated by five main research goals:

- (i) to provide a detailed description of the syntactic variation found in interrogatives in these four varieties
- (ii) to propose a unified syntactic analysis of the various question formation strategies;
- (iii) to offer a prosodic analysis of statements and questions providing new data from varieties not studied up to now in the literature;
- (iv) to establish the relation between the syntax and the prosody in question formation;
- (v) to determine how the syntax and the prosody interact in interrogative clause typing.

I have discussed these issues on the basis of empirical data collected by means of an especially conceived questionnaire with various elicitation tasks (cf. chapter 2). In the following, I address the findings of the present work with respect to the individual research questions in turn.

11.1 Syntactic variation

The four varieties under consideration, Gherdëina, Badiot, Fascian and Nònes, differ with respect to certain microsyntactic parameters such as the V2-property and these properties were shown to influence question formation in a crucial way.

In the present work, I have discussed the main wh-question formation strategies observed in these varieties.

- (1) Question formation strategies
 - a. wh-SCI-*pa/po*
 - b. wh-*pa/po*-questions
 - c. wh-*che*-SV
 - d. wh-cleft constructions
 - e. WH-SCI

Most of these question formation strategies involve, or can involve, the particle *pa/po*, which is due to Latin POST and has undergone a grammaticalization process from a temporal adverb with the meaning ‘afterwards, then’ into a functional element with illocutive/discourse-functional values and further into an obligatory question marker. The four varieties differ with respect to the stage the particle has reached in this grammaticalization cline. In Fascian and Nònes, the particle retains illocutive/discourse-functional values and can be used as a focus marker. In wh-questions, the use of the particle has become conventionalised, but is not obligatory. In Gherdëina and Badiot, in contrast, the particle has lost its discourse-functional values and has grammaticalised further into an obligatory question particle, first in wh-questions (Gherdëina and Badiot) and then also in yes/no-questions (Gherdëina only). In the light of the Gherdëina facts, I have suggested a further extension of the grammaticalization pathway of modal particles proposed by Abraham (1991), Wegener (2002) and Bayer (2012).

The five wh-question formation strategies observed can be classified into two categories with respect to their focus properties: neutral focus wh-questions and narrow focus wh-questions.

| Focus properties | Question formation strategies | | | Varieties |
|------------------|--------------------------------|---------------------------------|---------------------------------|------------|
| Neutral focus | wh-SCI-<i>pa/po</i> | Simple tenses | <i>wh-SCI-<i>pa/po</i></i> | G, B, F, N |
| | | Compound tenses | <i>wh-SCI-<i>pa/po</i>-PTCP</i> | G, B, F |
| | | | <i>wh-SCI-PTCP-<i>pa/po</i></i> | N |
| | | Modal verb constructions | <i>wh-SCI-<i>pa/po</i>-INF</i> | G, B, F |
| | <i>wh-SCI-INF-<i>pa/po</i></i> | | N | |
| | wh-<i>che</i>-SV | | | F B/C |
| Narrow focus | wh-cleft (<i>pa/po</i>) | | | F, N |
| | wh-<i>pa/po</i>-SV | | | F B/C |
| | WH-SCI | | | G, B |

Table 11.1: Question formation strategies in Gherdëina (G), Badiot (B), Fascian (F) (Cazet (C) / Brach (B) / Moenat (M), Nones (N)

11.1.1 Neutral focus wh-questions

In neutral focus wh-questions with a standard interpretation, the traditional and most widespread question formation strategy is *wh-SCI-*pa/po**, which splits into further subtypes according to tense or verb type and depending on the position of the particle *pa/po* (when present). Apart from this traditional wh-question formation strategy, the Brach and Cazet subvarieties of Fascian dispose of an additional, more recent strategy for standard wh-questions, *wh-*che*-SV* (chapter 6), which is incompatible with the particle *pa/po*, but which is used in the same discourse contexts as *wh-SCI-*pa/po**. The fact that *wh-*che*-SV* is limited to the Brach and Cazet subvarieties of Fascian and is not allowed in the neighbouring Moenat subvariety and in Gherdëina and Badiot can be attributed to the V2-property of the latter varieties as well as the phenomenon of ‘over-renunciation’ towards incoming linguistic influences in contact areas in the case of Moenat.

The default position of the particle *pa/po* in questions is postverbal, i.e. after SCI. However, as regards wh-questions involving compound tenses or modal verb constructions, Nònes differs from the other varieties in that the particle occurs in postparticipial or postinfinitival position rather than postverbally.

11.1.2 Narrow focus wh-questions

Narrow focus wh-questions, which are used as echo- or clarification questions, come in three different strategies: wh-clefts, wh-*pa/po*-questions and WH-SCI-questions. In wh-clefts, which occur in the varieties Fascian and Nònes, narrow focus is marked only by syntactic means in that the wh-expression is highlighted by a cleft construction but main prominence falls on the copula verb rather than on the wh-expression. Fascian and Nònes wh-*pa/po*-questions involve both syntactic focusing by means of the particle *pa/po* in the position directly after the wh-expression as well as prosodic focusing via placement of main prominence on the wh-expression. The word order difference in wh-*pa/po*-questions between Fascian Brach/Cazet and Nònes (SV) on the one hand and Moenat (SCI) on the other can be attributed to the ‘strong’ residual V2-property of the latter. Gherdëina and Badiot WH-SCI-questions, finally, exhibit only prosodic focusing in that main prominence is placed on the question word; the particle *pa*, which is obligatory in neutral focus wh-questions, is omitted.

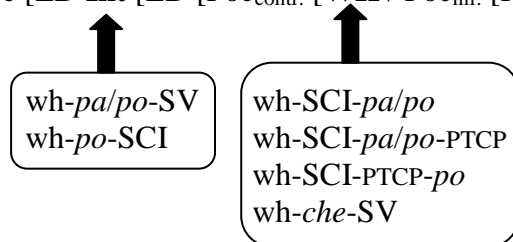
| Wh-question formation strategy | Varieties | Narrow focus | |
|--------------------------------|---|--|------------------------------|
| | | Syntactic marking | Prosodic marking |
| WH-SCI | Gherdëina Badiot | – | main stress on wh-expression |
| wh- <i>pa/po</i> | Gherdëina Badiot Fascian Nònes | <i>pa/po</i> in wh- <i>pa/po</i> -position | main stress on wh-expression |
| wh-cleft | Fascian Nònes | Cleft construction | – |

Table 11.2: Syntactic and prosodic marking of narrow focus

11.2 The syntactic analysis

The syntactic analysis proposed for the various *wh*-question formation strategies in the present work is couched within the cartographic approach (chapter 4). First of all, I argue that the particle *pa/po* is a syntactic head in the C domain, while in Gherdëina (and probably also in Badiot), *pa* seems to have further evolved into an affix. Taking as a starting point the phrase structure proposed by Poletto (2002) for Badiot, I make two main modifications on the basis of my empirical data which concern: (i) the existence in Dolomitic Ladin of a functional projection Int(errogative) à la Rizzi (2001) and (ii) drawing on insight from Benincà & Poletto (2004), the existence of two distinct focus positions, new information focus and contrastive focus. I take that new information focus elements and *wh*-expressions target the same functional projection. In line with the cartographic approach which postulates separate functional projections for distinct semantic interpretations, I argue that in Dolomitic Ladin *wh*-questions featuring the particle *pa/po*, two different CP projections are activated: the lower WH-position in neutral focus *wh*-questions, which is also targeted by Fascian Brach/Cazet *wh-che*-questions, and the higher position Int in narrow focus *wh*-questions.

- (2) [HT [SS [Force [LD **Int** [LD [Foc_{contr.} [**WH** / Foc_{inf.} [Fin]]]]]]]]]



The postparticipial and the postinfinitival positions of the particle *po* in Nònes *wh*-questions involving compound tenses or modal verb constructions cannot be accounted for from the perspective of syntax. Instead, I show that the particular placement of the particle in Nònes is due to prosodic influence on the syntactic structure.

11.3 The prosodic analysis

The prosodic analysis of statements, yes/no-questions and wh-questions proposed in the present work is couched within Autosegmental-Metrical Phonology. In order to find out what the prosodic characteristics of interrogatives are, the first step to take is to examine the prosody of statements.

11.3.1 Statements

All four varieties exhibit an H+L* L_I tune in neutral focus statements and an L+H* L_P L_I tune in narrow focus statements. Neutral and narrow focus statements differ in three main respects: (i) alignment, (ii) nuclear pitch accent and (iii) the existence in narrow focus statements of a phonological phrase boundary tone to the right of the focused constituent.

While in neutral focus statements, the nuclear pitch accent is aligned with the last prominent phrasal unit (cf. section 7.2.2), narrow focus statements have the nuclear pitch accent aligned with the most prominent syllable of the focused constituent, which is not necessarily the last one in the utterance. Moreover, it can be shown that focus influences phonological phrasing in the following way: narrow focus – not only in statements but also in questions – involves focus restructuring, i.e. a phonological phrase boundary is inserted after the focused constituent (3). The pitch target at this boundary is always low (L_P).

- (3) Phrasing rule
- a. Insert a phonological phrase boundary after a focused constituent.
 - b. Associate an L_P tone to this phonological phrase boundary.

| Varieties | Focus type | Nuclear pitch accent | Edge tones | |
|---|------------|----------------------|----------------------|----------------------|
| Gherdëina Badiot Fascian Nònes | neutral | H+L* | | L_I |
| | narrow | L+H* | L_P | |

Table 11.3: The tune in neutral focus and narrow focus statements in the four varieties

11.3.2 Yes/no-questions

In neutral focus yes/no-questions, main stress falls on the last prominent phrasal unit and all four varieties show an L+H* L_IH_I tune. The actual tonal implementation of this tune, however, can differ depending on factors such as the position of the main stressed syllable in its phonological phrase (penultimate vs. final) or the syllable type (open vs. closed). In contexts of tonal crowding, adjustment strategies such as tonal compression or tonal truncation are used in order to facilitate the realisation of tones. The adjustment strategies chosen and the extent to which they are used depend on the variety and the individual speaker.

Narrow focus yes/no-questions differ from neutral focus yes/no-questions in (i) alignment of the nuclear pitch accent with the focus constituent, (ii) insertion of an L_P phonological phrase boundary tone after the focus constituent (cf. 3) and (iii) in the final portion of the contour which exhibits low pitch instead of a final rise.

| Varieties | Focus type | Nuclear pitch accent | Edge tone(s) |
|---------------------|------------|----------------------|-------------------------------|
| Gherdëina Badiot | neutral | L+H* | L _I H _I |
| Fascian Nònes | narrow | L+H* | L _P L _I |

Table 11.4: The neutral focus statement-question contrast in the four varieties

The L+H* nuclear pitch accent in both narrow focus utterances and in questions indicates a relation between focus and interrogative force.

11.3.3 Wh-questions

The most frequently observed tune both across varieties and across wh-question formation strategies is L+H* L_P L_I, which can hence be considered as the default. Moreover, there are other, less frequent, tunes involving the falling H+L* and/or the final rise (L_IH_I). Strikingly, in neutral focus wh-questions, main stress falls on the verb (in compound tenses on the participle, in modal verb constructions on the infinitive) rather than on the rightmost content word or on the wh-expression as in other languages. Moreover, we find L_P after main stress which in statements and yes/no-questions occurs only with narrow focus.

The contrast between neutral and narrow focus is not marked intonationally (we observe L+H* L_P in both cases) but manifests itself in a difference in tune-text-alignment. In narrow focus wh-questions, main prominence is usually on the wh-expression which is thus aligned with the nuclear pitch accent.

The four varieties use both syntactic and prosodic marking to convey narrow focus wh-questions. Purely prosodic focus marking is instantiated by Gherdëina and Badiot WH-SCI-questions, in which narrow focus and main prominence are aligned. In Fascian and Nònes wh-cleft constructions, narrow focus and main prominence do not coincide as main stress does not fall on the wh-expression but on the copula verb. Here, narrow focus is expressed by purely syntactic means. Fascian and Nònes wh-*pa/po*-questions constitute a mixed type given that narrow focus is marked prosodically by main prominence on the wh-expression and also (morpho)syntactically by means of *pa/po* in the wh-*pa/po*-position.

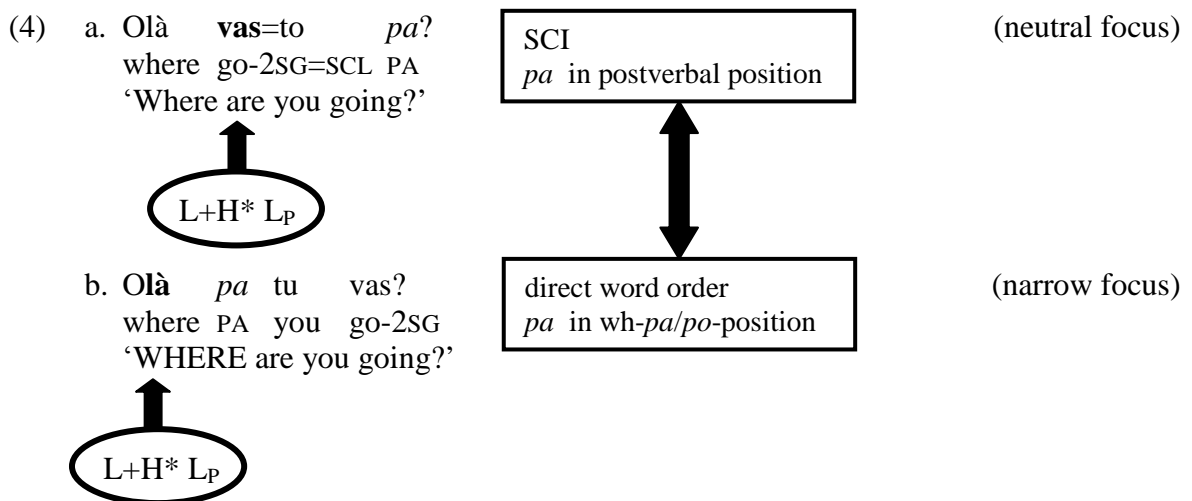
| Wh-question formation strategy | Varieties | Narrow focus | |
|--------------------------------|---------------------|--|------------------------------|
| | | Syntactic marking | Prosodic marking |
| WH-SCI | Gherdëina Badiot | – | main stress on wh-expression |
| wh- <i>pa/po</i> | Fascian Nònes | <i>pa/po</i> in wh- <i>pa/po</i> -position | main stress on wh-expression |
| wh-cleft | Fascian Nònes | cleft construction | – |

Table 11.5: Syntactic and prosodic marking of narrow focus

11.4 The prosody-syntax interface

As regards the relation between the syntax and the prosody, the crucial finding is that the two components are not isomorphic, i.e. autonomous, in question formation.

First, in *wh*-questions, one and the same tune ($L+H^* L_P L_I$) appears with various question formation strategies differing considerably in syntactic structure suggesting that the syntactic structure does not influence the prosody in any relevant way. The difference between the individual question formation strategies in these cases resides in tune-text-alignment, i.e. how this tune is actually aligned with the text. The nuclear pitch accent is always aligned with main prominence and the location of main prominence depends on the interpretation and the focus properties of the question. Hence, in neutral focus *wh*-SCI-*pa/po*-questions (4a), main stress falls on the verb which is thus aligned with $L+H^*$, whereas in narrow focus *wh*-*pa/po*-questions (4b), for instance, the *wh*-expression bears main prominence and is aligned with $L+H^*$.



Second, one and the same syntactic structure can be realised with several intonational tunes. In neutral focus *wh*-SCI-*pa/po*-questions, for instance, Fascian and Nònes use two different contours, $L+H^* L_P L_I$ and $H+L^* L_P L_I$, in free variation, the choice of the contour depending on the speaker.

Third, in yes/no-questions, both the tune and the tune-text-alignment are the same irrespective of whether the yes/no-question features an enclitic subject pronoun indicating SCI and hence signalling interrogative force or not in which case the yes/no-question completely corresponds in syntactic structure to a statement. Hence, the prosody does not “make up” for a clause type ambiguity in the syntax.

So far, the findings in the present work are in line with the phonology-free syntax hypothesis (cf. section 1.3.1), according to which the relation between the syntax and the phonology is unidirectional in that the phonology takes (some aspects of) the syntax as input, but the syntax is completely phonology-free and syntactic operations are not motivated by phonological rules.

However, similarly to Zec & Inkelas’ (1990) claim regarding Serbo-Croatian clitics (cf. section 1.3.1), the present work has shown that in certain cases, the phonology may indeed influence the syntax as well.

A case in point is the particular placement of the particle *po* in Nònes. In wh-questions involving compound tenses or modal verb constructions, Gherdëina, Badiot and Fascian exhibit the particle in its default position, whereas in Nònes, it comes only after the participle or the infinitive. Syntactic approaches fail to provide a satisfactory account of this particular particle placement in Nònes (cf. chapter 5). Examining the phenomenon from the perspective of prosody, however, it can be shown that in Nònes, in contrast to the other varieties, the placement of the particle is subject to a prosodic well-formedness condition requiring the particle to always appear to the right of main stress.

- (5) Particle placement in Nònes:
Place the particle *po* to the right of main stress.

More specifically, the particle encliticises to the phonological phrase boundary following main stress. The postparticipial and the postinfinitival positions of the particle *po* in Nònes are derived as follows: the syntax provides a phrase structure in which the particle occurs in postverbal position like in the other varieties. After syntactic output, the well-formedness condition in (5) overrides the syntactic placement and makes sure that the particle occurs after main stress at Spell-Out.

11.5 Interrogative clause typing

As regards the issue of how the question meaning of an utterance is signalled, the present work has shown that both the syntax and the prosody take part in interrogative clause typing but that they do not necessarily interact in the sense that one component takes over when the other fails to provide the relevant marking. In yes/no-questions, for instance, there is no difference in intonational tune or alignment depending on whether the syntax marks interrogative force by enclitic subject pronouns or not.

The findings in the present work suggest that three aspects matter for interrogative clause typing: (i) syntactic marking, (ii) prosodic marking and (iii) tune-text-alignment.

Syntactic marking strategies relevant for interrogative clause typing include subject-verb-inversion, the particle *pa/po* and hypothetically the complementizer *che*. Subject-verb-inversion is the most widespread marking strategy in the varieties spoken in northern Italy but it can unambiguously express interrogative force only in non-V2-varieties. Given the discussion in chapters 3 and 5, the particle *pa/po* can be considered as an interrogative marker. As argued in chapter 6, the complementizer *che* is endowed with a [wh]-feature and can hence be taken as an interrogative clause typing element.

As regards the prosody, there is no dedicated “question tune”, i.e. questions do not exhibit a particular nuclear pitch accent which distinguishes them from statements. A case in point is the $L+H^* L_P L_I$ tune, which is observed in a variety of different clause types including neutral focus and narrow focus wh-questions, narrow focus yes/no-questions and narrow focus statements.

The final rise ($L_I H_I$), in contrast, which is often observed in questions, whereas statements always end on low pitch (L_I), can be taken to signal the question meaning of the utterance. Note, however, that this holds only for neutral focus yes/no-questions (table 11.6), whereas in narrow focus utterances, statements and questions exhibit exactly the same tune (table 11.7).

| Varieties | Focus type | Sentence type | Nuclear pitch accent | Edge tone(s) |
|---|------------|------------------|----------------------|--------------|
| Gherdëina Badiot Fascian Nònes | neutral | Statements | $H+L^*$ | L_I |
| | | Yes/no-questions | $L+H^*$ | $L_I H_I$ |

Table 11.6: The neutral focus statement-question contrast in the four varieties

| Varieties | Focus type | Sentence type | Nuclear pitch accent | Edge tone(s) |
|---|------------|------------------|----------------------|--------------|
| Gherdëina Badiot Fascian Nònes | narrow | Statements | $L+H^*$ | $L_P L_I$ |
| | | Yes/no-questions | $L+H^*$ | $L_P L_I$ |

Table 11.7: The narrow focus statement-question contrast in the four varieties

The situation regarding the narrow focus statement-yes/no-question contrast raises the issue as to how the question meaning is signalled in narrow focus yes/no-questions. If an enclitic subject pronoun is present in the syntactic structure, interrogative force might be signalled by the syntax. However, due to the split-*pro*-drop paradigms of the four varieties, for certain grammatical persons there are no enclitic subject pronouns and hence, in these cases, the statement-question contrast cannot be signalled by the syntax as yes/no-

questions do not differ in syntactic structure from the corresponding statements. I would rather like to suggest that the distinction between narrow focus statements and narrow focus wh-questions in the four varieties lies in a difference in temporal alignment as D'Imperio & House (1997) and D'Imperio (2000, 2002) have proposed for Neapolitan Italian by (cf. section 9.3.1.3). D'Imperio and House have shown that in Neapolitan Italian, the peaks are aligned a little later in questions than in statements. On the basis of the pitch tracks provided in the present work, we have not been able to identify such minute differences. A closer phonetic examination would be needed to shed light on this issue.

A final observation regarding the significance of alignment for the interpretation of an utterance concerns wh-questions, where the same L+H* L_P L_I tune occurs in neutral focus and in narrow focus wh-questions. The difference between the two question types lies in how the L+H* L_P marker is aligned – with the verb in the case of neutral focus or with the wh-expression in the case of narrow focus.

In conclusion, there is reason to assume that alignment plays a crucial role both for the interpretation of an utterance and for interrogative clause typing.

11.6 Perspectives for further research

The present work has offered a first comprehensive account of the syntax and the prosody of interrogatives in the four varieties Gherdëina, Badiot, Fascian and Nònes. However, some issues could not be addressed and are left for future research.

A first desideratum for further research on this topic concerns the issue just seen in section 11.5 regarding the difference between narrow focus statements and narrow focus yes/no-questions. Experimental phonetics could help to determine whether the narrow focus

statement-yes/no-question contrast can really be attributed to a difference in temporal alignment as proposed by D'Imperio & House (1997) for Neapolitan Italian.

Second, the intuition that, apart from syntactic and prosodic marking, the wh-expression contributes to interrogative clause typing requires a solid scientific grounding. Does the interlocutor perceive that an utterance is a question already when he hears the wh-expression? A possible line of research could investigate the psychological reality of the wh-expression and its role for interrogative clause typing on the basis of event-related potentials (ERPs). Event-related potentials (ERPs) are “small brain potentials within the spontaneous electrical activity of the brain, which are time-locked to the occurrence of concrete events” (Friederici et al. 2003:330). Three particular ERP effects have been identified to correlate with syntactic processes, two transient ERP components – the left anterior negativity (LAN) and a late centro-parietal positivity present about 600 msec and beyond (P600) – and a sustained frontal negativity. It might be possible to exploit these ERP effects to determine whether the question meaning of an utterance can be perceived as soon as the wh-expression is heard.

Furthermore, the present work has approached interrogatives from the perspective of production. Future work can now build on the empirical data presented and the findings gained and approach the topic from the perspective of perception. Perception experiments could help to further investigate which clues are crucial in distinguishing a statement from a question. A possible line of research could examine how pronounced the final rise in yes/no-questions has to be in order for the utterance to be understood as a question. Moreover, given the crucial role of tune-text-alignment, research in experimental phonetics could vary alignment and study what consequences this has for the perception of the utterance.

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Appendices

- 1. Overview of informants**
- 2. Questionnaire**
- 3. Addendum to chapter 8**

1. Overview of informants interviewed for the fieldwork study

| Val Gardena (Gherdëina) | | | |
|--------------------------------|------------|------------|--|
| | sex | age | locality |
| 1 | f | 44 | Sëlva / Wolkenstein / Selva di Val Gardena |
| 2 | f | 40 | S. Crestina / St. Christina / S. Cristina |
| 3 | f | 64 | Urtijëi / St. Ulrich / Ortisei |
| 4 | f | 45 | Urtijëi / St. Ulrich / Ortisei |
| 5 | f | 23 | Urtijëi / St. Ulrich / Ortisei |
| 6 | m | 58 | Sëlva / Wolkenstein / Selva di Val Gardena |

| Val Badia (Badiot) | | | |
|---------------------------|------------|------------|---|
| | sex | age | subvariety |
| 1 | f | 29 | San Martin de Tor / St. Martin in Thurn / S. Martino in Badia |
| 2 | f | 50 | San Martin de Tor / St. Martin in Thurn / S. Martino in Badia |
| 3 | f | 48 | La Val / Wengen / La Valle |
| 4 | f | 81 | Calfosch / Kolfuschg / Colfosco |
| 5 | f | 54 | San Ćiascian / St. Kassian / S. Cassiano |
| 6 | f | 36 | San Lînert / St. Leonhard / S. Leonardo |
| 7 | f | 23 | Rina / Welschellen |
| 8 | f | 38 | Corvara |
| 9 | f | 61 | San Martin de Tor / St. Martin in Thurn / S. Martino in Badia |
| 10 | f | 36 | San Martin de Tor / St. Martin in Thurn / S. Martino in Badia |
| 11 | f | 39 | Pedrases / Pedratsches |

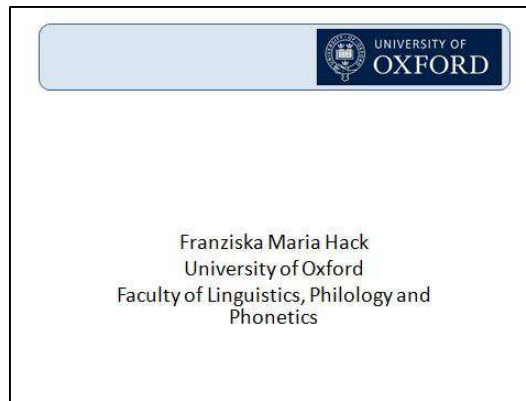
| Val di Fassa (Fascian) | | | |
|-------------------------------|------------|------------|-------------------|
| | sex | age | subvariety |
| 1 | f | 20 | Cazet |
| 2 | f | 26 | Brach |
| 3 | f | 35 | Brach |
| 4 | f | 38 | Brach |
| 5 | f | 48 | Brach |
| 6 | f | 27 | Cazet |
| 7 | f | 39 | Moenat |
| 8 | f | 33 | Cazet |
| 9 | f | 36 | Brach |
| 10 | f | 43 | Moenat |
| 11 | f | 21 | Brach |
| 12 | f | 46 | Moenat |

| Val di Non (Nònes) | | | |
|---------------------------|------------|------------|-----------------|
| | sex | age | locality |
| 1 | m | > 60 | Romeno |
| 2 | f | 39 | Romeno / Cles |
| 3 | f | > 40 | Romeno |
| 4 | f | > 50 | Romeno |
| 5 | f | 65 | Romeno |
| 6 | f | 43 | Romeno / Cles |
| 7 | f | 24 | Revò |
| 8 | f | 23 | Castelfondo |

2. Questionnaire

1. Main questionnaire

Variety: Gherdëina



Original version

Vorstellung

Bitte stellen Sie sich in einigen Sätzen vor. Nennen Sie Ihren Namen, Ihren Geburts- und Wohnort, Ihr Alter, Ihren Beruf und eventuell Ihre Lieblingsbeschäftigung.
Dankeschön!

English version

Presentation

Please introduce yourself telling your name, your place of birth and residence, your age and occupation and, if you like, your hobbies.
Thank you!

Task 1

1) Gespräch mit Franca

Das ist Franca.
Stellen Sie sich vor, dass Sie sich mit Franca unterhalten.
Im Folgenden werden einige Teile Ihres Gesprächs präsentiert.
Bitte antworten Sie Franca, indem Sie die vorgegebenen Wörter benutzen und achten Sie eventuell auch auf die richtige Betonung.



Franca

1) Conversation with Franca

This is Franca.
Imagine that you are talking to Franca.
In what follows, you will see some parts of your conversation with her.
Please answer using the words given and also pay attention to the correct intonation.



Franca

1) Gespräch mit Franca

(1)

Franca: Was hat dir Mario erzählt?

Sie: _____
Mara – jí – a lauré



Franca

1) Conversation with Franca

(1)

Franca: What did Mario tell you?

You: _____
Mara – go – to work



Franca

1) Gespräch mit Franca

(2)

Franca: Mario hat mir erzählt, dass Carmen zur Arbeit geht.

Sie: Aber ich sage dir die Wahrheit:

MARA – jí – a lauré



Franca

1) Conversation with Franca

(2)

Franca: Mario told me that Carmen goes to work.

You: No, that's not true:

MARA – go – to work



Franca

1) Gespräch mit Franca

(3)

Franca: Franco hat mir erzählt, dass Mara zum Tanzen geht.

Sie: Aber ich sage dir die Wahrheit:

Mara – jí – a **LAURÉ**



Franca

1) Conversation with Franca

(3)

Franca: Franco told me that Mara goes dancing.

You: No, that's not true:

Mara – go – to **WORK**



Franca

1) Gespräch mit Franca

(4)

Sie: Weisst du schon das Neuste:
_____!

Mauro – ulëi bon – Maria



Franca

1) Conversation with Franca

(4)

You: Do you already know the news:
_____!

Mauro – love – Maria



Franca

1) Gespräch mit Franca

(5)

Franca: *Mir ist erzählt worden, dass Carlo Maria liebt.*



Franca

Sie: *Aber ich sage dir die Wahrheit:*

MAURO – ulëi bon – Maria

1) Conversation with Franca

(5)

Franca: *They told me that Carlo loves Maria.*



Franca

You: *No, that's not true:*

MAURO – love – Maria

1) Gespräch mit Franca

(6)

Franca: *Mir ist erzählt worden, dass Mauro Teresa liebt.*



Franca

Sie: *Aber ich sage dir die Wahrheit:*

Mauro – ulëi bon – MARIA

1) Conversation with Franca

(6)

Franca: *They told me that Mauro loves Teresa.*



Franca

You: *No, that's not true:*

Mauro – love – MARIA

1) Gespräch mit Franca

(7)

Franca: *Mir ist erzählt worden, dass Mauro Maria hasst.*



Franca

Sie: *Aber ich sage dir die Wahrheit:*

Mauro – ULËI BON – Maria

1) Conversation with Franca

(7)

Franca: *They told me that Mauro hates Maria.*



Franca

You: *No, that's not true:*

Mauro – LOVE – Maria

1) Gespräch mit Franca

(8)

Franca: *Was geschieht?*



Franca

Sie: _____

Mara – maië – n mëil

1) Conversation with Franca

(8)

Franca: *What happens?*



Franca

Sie: _____

Mara – eat – an apple

1) Gespräch mit Franca

(9)

Franca: *Mir ist erzählt worden, dass Luisa einen Apfel isst.*



Franca

Sie: *Aber ich sage dir dir Wahrheit:*

MARA – maië – n mëil

1) Conversation with Franca

(9)

Franca: *They told me that Luisa eats an apple.*



Franca

You: *No, that's not true:*

MARA – eat – an apple

1) Gespräch mit Franca

(10)

Franca: *Mir ist erzählt worden, dass Mara Polenta isst.*



Franca

Sie: *Ich sage dir dir Wahrheit:*

Mara – maië – n MËIL

1) Conversation with Franca

(10)

Franca: *They told me that Mara eats polenta.*



Franca

You: *No, that's not true:*

Mara – eat – an APPLE

1) Gespräch mit Franca

(11)

Franca: *Mir ist erzählt worden, dass Mara einen Apfel verkauft.*



Franca

Sie: *Ich sage dir dir Wahrheit:*

Mara – MAIË – n mëil

1) Conversation with Franca

(11)

Franca: *They told me that Mara sells an apple.*



Franca

You: *No, that's not true:*

Mara – EAT – an apple

1) Gespräch mit Franca

(12)

Franca: *Was geschieht?*



Franca

Sie: _____

Maria – mandé – la marënda – a Nina

1) Conversation with Franca

(12)

Franca: *What happens?*



Franca

You: _____

Maria – send – the lunch – to Nina

1) Gespräch mit Franca

(13)

Franca: *Mir ist erzählt worden, dass Lara Nina das Mittagessen schickt.*

Sie: *Aber ich sage dir die Wahrheit:*

_____.
MARIA – mandé – la marënda – a Nina



Franca

1) Conversation with Franca

(13)

Franca: *They told me that Lara sends the lunch to Nina.*

You: *No, that's not true:*

_____.
MARIA – send – the lunch – to Nina



Franca

1) Gespräch mit Franca

(14)

Franca: *Mir ist erzählt worden, dass Maria Nina das Brot schickt.*

Sie: *Aber ich sage dir die Wahrheit:*

_____.
Maria – mandé – **LA MARËNDA** – a Nina



Franca

1) Conversation with Franca

(14)

Franca: *They told me that Maria sends the bread to Nina.*

You: *No, that's not true:*

_____.
Maria – send – **THE LUNCH** – to Nina



Franca

1) Gespräch mit Franca

(15)

Franca: *Mir ist erzählt worden, dass Maria Elena das Mittagessen schickt.*

Sie: *Aber ich sage dir die Wahrheit:*

_____.
Maria – mandé – la marënda – a **NINA**



Franca

1) Conversation with Franca

(15)

Franca: *They told me that Maria sends the lunch to Elena.*

You: *No, that's not true:*

_____.
Maria – send – the lunch – to **NINA**



Franca

1) Gespräch mit Franca

(16)

Franca: *Mir ist erzählt worden, dass Maria Nina das Mittagessen wegnimmt.*

Sie: *Aber ich sage dir die Wahrheit:*

_____.
Maria – **MANDÉ** – la marënda – a Nina



Franca

1) Conversation with Franca

(16)

Franca: *They told me that Maria takes away the lunch from Nina.*

You: *No, that's not true:*

_____.
Maria – **SEND** – the lunch – to Nina



Franca

Task 2

2) Aussagen und Fragen

Instruktionen:

Bilden Sie auf der Grundlage der vorgegebenen Situation und mithilfe der vorgegebenen Wörter

- eine Aussage und
- eine Frage.

37

2) Statements and questions

Instructions:

Please consider the situation described and phrase

- a statement and
- a question

on the basis of this situation and using the words given.

38

2) Aussagen und Fragen

Beispiel:

Sie sehen, dass Paolo sein Mittagessen einnimmt.

- Sie sagen zu Ihrer Schwester:

➡ _____
maië – pulënta

39

2) Statements and questions

Example:

You see that Paolo is having his lunch.

- You tell your sister:

➡ _____
eat – polenta

40

2) Aussagen und Fragen

Beispiel:

Sie sehen, dass Paolo sein Mittagessen einnimmt.

- Sie sagen zu Ihrer Schwester:

➡ **L maia pulënta.**
maië – pulënta

41

2) Statements and questions

Example:

You see that Paolo is having his lunch.

- You tell your sister:

➡ **He is eating polenta.**
eat – polenta

42

2) Aussagen und Fragen

Beispiel:

Sie sehen, dass Paolo sein Mittagessen einnimmt.

- Sie sagen zu Ihrer Schwester:
- Sie fragen Ihre Schwester:

L maia pulënta. ➡ _____ ?
maië – pulënta maië – pulënta

43

2) Statements and questions

Example:

You see that Paolo is having his lunch.

- You tell your sister:
- You ask your sister:

He is eating polenta. ➡ _____ ?
eat – polenta eat – polenta

44

2) Aussagen und Fragen

Beispiel:

Sie sehen, dass Paolo sein Mittagessen einnimmt.

a. Sie sagen zu Ihrer Schwester: b. Sie fragen Ihre Schwester:

L maia pulënta.

maië – pulënta



Maiel pa pulënta?

maië – pulënta

45

2) Statements and questions

Example:

You see that Paolo is having his lunch.

a. You tell your sister:

b. You ask your sister:

He is eating polenta.

eat – polenta



Is he eating polenta?

eat – polenta

46

2) Aussagen und Fragen

(1) Sie sehen, dass der letzte Apfel aufgegessen worden ist und vermuten, dass es Ihre Schwester war...

a. Sie sagen zu Ihrer Schwester:

_____!
avëi maia – I mëil

b. Sie fragen Ihre Schwester:

_____?
avëi maia – I mëil

47

2) Statements and questions

(1) You see that the last apple has been eaten and suppose that your sister has eaten it.

a. You tell your sister:

_____!
have eaten – the apple

b. You ask your sister:

_____?
have eaten – the apple

48

2) Aussagen und Fragen

(2) Einige Ihrer Freunde sind auf einer Reise...

a. Sie sagen zu Ihnen am Telefon:

_____.
ruvé – duman

b. Sie fragen Ihre Freunde am Telefon:

_____?
ruvé – duman

49

2) Statements and questions

(2) Some of your friends are on a trip ...

a. You tell them on the phone:

_____.
arrive – tomorrow

b. You ask your friends on the phone:

_____?
arrive – tomorrow

50

2) Aussagen und Fragen

(3) Sie wollen mit einem Freund zu Mittag essen...

a. Sie sagen zu ihm:

_____!
maië – bona marënda

b. Sie fragen ihn:

_____?
maië – bona marënda

51

2) Statements and questions

(3) You would like to have lunch with a friend ...

a. You tell him:

_____!
eat – good lunch

b. You ask him:

_____?
eat – good lunch

52

2) Aussagen und Fragen

(4) Sie haben von den Reiseplänen Ihrer Freunde gehört...

a. Sie sagen zu ihren Freunden:

_____.
jí – a Roma

b. Sie fragen Ihre Freunde:

_____?
jí – a Roma

23

2) Statements and questions

(4) You have heard that your friends want to go on a trip...

a. You tell your friends:

_____.
go – to Rome

b. You ask your friends:

_____?
go – to Rome

24

2) Aussagen und Fragen

(5) Sie haben Lust auf einen Apfel...

a. Sie sagen sich:

_____.
puděi – maië – n mëil.

b. Sie fragen Ihre Mutter:

_____?
puděi – maië – n mëil

25

2) Statements and questions

(5) You would like to eat an apple ...

a. You say to yourself:

_____.
can – eat – an apple.

b. You ask your mother

_____?
can – eat – an apple

26

2) Aussagen und Fragen

(6) Sie wollen ein Stück Käse essen, aber es ist keiner mehr da. Sie nehmen an, dass Ihre Brüder ihn gegessen haben.

a. Sie sagen zu Ihren Brüdern:

_____.
l'avëi – maià

b. Sie fragen Ihre Brüder:

_____?
l'avëi maià

27

2) Statements and questions

(6) You would like to eat a piece of cheese, but there is nothing left. You suppose that your brothers have eaten it.

a. You tell your brothers:

_____.
it have – eaten

b. You ask your brothers:

_____?
it have – eaten

28

2) Aussagen und Fragen

(7) Einige Freunde machen einen Ausflug mit dem Auto.

a. Sie erzählen Ihrem Bruder von dem Reiseziel der Freunde:

_____.
ruvé – a Roma

b. Sie fragen Ihren Bruder nach dem Reiseziel der Freunde:

_____?
ruvé – a Roma

29

2) Statements and questions

(7) Some friends of yours are going on holiday ...

a. You tell your brother about your friends' holiday destination:

_____.
arrive – in Rome

b. You ask your brother about your friends' holiday destination:

_____?
arrive – in Rome

30

2) Aussagen und Fragen

(8) Ihr Bruder hat Hunger und macht eine Pause.

a. Sie erklären Ihrer Freundin, was Ihr Bruder tut:

_____.
maië – marënda

b. Sie fragen Ihre Freundin, was Ihr Bruder tut:

_____?
maië – marënda

61

2) Aussagen und Fragen

(8) Ihr Bruder hat Hunger und macht eine Pause.

a. Sie erklären Ihrer Freundin, was Ihr Bruder tut:

_____.
maië – marënda

b. Sie fragen Ihre Freundin, was Ihr Bruder tut:

_____?
maië – marënda

61

2) Aussagen und Fragen

(9) Sie sprechen mit einigen Bekannten über den Beruf einer gemeinsamen Freundin.

a. Sie erzählen:

_____.
lauré – a Roma

b. Sie fragen:

_____?
lauré – a Roma

63

2) Statements and questions

(9) You talk with some people about a friend's job.

a. You tell them:

_____.
work – in Rome

b. You ask them:

_____?
work – in Rome

64

2) Aussagen und Fragen

(10) Sie machen einen Ausflug.

a. Sie wollen mit ihren Freunden zum Mittagessen einkehren und sagen:

_____.
maië – marënda – a Roma

b. Sie fragen die anderen:

_____?
maië – marënda – a Roma

65

2) Statements and questions

(10) You are going on a trip.

a. You would like to stop for a bite to eat and say:

_____.
eat – lunch – in Rome

b. You ask the others:

_____?
eat – lunch – in Rome

66

2) Aussagen und Fragen

(11) Einige Freundinnen haben eine Reise nach Deutschland unternommen...

a. Sie erzählen Ihrer Schwester:

_____.
ruvé – ncuei – a Roma

b. Sie fragen Ihre Schwester:

_____?
ruvé – ncuei – a Roma

67

2) Statements and questions

(11) Some friends have done a trip to Germany ...

a. You tell your sister:

_____.
arrive – today – in Rome

b. You ask your sister:

_____?
arrive – today – in Rome

68

2) Aussagen und Fragen

(12) Ihre Nichten haben kürzlich das Stricken gelernt.

a. Sie sagen lobend zu Ihrer Schwester:

lauré – bën

b. Sie fragen Ihre Schwester:

lauré – bën

69

2) Statements and questions

(12) Your nieces have learned to knit ...

a. You tell your sister:

work – well

b. You ask your sister:

work – well

70

2) Aussagen und Fragen

(13) Es ist bereits 13 Uhr. Sie haben Hunger.

a. Sie sagen zu Ihren Kollegen:

maië – marënda

b. Sie fragen Ihre Kollegen:

maië – marënda

71

2) Statements and questions

(13) It is already 1 pm. You are hungry.

a. You tell your colleagues:

eat – lunch

b. You ask your colleagues:

eat – lunch

72

2) Aussagen und Fragen

(14) Ein Kunde hat bei Ihnen Brennholz bestellt. Sie sprechen nun darüber, wann Sie das Holz ausliefern sollen.

a. Sie sagen zu Ihrem Kunden:

mandé – la lënia – duman

b. Sie fragen den Kunden:

mandé – la lënia – duman

73

2) Statements and questions

(14) One of your customers has ordered firewood. You are talking to him about when you should deliver the order.

a. You tell your customer:

send – the firewood – tomorrow

b. You ask the customer:

send – the firewood – tomorrow

74

Task 3

3) ja/nein-Fragen

Instruktionen:

Es folgt ein weiteres Gespräch mit Franca.

Stellen Sie wieder mit den vorgegebenen Wörtern Fragen auf der Grundlage der Situation.

[...] zeigt an, dass Sie das Wort nicht verstanden haben

Achten Sie darauf, den Satz an der richtigen Stelle zu betonen. Die Wörter in KAPITÄLCHEN helfen Ihnen dabei.



3) yes/no-questions

Instructions:

You are having another conversation with Franca.

Please ask questions on the basis of the discourse situation described using the words given on the screen.

[...] indicates that you have not understood what Franca was saying

Pay attention to the correct intonation. The words in CAPITALS will guide you.



3) ja/nein-Fragen

(1) Sie fragen Franca, ob Sie (mit Ihnen) zu Mittag essen möchte.

Sie: _____?
maië – na bona marënda

Franca: Scii!



Franca

77

3) yes/no-questions

(1) You ask Franca whether she would like to join you for lunch.

You: _____?
eat – a good lunch

Franca: Yes!



Franca

78

3) ja/nein-Fragen

(2)

Franca: Ie [...] na bona marënda!

Sie: Ie ne n'é nia capì. Cie es'a dit?
_____?
MAIË – na bona marënda

Franca: Ma no! Ie **FEJE** na bona marënda!



Franca

79

3) yes/no-questions

(2)

Franca: I [...] a good lunch!

You: Sorry, I didn't understand. What did you say?
_____?
EAT – a good lunch

Franca: No! I **PREPARE** a good lunch!



Franca

80

3) ja/nein-Fragen

(3)

Franca: Ie maie n bon [...]!

Sie: Ie ne n'é nia capì. Cie es'a dit?
_____?
maië – na bona **MARËNDA**

Franca: Ma no! Maie n bon **MËIL**!



Franca

81

3) yes/no-questions

(3)

Franca: I am eating a good [...]!

Sie: I didn't understand. What did you say?
_____?
eat – a good **LUNCH**

Franca: No! I am eating a good **APPLE**!



Franca

82

3) ja/nein-Fragen

(4) Sie wollen mit Franca nach Rom fahren.

Sie: _____?
jí – a Roma

Franca: Sci!



Franca

83

3) yes/no-questions

(4) You would like to go to Rome with Franca.

You: _____?
go – to Rome

Franca: Yes!



Franca

83

3) ja/nein-Fragen

(5)

Franca: Jon a [...].

Sie: le ne n'é nia capì. Cie es'a dit?
_____?
jí – a ROMA

Franca: Ma no! Jon a BULSAN!



Franca

86

3) yes/no-questions

(5)

Franca: Let's go to [...].

You: I didn't understand. What did you say?
_____?
go – to ROME

Franca: No! Let's go to Bolzano!



Franca

87

3) ja/nein-Fragen

(6)

Franca: [...] da Roma!

Sie: le ne n'é nia capì. Cie es'a dit?
_____?
JÍ – a Roma

Franca: Ma no! UNION da Roma!



Franca

88

3) yes/no-questions

(6)

Franca: [...] from Rome!

You: I didn't understand. What did you say?
_____?
GO – to Rome

Franca: No! We COME from Rome!



Franca

89

3) ja/nein-Fragen

(7) Es ist Mittagszeit, Franca und ihre Schwester haben gekocht. Die Mutter, die draußen auf dem Feld arbeitet, hat Hunger.

Sie: _____?
mandé – la marënda – al'oma

Franca: Sci!



Franca

90

3) yes/no-questions

(7) It is lunchtime, Franca and her sister have prepared lunch. Their mother, who is working outside, is hungry.

You: _____?
bring – the lunch – to mother

Franca: Yes!



Franca

91

3) ja/nein-Fragen

(8)

Franca: Mandon la marènda a [...].

Sie: Ie ne n'é nia capi. Cie es'a dit?
_____?
mandé – la marènda – al'OMA



Franca

Franca: Ma no, la mandon al'AVA!

92

3) yes/no-questions

(8)

Franca: Let's bring lunch to [...].

You: I didn't understand. What did you say?
_____?
send – lunch – to MOTHER



Franca

Franca: No, we'll bring it to GRAND-MOTHER!

93

3) ja/nein-Fragen

(9)

Franca: [...] la marènda al'oma.

Sie: Ie ne n'é nia capi. Cie es'a dit?
_____?
MANDÉ – la marènda – al'oma



Franca

Franca: Ma no! La PURTON al'oma!

94

3) yes/no-questions

(9)

Franca: [...] lunch to mother.

You: I didn't understand. What did you say?
_____?
BRING – lunch – to mother



Franca

Franca: No! We'll BRING it to mother!

95

Task 4

4) Aussagen und Fragen

Instruktionen:

Bilden Sie auf der Grundlage des vorgegebenen Kontexts und mithilfe der vorgegebenen Wörtern

- eine Aussage und
- eine Frage.

96

4) Statements and questions

Instructions:

Please phrase

- a statement and
- a question

on the basis of the discourse situation described using the words given on the screen.

97

4) Aussagen und Fragen

(1) Es geht um das Mittagessen...

a. Heute hat Ihre Schwester das Mittagessen ausfallen lassen, deshalb sagen Sie zu ihr:

_____.
duman – maië – la marënda

b. Sie fragen Ihre Schwester:

_____?
ulà – maië – la marënda

98

4) Statements and questions

(1) Lunchtime ...

a. Today, your sister did not have lunch. Therefore, you tell her:

_____.
tomorrow – eat – lunch

b. You ask your sister:

_____?
where – eat – lunch

98

4) Aussagen und Fragen

(2) Ihre Brüder arbeiten in Rom ...

a. Sie erzählen Ihrer Schwester:

_____.
duman – lauré – a Roma

b. Sie fragen Ihre Mutter:

_____?
can – lauré – a Roma

100

4) Statements and questions

(2) Your brothers work in Rome ...

a. You tell your sister:

_____.
tomorrow – work – in Rome

b. You ask your mother:

_____?
when – work – in Rome

101

4) Aussagen und Fragen

(3) Gestern hat der Nachbar das Brennholz abgeschickt...

a. Sie erzählen Ihrer Schwester:

_____.
inier – avëi mandé – la lënia

b. Sie wollen von Ihrem Bruder wissen, wohin der Nachbar das Holz geschickt hat:

_____?
ulà – avëi mandé – la lënia

102

4) Statements and questions

(3) Yesterday, the neighbour sent off the firewood ...

a. You tell your sister:

_____.
yesterday – have sent – the firewood

b. You ask your brother, where the neighbour sent the firewood to.

_____?
where – have sent – the firewood

103

4) Aussagen und Fragen

(4) Marina isst sehr gerne Äpfel.

a. Sie nehmen sich vor:

_____.
duman – mandé – n mëil – a Marina

b. Sie fragen sich, wie Sie diesen Plan in die Tat umsetzen können:

_____?
co – mandé – n mëil – a Marina

104

4) Statements and questions

(4) Marina loves apples.

a. You want to do something nice for Marina.

_____.
tomorrow – bring – an apple – to Marina

b. You wonder how you could do that:

_____?
how – send – an apple – to Marina

105

4) Aussagen und Fragen

(5) Ihre Mutter ist auf Reisen und hat heute das Mittagessen ausfallen lassen müssen.

a. *Morgen wird das aber anders sein:*

_____.
duman – maië – l'oma – la marënda

b. *Sie fragen sich aber, wo Ihre Mutter essen wird:*

_____?
ulà – maië – l'oma – la marënda

106

4) Statements and questions

(5) Your mother is on a trip and could not have lunch today.

a. *Tomorrow, however, she will be able to have lunch:*

_____.
tomorrow – eat – mother – lunch

b. *You wonder, where your mother could have lunch:*

_____?
where – eat – mother – lunch

107

4) Aussagen und Fragen

(6) Ihre Brüder haben eine anstrengende Arbeit. Manchmal arbeiten sie sogar sonntags.

a. *Sie sagen zu Ihren Brüdern:*

_____.
magari – lauré – dumënia

b. *Sie fragen Ihre Brüder nach dem Grund:*

_____?
ciuldì – lauré – dumënia

108

4) Statements and questions

(6) Your brothers have a strenuous job. Sometime, they even work on sundays.

a. *You tell your brothers:*

_____.
perhaps – work – on sundays

b. *You ask your brothers for the reason:*

_____?
why – work – on sundays

109

4) Aussagen und Fragen

(7) Zusammen mit einer Freundin haben Sie Äpfel geerntet.

a. *Sie sagen zu Ihrer Freundin:*

_____.
duman – maië – i mëiles

b. *Sie fragen Ihre Freundin:*

_____?
ulà – maië – i mëiles

110

4) Statements and questions

(7) You have picked apples together with a friend.

a. *You tell your friend:*

_____.
tomorrow – eat – the apples

b. *You ask your friend:*

_____?
where – eat – the apples

111

4) Aussagen und Fragen

(8) Ihre Großväter sind sehr beschäftigt...

a. *Sie erzählen einem Freund:*

_____.
inier – i nëinesc – avëi lauré

b. *Sie fragen Ihre Mutter:*

_____?
can – i nëinesc – avëi lauré

112

4) Statements and questions

(8) Your grandfathers are very busy ...

a. *You tell a friend:*

_____.
yesterday – the grandfathers – have worked

b. *You ask your mother:*

_____?
when – the grandfathers – have worked

113

4) Aussagen und Fragen

(9) Ihre Brüder haben einem Bekannten Brennholz nach Rom geschickt...

a. Sie erzählen Ihrer Mutter:

_____.
inier – avëi mandé – la lënia – a Roma

b. Sie fragen Ihren Vater:

_____?
co – avëi mandé – la lënia – a Roma

114

4) Statements and questions

(9) Your brothers have sent firewood to a friend in Rome ...

a. You tell your mother:

_____.
yesterday – have sent – the firewood – to Rome

b. You ask your father:

_____?
how – have sent – the firewood – to Rome

115

Task 5

5) Fragen formulieren

Instruktionen:

Sie werden im Folgenden Sätze zwei verschiedener Typen sehen:

- 1) Sätze ohne Markierung, die Sie aussprechen sollen.
- 2) Sätze, die ein oder mehrere **rot** markierte Wörter enthalten.

Formulieren Sie auf der Grundlage dieses vorgegebenen Satzes eine Frage!

Dabei sollen die **rot** markierten Wörter die Antwort zu Ihrer Frage sein.

5) Phrase questions

Instruktionen:

In the following, you will see two types of sentences:

- 1) Sentences without marking, which you will be asked to pronounce.
- 2) Sentences, which contain one or more words highlighted in **red**.

Please phrase a question on the basis of this sentence in a way that the words highlighted in **red** constitute the answer to your question.

5) Fragen formulieren

Zunächst ein Beispiel auf Deutsch:

Gestern hat Anna deinem Bruder eine Birne gegeben.

_____.
 Sprechen Sie den Satz!

5) Phrase questions

Please do as shown in the example:

Yesterday, Anna gave a pear to your brother.

_____.
 Please say this sentence!


5) Fragen formulieren

Gestern hat **Anna** deinem Bruder eine Birne gegeben.

_____.
 Formulieren Sie eine Frage, auf die die Antwort '**Anna**' lautet

5) Phrase questions

Yesterday, **Anna** gave a pear to your brother.

_____.
 Please phrase a question in such a way that the answer to your question is '**Anna**'.

5) Fragen formulieren


Gestern hat **Anna** ihrem Bruder eine Birne gegeben.

 Eine mögliche Frage, die 'Anna' als Antwort hat:

WER hat deinem Bruder eine Birne gegeben?

5) Phrase questions

Yesterday, **Anna** gave a pear to your brother.

 A possible question, to which the answer is 'Anna':

WHO gave a pear to your brother?

5) Fragen formulieren

... und jetzt auf **Grödnerisch!!!**

5) Phrase questions

... and now in your **local variety!!!**

5) Fragen formulieren

(1)
I năinesc maia la marënda a Roma.

5) Phrase questions

(1)
The grandfathers have lunch in Rome.

5) Fragen formulieren

(1a)
I năinesc maia la marënda a Roma.

5) Phrase questions

(1a)
The grandfathers have lunch in Rome.

5) Fragen formulieren

(1b)

I nănesc maia **la marēnda** a Roma.

5) Phrase questions

(1b)

The grandfathers have **lunch** in Rome.

5) Fragen formulieren

(1c)

I nănesc maia la marēnda a **Roma**.

5) Phrase questions

(1c)

The grandfathers have lunch in **Rome**.

5) Fragen formulieren

(1d)

I nănesc **maia** la marēnda a Roma.

5) Phrase questions

(1d)

The grandfathers **have** lunch in Rome.

5) Fragen formulieren

(1e)

I nănesc maia la marēnda a Roma.

5) Phrase questions

(1e)

The grandfathers have lunch in Rome.

5) Fragen formulieren

(2)

Inier iel unì a Roma
per maiè la marènda.

5) Phrase questions

(2)

Yesterday he went to Rome
to have lunch.

5) Fragen formulieren

(2a)

Inier iel unì a Roma
per maiè la marènda.

5) Phrase questions

(2a)

Yesterday he went to Rome
to have lunch.

5) Fragen formulieren

(2b)

Inier iel unì **a Roma**
per maiè la marènda.

5) Phrase questions

(2b)

Yesterday he went **to Rome**
to have lunch.

5) Fragen formulieren

(2c)

Inier iel unì a Roma
per maiè la marènda.

5) Phrase questions

(2c)

Yesterday he went to Rome
to have lunch.

5) Fragen formulieren

(2d)

Inier iel unì a Roma
per maië **la marènda.**

5) Phrase question

(2d)

Yesterday he went to Rome
to have **lunch.**

5) Fragen formulieren

(3)

Mi oma me à mandá nuef mëiles
cula curiera.

5) Phrase questions

(3)

My mother sent me nine apples
by bus.

5) Fragen formulieren

(3a)

Mi oma me à mandá nuef mëiles
cula curiera.

5) Phrase questions

(3a)

My mother sent me nine apples
by bus.

5) Fragen formulieren

(3b)

Mi oma me à mandá **nuef mëiles**
cula curiera.

5) Phrase questions

(3b)

My mother sent me **nine apples**
by bus.

5) Fragen formulieren

(3c)

Mi oma me à mandá **nuef** mëiles
cula curiera.

5) Phrase questions

(3c)

My mother sent me **nine** apples
by bus.

5) Fragen formulieren

(3d)

Mi oma me à mandá nuef mëiles
cula curiera.

5) Fragen formulieren

(3d)

My mother sent me nine apples
by bus.

5) Fragen formulieren

(3e)

Mi oma **me** à mandá nuef mëiles
cula curiera.

5) Phrase questions

(3e)

My mother sent **me** nine apples
by bus.

5) Fragen formulieren

(3f)

Mi oma **me à mandá nuef mëiles**
cula curiera.

5) Phrase questions

(3f)

My mother **sent me nine apples**
by bus.

Task 6

6) Fragen im Kontext

Instruktion:

Formulieren Sie eine Frage auf Grödnerisch auf der Grundlage des vorgegebenen Kontexts.

6) Questions in context

Instructions:

Please phrase a question in your local variety on the basis of the context provided.

6) Fragen im Kontext

(1)

Anna macht sich zum Ausgehen fertig und Sie fragen sie, wohin sie geht.

Anna antwortet, aber Sie verstehen die Antwort nicht richtig und fragen sie deshalb (nochmals) wohin sie geht.

_____?

6) Questions in context

(1)

Anna is getting ready to go out and you ask her where she is going.

Anna replies but you don't understand her answer and therefore ask her a second time, where she is going.

_____?

6) Fragen im Kontext

(2)

Einige Freunde von Ihnen sind zum Essen in ein elegantes Restaurant mit einem berühmten Chefkoch gegangen.

Was fragen Sie sie?

_____?

6) Questions in context

(2)

Some friends of yours went out to eat in an elegant restaurant with a renowned chef.

What do you ask them?

_____?

6) Fragen im Kontext

(3)

Sie wollen das Haus verlassen, finden aber Ihre Tasche nicht. Sie suchen überall, können sie aber nicht finden.

Was fragen Sie sich?

_____?

6) Questions in context

(3)

You would like to go out but you can't find your handbag. You look for it everywhere but you can't find it.

What do you wonder?

_____?

6) Fragen im Kontext

(4)

Frau Bertamelli hat drei Söhne:
Giancarlo, der älteste, ist Arzt;
Paolo, der zweitälteste, studiert Linguistik.

_____?

6) Questions in context

(4)

Mrs Bertamelli has three sons:
Giancarlo, the eldest, is a doctor;
Paolo, the second one, studies linguistics.

_____?

6) Fragen im Kontext

(5)

Paolo erzählt: "Ich habe drei tolle Tage in Paris verbracht. Am ersten Tag bin ich auf den Eiffelturm gestiegen, am zweiten Tag habe ich einen Spaziergang am Ufer der Seine gemacht."

Was fragen Sie ihn?

_____?

6) Questions in context

(5)

Paolo talks about his holidays: "I had three fantastic days in Paris. On the first day, I climbed the Eiffel Tower. On the second day, I went for a walk on the banks of the Seine."

What do you ask him?

_____?

6) Fragen im Kontext

(6)

Sie laden einen guten Freund zum Abendessen ein. Ihr Freund antwortet aber:

„Tut mir Leid, ich kann nicht kommen.“

Was fragen Sie ihn?

_____?

6) Questions in context

(6)

You invite a good friend to dinner. However, your friend replies: "I'm so sorry, I can't make it tonight."

What do you ask your friend?

_____?

Task 7

7) *pa / po*

Instruktionen:

Im Folgenden sehen Sie Fragesätze, die sich in der Stellung der Partikel *pa* unterscheiden.

Welche Variante würden Sie sagen? Welche nicht?

Erscheinen Ihnen beide Varianten gebräuchlich?

Wenn ja, gibt es einen Unterschied in Bezug auf den Kontext, in dem die eine oder andere Variante verwendet wird?

Sprechen Sie die Variante aus, die Sie gebrauchen würden!

7) *pa / po*

Instructions:

In the following, you will see questions differing in the position of the particle *pa / po*.

Which variant would you use? Which one not? Why?

Do you think both variants are in use?

If so, is there any difference regarding the context, in which one or the other variant is used?

Please pronounce the variant you would use!

7) pa

(1)

Sie treffen zwei nette Burschen auf der Straße und fragen sie:

- a. Co äis'a (vo) inuem?
- b. Co pa äis inuem?

7) pa

(1)

You meet two nice guys on the road and ask them:

- a. Co äis'a (vo) inuem?
- b. Co pa äis inuem?

'What's your name?'

7) pa

(2)

Sie machen einen Ausflug mit Franca und fragen sie:



Franca

- a. Ulà jons'a?
- b. Ulà pa jon?

7) pa

(2)

You would like to go on a trip with Franca and ask her:



Franca

- a. Ulà jons'a?
- b. Ulà pa jon?

'Where shall we go?'

7) pa

(3)

Sie suchen einen Tischler für eine Arbeit an Ihrem Haus und erkundigen sich bei Franca:



Franca

- a. Chi lëura pa bën?
- b. Chi pa lëura bën?

7) pa

(3)

You are looking for a carpenter and ask Franca:



Franca

- a. Chi lëura pa bën?
- b. Chi pa lëura bën?

'Who works well?'

7) pa

(4)

Wie jeden Tag gehen Sie auch heute mit Franca zum Mittagessen und fragen sie:



Franca

- a. Cie maies'a ncuei?
- b. Cie pa te maies ncuei?
- c. Cie pa maies ncuei?

7) pa

(4)

As every day you are going to have lunch with Franca and ask her:



Franca

- a. Cie maies'a ncuei?
- b. Cie pa te maies ncuei?
- c. Cie pa maies ncuei?

'What are you eating today?'

7) pa

(5)

Ihr Vater will heute in Rom essen ...



Franca

- a. Ciuldì maions'a a Roma?
- b. Ciuldì pa maions a Roma?
- c. Ciuldì pa maion a Roma?

7) pa

(5)

Your father would like to eat in Rome ...



Franca

- a. Ciuldì maions'a a Roma?
- b. Ciuldì pa maions a Roma?
- c. Ciuldì pa maion a Roma?

'What are we going to eat in Rome?'

7) pa

(6)

Sie sind mit Ihrer Schwester auf einer Reise und fragen sie:



Franca

- a. Can cherdés'a (su) la nona?
- b. Can pa te cherdés (su) la nona?
- c. Can pa cherdés (su) la nona?

7) pa

(6)

You are on a trip with your sister and ask her:



Franca

- a. Can cherdés'a (su) la nona?
- b. Can pa te cherdés (su) la nona?
- c. Can pa cherdés (su) la nona?

'When are you going to call your godmother?'

7) pa

(7)

Die Schwestern von Franca arbeiten in Rom. Sie fragen Franca:



Franca

- a. Da tan d'ani lëureles pa a Roma?
- b. Da tan d'ani lëureles'a a Roma?
- c. Da tan d'ani pa lëureles a Roma?
- d. Da tan d'ani pa les lëura a Roma?
- e. Da tan pa d'ani lëureles a Roma?

7) pa

(7)

Franca's sisters work in Rome. You ask Franca:



Franca

- a. Da tan d'ani lëureles pa a Roma?
- b. Da tan d'ani lëureles'a a Roma?
- c. Da tan d'ani pa lëureles a Roma?
- d. Da tan d'ani pa les lëura a Roma?
- e. Da tan pa d'ani lëureles a Roma?

'For how many years have they been working in Rome?'

7) pa

(8)

Franca's Brüder wollen einen Ausflug nach Rom machen. Sie erkundigen sich:



Franca

- a. Co vài pa a Roma?
- b. Co pa vài a Roma?
- c. Co pa i va a Roma?

7) pa

(8)

Franca's brothers would like to do a trip to Rome. You would like to know:



Franca

- a. Co vài pa a Roma?
- b. Co pa vài a Roma?
- c. Co pa i va a Roma?

'How are they going to Rome?'

7) pa

(9)

Franca's Schwester will einen Besuch bei Ihnen machen. Sie fragen Franca:

- a. Can uelela pa uni?
- b. Can uelela uni pa?
- c. Can pa la uel uni?
- d. Can pa uelela uni?



Franca

7) pa

(9)

Franca's sister would like to visit you. You ask Franca:

- a. Can uelela pa uni?
- b. Can uelela uni pa?
- c. Can pa la uel uni?
- d. Can pa uelela uni?



Franca

'When would she like to come?'

7) pa

(10)

Mauro hat sich in Maria verliebt. Verwundert fragen Sie Franca:

- a. Ciuldì ama pa Mauro Maria?
- b. Ciuldì pa ama Mauro Maria?
- c. Ciuldì pa Mauro ama Maria?



Franca

7) pa

(10)

Mauro has fallen in love with Maria. Surprised, you ask Franca:

- a. Ciuldì ama pa Mauro Maria?
- b. Ciuldì pa ama Mauro Maria?
- c. Ciuldì pa Mauro ama Maria?



Franca

'Why does Mauro love Maria?'

7) pa

(11)

Nachmittags treffen Sie Franca und fragen sie, wo sie zu Mittag gegessen hat:

- a. Ulà es'a maià la marènda?
- b. Ulà es maià pa la marènda?
- c. Ulà pa es maià la marènda?



Franca

7) pa

(11)

You meet Franca in the afternoon and ask her where she had lunch:

- a. Ulà es'a maià la marènda?
- b. Ulà es maià pa la marènda?
- c. Ulà pa es maià la marènda?



Franca

'Where did you have lunch?'

7) pa

(12)

Ihre Schwestern haben Franca bei der Hausarbeit geholfen. Sie erkundigen sich bei Franca:

- a. Co ales pa laurà?
- b. Co ales'a laurà?
- c. Co pa ales laurà?
- d. Co pa les a laurà?



Franca

7) pa

(12)

Your sisters have helped Franca with the housework. You ask Franca:

- a. Co ales pa laurà?
- b. Co ales'a laurà?
- c. Co pa ales laurà?
- d. Co pa les a laurà?



Franca

'How did they work?'

7) pa

(13)

Die Patin hat Geburtstag und sie erkundigen sich bei Franca, was ihre Schwestern der Patin geschickt haben.

- a. Cie ales pa mandà ala nona?
- b. Cie ales'a mandà ala nona?
- b. Cie ales mandà pa ala nona?
- c. Ci pa les a mandà ala nona?
- d. Ci pa ales mandà ala nona?



Franca

7) pa

(13)

It's the godmother's birthday and you ask Franca, what her sisters have sent to the godmother.

- a. Cie ales pa mandà ala nona?
- b. Cie ales'a mandà ala nona?
- b. Cie ales mandà pa ala nona?
- c. Ci pa les a mandà ala nona?
- d. Ci pa ales mandà ala nona?



Franca

'What did they send to the godmother?'

7) pa

(14)

Franca's Tochter hat eine Reise nach Rom gemacht und Sie erkundigen sich bei Franca:

- a. Can iela pa ruveda a Roma?
- b. Can iela ruveda pa a Roma?
- c. Can pa iela ruveda a Roma?
- d. Can pa la ie ruveda a Roma?



Franca

7) pa

(14)

Franca's daughter went on a trip to Rome and you ask Franca:

- a. Can iela pa ruveda a Roma?
- b. Can iela ruveda pa a Roma?
- c. Can pa iela ruveda a Roma?
- d. Can pa la ie ruveda a Roma?



Franca

'When did she arrive in Rome?'

7) pa

(15)

Franca's Bruder, der zwei Autos besitzt, macht gerade einen Besuch bei ihr.

Sie fragen Franca:

- a. Cun ciun di doi iel pa uni?
- b. Cun ciun di doi pa l ie uni?
- c. Cun ciun di doi pa iel uni?
- d. Cun ciun pa di doi iel uni?



Franca

7) pa

(15)

Franca's brother, who owns two cars, is just visiting her.

You ask Franca:

- a. Cun ciun di doi iel pa uni?
- b. Cun ciun di doi pa l ie uni?
- c. Cun ciun di doi pa iel uni?
- d. Cun ciun pa di doi iel uni?



Franca

'With which one of the two did he come?'

7) pa

(16)

Sie sehen, wie sich Franca's Bruder mit einigen Frauen auf dem Dorfplatz unterhält. Sie wollen von Franca wissen:

- a. Cun ciuna pa d' ëiles l lëura a Roma?
- b. Cun ciuna pa d' ëiles lëurel a Roma?



Franca

7) pa

(16)

You are seeing Franca's brother talking to some women on the village green. You ask Franca:

- a. Cun ciuna pa d' ëiles l lëura a Roma?
- b. Cun ciuna pa d' ëiles lëurel a Roma?



Franca

'With which one of them does he work in Rome?'

Task 8

8) *pa*

Instruktionen:

Im Folgenden unterhalten Sie sich wieder mit Franca.

Bitte sagen Sie, in welcher Situation Sie die folgenden Fragen stellen würden!



Franca

8) *pa*

Instructions:

In the following, you are again talking with Franca.

Please explain, in what kind of situation(s) you would ask the following questions.



Franca

8) *pa*

(1)

Sie unterhalten sich mit Franca und fragen sie:

Ciuldî pa abiné adum milions de paroles?



Franca

8) *pa*

(1)

You are talking with Franca and ask her:

Ciuldî pa abiné adum milions de paroles?

'Why collect together millions of words?'



Franca

8) *pa*

(2)

Sie unterhalten sich mit Franca und fragen sie:

Co pa che te ses tan dut, Franca?



Franca

8) *pa*

(2)

You are talking with Franca and ask her:

Co pa che te ses tan dut, Franca?

'How come you know all that, Franca?'



Franca

8) *pa*

(3)

Sie unterhalten sich mit Franca und ihrer Schwester und fragen sie:

Ulà pa che ulëis jí ncuei?



Franca

8) *pa*

(3)

You are talking with Franca and her sister and ask them:

Ulà pa che ulëis jí ncuei?

'Where would you like to go today?'



Franca

8) *pa*

(4)

Sie unterhalten sich mit Franca und ihrer Schwester und fragen sie:

- a. Cie pa che maion ncuei?
- b. Cie pa maië ncuei?



Franca

8) *pa*

(4)

You are talking with Franca and her sister and ask them:

- a. Cie pa che maion ncuei?
- b. Cie pa maië ncuei?



Franca

'What shall we eat today?'

8) *pa*

(5)

Sie wollen eine Torte für Francas Sohn backen, wissen aber nicht, welche er gern isst. Sie fragen Franca:

- a. Ciuna pa che l maia?
- b. Ciuna pa che maiei?



Franca

8) *pa*

(5)

You would like to bake a cake for Franca's son, but you don't know what kind of cake he likes. You ask Franca:

- a. Ciuna pa che l maia?
- b. Ciuna pa che maiei?



Franca

'Which one does he (like to) eat?'

Task 9

9) Fragen mit *ce* und *cie*

Instruktionen:

Im folgenden Gespräch mit Franca kommen Fragesätze mit *ce* und *cie* in mehreren Varianten vor.

Welche Variante würden Sie sagen? Welche nicht?

Gibt es einen Unterschied in Bezug auf den Kontext, in dem die eine oder andere Variante verwendet wird?

Sprechen Sie die Variante aus, die Sie gebrauchen würden!



Franca

9) Questions with *ce* and *cie*

Instructions:

In the following conversation with Franca, there are several variants of questions involving the question words *ce* and *cie*.

Which variant would you say? Which one not?

Is there a difference regarding the context, in which one or the other variant are used?

Please pronounce the variant you would use in this situation!



Franca

9) Fragen mit *ce* und *cie*

(1)

Franca's Bruder, der drei Autos besitzt, macht gerade einen Besuch bei ihr.

Sie fragen Franca:

- a. Cun ce auto iel pa uni?
- b. Cun ce auto pa l ie uni?
- c. Cun ce auto pa iel uni?
- d. Cun ce pa auto iel uni?



Franca

9) Questions with *ce* and *cie*

(1)

Franca's brother, who owns three cars, is just visiting.

You ask Franca:

- a. Cun ce auto iel pa uni?
- b. Cun ce auto pa l ie uni?
- c. Cun ce auto pa iel uni?
- d. Cun ce pa auto iel uni?



Franca

'With which car did he come?'

9) Fragen mit *ce* und *cie*

(2)

Franca's Bruder ist nach Gröden gekommen, um sie zu besuchen.

Sie erkundigen sich:

- a. Cun cie iel uni?
- b. Cun cie iel pa uni?
- c. Cun cie pa iel uni?
- d. Cun cie pa l ie uni?



Franca

9) Questions with *ce* and *cie*

(2)

Franca's brother has come to Val Gardena to visit her.

You ask her:

- a. Cun cie iel uni?
- b. Cun cie iel pa uni?
- c. Cun cie pa iel uni?
- d. Cun cie pa l ie uni?



Franca

'With which one did he come?'

9) Fragen mit *ce* und *cie*

(3)

Franca hat ihrer Partin einige Bücher geschickt. Sie fragen nach:

- a. Ce libri es'a mandà ala nona?
- b. Ce libri pa es mandà ala nona?
- c. Ce libri es mandà pa ala nona?



Franca

9) Questions with *ce* and *cie*

(3)

Franca sent her godmother some books.

You ask her:

- a. Ce libri es'a mandà ala nona?
- b. Ce libri pa es mandà ala nona?
- c. Ce libri es mandà pa ala nona?



Franca

'Which books did you send to your godmother?'

9) Fragen mit *ce* und *cie*

(4)

Franca will ihrer Mutter etwas zum Geburtstag schicken. Sie fragen nach:

- a. Cie (ti) mandes'a?
- b. Cie (ti) mandes?
- c. Cie pa (ti) mandes?



Franca

9) Questions with *ce* and *cie*

(4)

Franca would like to send something to her mother for her birthday. You ask Franca:

- a. Cie (ti) mandes'a?
- b. Cie (ti) mandes?
- c. Cie pa (ti) mandes?



Franca

'What do you send her?'

9) Fragen mit *ce* und *cie*

(5)

Franca und ihre Schwester haben bei einer Tante zu Mittag gegessen. Sie fragen nach:

- a. Da ce anda ës'a maià da marènda?
- b. Da ce anda pa ës maià da marènda?



Franca

9) Questions with *ce* and *cie*

(5)

Franca and her sister had lunch with one of their aunts. You would like to know:

- a. Da ce anda ës'a maià da marènda?
- b. Da ce anda pa ës maià da marènda?



Franca

'At which aunt's place did you have lunch?'

9) Fragen mit *ce* und *cie*

(6)

Sie wollen auch wissen, was es gab:

- a. Cie ëis'a maià?
- b. Cie ëis maià?
- c. Cie ëis maià pa?



Franca

9) Questions with *ce* and *cie*

(6)

You would also like to know what they had for lunch:

- a. Cie ëis'a maià?
- b. Cie ëis maià?
- c. Cie ëis maià pa?



Franca

'What did you eat?'

Task 10

10) Fragen mit und ohne *pa*

Instruktionen:

Sie sprechen wieder mit Franca. Formulieren Sie mithilfe der vorgegebenen Wörter Fragen:

- a) mit *pa*
- b) ohne *pa*



Franca

Achten Sie dabei auf die Betonung!

10) Questions with and without *pa*

Instructions:

You are talking again with Franca. Please phrase questions using the words provided on the screen:

- a) questions with *pa*
- b) questions without *pa*



Franca

Please pay attention to the correct accentuation!

10) Fragen mit und ohne *pa*

(1)

Sie fragen Franca, wo sie zu Mittag isst:

a. _____?
ulà – maië – la marënda

pa

b. _____?
ulà – maië – la marënda

pa



Franca

10) Questions with and without *pa*

(1)

You ask Franca, where she is having lunch today:

a. _____?
ulà – maië – la marënda

pa

b. _____?
ulà – maië – la marënda

pa



Franca

10) Fragen mit und ohne *pa*

(2)

Franca's Schwestern fahren nach Rom. Sie wollen wissen, wie sie dorthin kommen:

a. _____?
co – jí – a Roma

pa

b. _____?
co – jí – a Roma

pa



Franca

10) Questions with and without *pa*

(2)

Franca's sisters are leaving for Rome. You ask Franca, how they will get there:

a. _____?
co – jí – a Roma

pa

b. _____?
co – jí – a Roma

pa



Franca

10) Fragen mit und ohne *pa*

(3)

Sie haben Hunger und fragen Franca und ihre Mutter, wann sie Ihnen das Mittagessen schicken:

a. _____ *pa*
can – me – mandé – da marènda



Franca

b. _____ *pa*
can – me – mandé – da marènda

10) Questions with and without *pa*

(3)

You are hungry and ask Franca and her mother when they will send you your lunch:

a. _____ *pa*
can – me – mandé – da marènda



Franca

b. _____ *pa*
can – me – mandé – da marènda

10) Fragen mit und ohne *pa*

(4)

Heute essen alle in Rom. Sie fragen Franca nach dem Grund:

a. _____ *pa*
ciuldi – maië – a Roma



Franca

b. _____ *pa*
ciuldi – maië – a Roma

10) Questions with and without *pa*

(4)

Today, the whole family is eating in Rome. You ask Franca for the reason:

a. _____ *pa*
ciuldi – maië – a Roma



Franca

b. _____ *pa*
ciuldi – maië – a Roma

10) Fragen mit und ohne *pa*

(5)

Franca's Bruder ist beim Essen. Sie fragen Franca, was er isst:

a. _____ *pa*
cie – maië – da marènda



Franca

b. _____ *pa*
cie – maië – da marènda

10) Questions with and without *pa*

(5)

Franca's brother is having lunch. You ask Franca, what he is eating:

a. _____ *pa*
cie – maië – da marènda



Franca

b. _____ *pa*
cie – maië – da marènda

10) Fragen mit und ohne *pa*

(6)

Sie wollen mit Franca Gartenarbeit machen und fragen sie, wer sonst noch mitarbeitet:

a. _____ *pa*
chi – lauré – cun nëus



Franca

b. _____ *pa*
chi – lauré – cun nëus

10) Questions with and without *pa*

(6)

You would like to go gardening with Franca and ask her who else will be working with you:

a. _____ *pa*
chi – lauré – cun nëus



Franca

b. _____ *pa*
chi – lauré – cun nëus

10) Fragen mit und ohne *pa*

(7)

Sie wollen mit Franca Gartenarbeit machen und fragen sie, ob ihr Bruder auch mitarbeitet:

a. _____ *pa*
lauré – cun nëus



Franca

b. _____ *pa*
lauré – cun nëus

10) Questions with and without *pa*

(7)

You would like to go gardening with Franca and ask her, whether her brother will be working with you as well:

a. _____ *pa*
lauré – cun nëus



Franca

b. _____ *pa*
lauré – cun nëus

10) Fragen mit und ohne *pa*

(8)

Einige Nachbarn schicken Ihrem Großvater Brennholz. Sie fragen die Nachbarn nach dem Grund:

a. _____ *pa*
ciuldi – mandé – la lënia – a mi nëine



Franca

b. _____ *pa*
ciuldi – mandé – la lënia – a mi nëine

10) Questions with and without *pa*

(8)

Some neighbours send firewood to your grandfather. You ask the neighbours for the reason:

a. _____ *pa*
ciuldi – mandé – la lënia – a mi nëine



Franca

b. _____ *pa*
ciuldi – mandé – la lënia – a mi nëine

10) Fragen mit und ohne *pa*

(9)

Franca's Schwester arbeitet in Rom. Sie wollen mehr Details wissen:

a. _____ *pa*
da tan de ani – lauré – a Roma



Franca

b. _____ *pa*
da tan de ani – lauré – a Roma

10) Questions with and without *pa*

(9)

Franca's sister works in Rome. You would like to know more about this job:

a. _____ *pa*
da tan de ani – lauré – a Roma



Franca

b. _____ *pa*
da tan de ani – lauré – a Roma

10) Fragen mit und ohne *pa*

(10)

Sie haben Äpfel geerntet und fragen sich, welchen sie Ihrer Mutter schicken sollen.

a. _____ *pa*
ce mëil – mandé – a mi oma

b. _____ *pa*
ce mëil – mandé – a mi oma

10) Questions with and without *pa*

(10)

You have picked apples and wonder which one you should give to your mother.

a. _____ *pa*
ce mëil – mandé – a mi oma

b. _____ *pa*
ce mëil – mandé – a mi oma

10) Fragen mit und ohne *pa*

(11)

Ihr Großvater hat zu Mittag gegessen. Sie fragen Franca:

a. _____ *pa*
tant – avëi maià – l nëine



Franca

b. _____ *pa*
tant – avëi maià – l nëine

10) Questions with and without *pa*

(11)

Your grandfather has had lunch. You ask Franca:

a. _____ *pa*
tant – avëi maià – l nëine



Franca

b. _____ *pa*
tant – avëi maià – l nëine

10) Fragen mit und ohne *pa*

(12)

Alle Ihre Äpfel sind aufgeessen worden. Bestürzt fragen Sie, wer es war:

a. _____ *pa*
chi – avëi maià – mi mëiles



Franca

b. _____ *pa*
chi – avëi maià – mi mëiles

10) Questions with and without *pa*

(12)

All your apples have been eaten. You want to know who it was:

a. _____ *pa*
chi – avëi maià – mi mëiles



Franca

b. _____ *pa*
chi – avëi maià – mi mëiles

10) Fragen mit und ohne *pa*

(13)

Sie haben gehört, dass einige Freundinnen nach Rom fahren wollen. Sie fragen Franca:

a. _____ *pa*
jí – a Roma



Franca

b. _____ *pa*
jí – a Roma

10) Questions with and without *pa*

(13)

You have heard that some friends would like to go on a trip to Rome. You ask Franca:

a. _____ *pa*
jí – a Roma



Franca

b. _____ *pa*
jí – a Roma

10) Fragen mit und ohne *pa*

(14)

Jemand hat Ihre Äpfel aufgeessen. Sie fragen Franca, ob es vielleicht Ihre Tante gewesen ist:

a. _____ *pa*
avëi maià – mi anda – mi mëiles



Franca

b. _____ *pa*
avëi maià – mi anda – mi mëiles

10) Questions with and without *pa*

(14)

Somebody has eaten your apples. You ask Franca, whether it has been your aunt:

a. _____ *pa*
avëi maià – mi anda – mi mëiles



Franca

b. _____ *pa*
avëi maià – mi anda – mi mëiles

10) Fragen mit und ohne *pa*

(15)

Franca hat eine Uhr gekauft. Sie fragen sie:

a. _____ *pa*
la mandé – a mi anda



Franca

b. _____ *pa*
la mandé – a mi anda

10) Questions with and without *pa*

(15)

Franca has bought a watch. You ask her:

a. _____ *pa*
la mandé – a mi anda



Franca

b. _____ *pa*
la mandé – a mi anda

Ende...

Herzlichen Dank für Ihre
Mitarbeit!!!

Finish...

Thank you very much!!!

2. Syntactic questionnaire (Word order)

Variety: Fascian

(7) Ordine delle parole

Istruzioni:

Nella parte seguente, vedrete la stessa frase in alcune varianti diversi che si distinguono per quanto riguarda l'ordine dei singoli costituenti.

Siete pregati di indicare quale variante è per Lei la più naturale e di pronunciare questa frase.

Dite anche quali varianti non si possono usare e perché.

92

(7) Word order

Instructions:

In what follows, you will see the same question in several variants differing with respect to word order.

Please indicate which variant sounds most natural to you and pronounce it.

Please say also which variants are not used at all and why.

93

(7) Ordine delle parole

(1)

- a. Olà pa Marianna la magna l formai?
- b. Marianna, olà pa la magna l formai?
- c. Marianna, olà magnela pa l formai?

94

(7) Word order

(1)

- a. Olà pa Marianna la magna l formai?
- b. Marianna, olà pa la magna l formai?
- c. Marianna, olà magnela pa l formai?

'Where does Marianna eat the cheese?'

94

(7) Ordine delle parole

(2)

- a. Marianna, olà che la magna l formai?
- b. Olà che Marianna la magna l formai?
- c. Olà èl pa che Marianna la magna l formai?
- d. Marianna, olà él pa che la magna l formai?

95

(7) Word order

(2)

- a. Marianna, olà che la magna l formai?
- b. Olà che Marianna la magna l formai?
- c. Olà èl pa che Marianna la magna l formai?
- d. Marianna, olà él pa che la magna l formai?

'Where does Marianna eat the cheese?'

95

(7) Ordine delle parole

(3)

- a. Can pa le fémene le va a Moena?
- b. Le fémene, can pa le va a Moena?
- c. Le fémene, can vale pa a Moena?

97

(7) Word order

(3)

- a. Can pa le fémene le va a Moena?
- b. Le fémene, can pa le va a Moena?
- c. Le fémene, can vale pa a Moena?

'When will the women go to Moena?'

97

(7) Ordine delle parole

(4)

- a. Le fémene, can che le va a Moena?
- b. Can che le fémene le va a Moena?
- c. Can èl pa che le fémene le va a Moena?
- d. Le fémene, can él pa che le va a Moena?

99

(7) Word order

(4)

- a. Le fémene, can che le va a Moena?
- b. Can che le fémene le va a Moena?
- c. Can èl pa che le fémene le va a Moena?
- d. Le fémene, can él pa che le va a Moena?

'When will the women go to Moena?'

99

(7) Ordine delle parole

(5)

Lei chiede a Franca dove Maria mangia il formaggio.
Ma Franca non ha capito bene e Le racconta invece dove Maria mangia *la polenta*.
Ma Lei vuole chiedere del **formaggio**...

- a. Olà pa **L FORMAI** la l magna (no la polenta)?
- b. **L FORMAI**, olà pa la l magna (no la polenta)?
- c. **L FORMAI**, olà l magnela pa (no la polenta)?

109

(7) Word order

(5)

You ask Franca where Maria eats the cheese.
But Franca did not understand you correctly and tells you where Maria eats *the polenta*.
But you want to know about **the cheese** ...

- a. Olà pa **L FORMAI** la l magna (no la polenta)?
- b. **L FORMAI**, olà pa la l magna (no la polenta)?
- c. **L FORMAI**, olà l magnela pa (no la polenta)?

'Where does Maria eat **THE CHEESE** (not the polenta)?'

102

(7) Ordine delle parole

(6)

Lei chiede a Franca dove Maria mangia il formaggio.
Ma Franca non ha capito bene e Le racconta invece dove Maria mangia *la polenta*.
Ma Lei vuole chiedere del **formaggio**...

- a. **L FORMAI**, olà che la l magna (no la polenta)?
- b. Olà che **L FORMAI** la l magna (no la polenta)?

103

(7) Word order

(6)

You ask Franca where Maria eats the cheese.
But Franca did not understand you correctly and tells you where Maria eats *the polenta*.
But you want to know about **the cheese** ...

- a. **L FORMAI**, olà che la l magna (no la polenta)?
- b. Olà che **L FORMAI** la l magna (no la polenta)?

'Where does she eat **THE CHEESE** (not the polenta)?'

104

(7) Ordine delle parole

(7)

Lei chiede a Franca quando le donne vanno a Moena.
Ma Franca non ha capito bene e Le racconta invece quando *le ragazze* vanno a Moena.
Ma Lei vuole chiedere **delle donne**...

- a. Can pa **LE FÉMENE** le va a Moena (no le beze)?
- b. **LE FÉMENE**, can pa le va a Moena (no le beze)?
- c. **LE FÉMENE**, can vale pa a Moena (no le beze)?

105

(7) Word order

(7)

You ask Franca when the women go to Moena.
But Franca did not understand you correctly and tells you when *the girls* go to Moena.
But you want to know about **the women** ...

- a. Can pa **LE FÉMENE** le va a Moena (no le beze)?
- b. **LE FÉMENE**, can pa le va a Moena (no le beze)?
- c. **LE FÉMENE**, can vale pa a Moena (no le beze)?

'When do **THE WOMEN** go to Moena (not the girls)?'

106

(7) Ordine delle parole

(8)

Lei chiede a Franca quando le donne vanno a Moena.
Ma Franca non ha capito bene e Le racconta invece quando *le ragazze* vanno a Moena.
Ma Lei vuole chiedere **delle donne**...

- a. **LE FÉMENE**, can che le va a Moena (no le beze)?
- b. Can che **LE FÉMENE** le va a Moena (no le beze)?

107

(7) Word order

(8)

You ask Franca when the women go to Moena.
But Franca did not understand you correctly and tells you when *the girls* go to Moena.
But you want to know about **the women** ...

- a. **LE FÉMENE**, can che le va a Moena (no le beze)?
- b. Can che **LE FÉMENE** le va a Moena (no le beze)?

'When do **THE WOMEN** go to Moena (not the girls)?'

108

(7) Ordine delle parole

(9)

- a. Che pa Maria la magna a Moena?
- b. Maria, che pa la magna a Moena?
- c. Maria, che magnela pa a Moena?

109

(7) Word order

(9)

- a. Che pa Maria la magna a Moena?
 - b. Maria, che pa la magna a Moena?
 - c. Maria, che magnela pa a Moena?
- 'What does Maria eat in Moena?'

110

(7) Ordine delle parole

(10)

- a. Maria, che che la magna a Moena?
- b. Che che Maria la magna a Moena?
- c. Che él pa che Maria la magna a Moena?
- d. Maria, che él pa che la magna a Moena?

111

(7) Word order

(10)

- a. Maria, che che la magna a Moena?
 - b. Che che Maria la magna a Moena?
 - c. Che él pa che Maria la magna a Moena?
 - d. Maria, che él pa che la magna a Moena?
- 'What does Maria eat in Moena?'

112

(7) Ordine delle parole

(11)

- a. Co pa le fémene le va a Moena?
- b. Le fémene, co pa le va a Moena?
- c. Le fémene, co vale pa a Moena?

113

(7) Word order

(11)

- a. Co pa le fémene le va a Moena?
 - b. Le fémene, co pa le va a Moena?
 - c. Le fémene, co vale pa a Moena?
- 'How do the women go to Moena?'

114

(7) Ordine delle parole

(12)

- a. Le fémene, co che le va a Moena?
- b. Co che le fémene le va a Moena?
- c. Co él pa che le fémene le va a Moena?
- d. Le fémene, co él pa che le va a Moena?

115

(7) Word order

(12)

- a. Le fémene, co che le va a Moena?
 - b. Co che le fémene le va a Moena?
 - c. Co él pa che le fémene le va a Moena?
 - d. Le fémene, co él pa che le va a Moena?
- 'How do the women go to Moena?'

116

(7) Ordine delle parole

(13)

- a. Che pa Maria la magna a Moena?
- b. Maria, che pa la magna a Moena?
- c. Maria, che magnela pa a Moena?

117

(7) Word order

(13)

- a. Che pa Maria la magna a Moena?
- b. Maria, che pa la magna a Moena?
- c. Maria, che magnela pa a Moena?

'What does Maria eat in Moena?'

118

(7) Ordine delle parole

(14)

Lei chiede a Franca cosa Maria mangia a Moena.
Ma Franca non ha capito bene e Le racconta invece cosa mangia Rita.
Ma Lei vuole chiedere di Maria ...

- a. Che pa **MARIA** la magna a Moena (no Rita)?
- b. **MARIA**, che pa la magna a Moena (no Rita)?
- c. **MARIA**, che magnela pa a Moena (no Rita)?

119

(7) Word order

(14)

You ask Franca what Maria eats in Moena. But Franca did not understand you correctly and tells you what Rita eats in Moena. But you want to know about Maria ...

- a. Che pa **MARIA** la magna a Moena (no Rita)?
- b. **MARIA**, che pa la magna a Moena (no Rita)?
- c. **MARIA**, che magnela pa a Moena (no Rita)?

'What does MARIA eat in Moena (not Rita)?'

120

(7) Ordine delle parole

(15)

Lei chiede a Franca come gli uomini vanno a Moena.
Ma Franca non ha capito bene e Le racconta invece come le donne vanno a Moena.
Ma Lei vuole chiedere degli uomini ...

- a. Co pa **I OMEGN** i va a Moena (no le fémene)?
- b. **I OMEGN**, co pa i va a Moena (no le fémene)?
- c. **I OMEGN**, co vai pa a Moena (no le fémene)?

121

(7) Word order

(15)

You ask Franca how the men go to Moena. But Franca did not understand you correctly and tells you how the women go to Moena. But you want to know about the men ...

- a. Co pa **I OMEGN** i va a Moena (no le fémene)?
- b. **I OMEGN**, co pa i va a Moena (no le fémene)?
- c. **I OMEGN**, co vai pa a Moena (no le fémene)?

'How do THE MEN go to Moena (not the women)?'

122

(7) Ordine delle parole

(16)

- a. Perché pa Maria la magna a Roma?
- b. Maria, perché pa la magna a Roma?
- c. Maria, perché magnela pa a Roma?

123

(7) Word order

(16)

- a. Perché pa Maria la magna a Roma?
- b. Maria, perché pa la magna a Roma?
- c. Maria, perché magnela pa a Roma?

'Why does Maroa eat in Rome?'

124

(7) Ordine delle parole

(17)

- a. Maria, perché che la magna a Roma?
- b. Perché che Maria la magna a Roma?
- c. Perché él pa che Maria la magna a Roma?
- d. Maria, perché él pa che la magna a Roma?

125

(7) Word order

(17)

- a. Maria, perché che la magna a Roma?
- b. Perché che Maria la magna a Roma?
- c. Perché él pa che Maria la magna a Roma?
- d. Maria, perché él pa che la magna a Roma?

'Why does Maria eat in Rome?'

126

(7) Ordine delle parole

(18)

- a. Chi pa la polenta la magna a Roma?
- b. La polenta, chi pa la magna a Roma?
- c. La polenta, chi la magna pa a Roma?

127

(7) Word order

(18)

- a. Chi pa la polenta la magna a Roma?
- b. La polenta, chi pa la magna a Roma?
- c. La polenta, chi la magna pa a Roma?

'Who eats the polenta in Rome?'

128

(7) Ordine delle parole

(19)

- a. La polenta, chi che la magna a Roma?
- b. Chi che la polenta la magna a Roma?
- c. Chi él pa che la polenta la magna a Roma?
- d. La polenta, chi él pa che la magna a Roma?

129

(7) Word order

(19)

- a. La polenta, chi che la magna a Roma?
- b. Chi che la polenta la magna a Roma?
- c. Chi él pa che la polenta la magna a Roma?
- d. La polenta, chi él pa che la magna a Roma?

'Who eats the polenta in Rome?'

130

(7) Ordine delle parole

(20)

Lei chiede a Franca perché Maria mangia a Roma.
Ma Franca non ha capito bene e Le racconta invece perché Rita mangia a Roma.
Ma Lei vuole chiedere di **Maria**...

- a. Perché pa **MARIA** la magna a Roma (no Rita)?
- b. **MARIA**, perché pa la magna a Roma (no Rita)?
- c. **MARIA**, perché magnela pa a Roma (no Rita)?

131

(7) Word order

(20)

You ask Franca why Maria eats in Rome. But Franca did not understand you correctly and tells you why Rita eats in Rome. But you want to know about **Maria** ...

- a. Perché pa **MARIA** la magna a Roma (no Rita)?
- b. **MARIA**, perché pa la magna a Roma (no Rita)?
- c. **MARIA**, perché magnela pa a Roma (no Rita)?

'Why does **MARIA** eat in Rome (not Rita)?'

132

(7) Ordine delle parole

(21)

Lei chiede a Franca chi mangia la polenta a Roma.
Ma Franca non ha capito bene e Le racconta invece chi mangia *la pizza* a Roma.
Ma Lei vuole chiedere della **polenta** ...

- a. Chi pa **LA POLENTA** la magna a Roma (no la pizza)?
- b. **LA POLENTA**, chi pa la magna a Roma (no la pizza)?
- c. **LA POLENTA**, chi la magna pa a Roma (no la pizza)?

133

(7) Word order

(21)

You ask Franca who has polenta in Rome. But Franca did not understand you correctly and tells you who has *pizza* in Rome. But you want to know about **the polenta** ...

- a. Chi pa **LA POLENTA** la magna a Roma (no la pizza)?
- b. **LA POLENTA**, chi pa la magna a Roma (no la pizza)?
- c. **LA POLENTA**, chi la magna pa a Roma (no la pizza)?

'Who has **POLENTA** in Rome (not pizza)?'

134

(7) Ordine delle parole

(22)

- a. Da tenc de egn pa Maria la laora a Moena?
- b. Maria, da tenc de egn pa la laora a Moena?
- c. Maria, da tenc de egn laorela pa a Moena?

135

(7) Word order

(22)

- a. Da tenc de egn pa Maria la laora a Moena?
- b. Maria, da tenc de egn pa la laora a Moena?
- c. Maria, da tenc de egn laorela pa a Moena?

'Since how many years does she work in Moena?'

136

(7) Ordine delle parole

(23)

- a. Maria, da tenc de egn che la laora a Moena?
- b. Da tenc de egn che Maria la laora a Moena?
- c. Da tenc de egn él pa che Maria la laora a Moena?
- d. Maria, da tenc de egn él pa che la laora a Moena?

137

(7) Word order

(23)

- a. Maria, da tenc de egn che la laora a Moena?
- b. Da tenc de egn che Maria la laora a Moena?
- c. Da tenc de egn él pa che Maria la laora a Moena?
- d. Maria, da tenc de egn él pa che la laora a Moena?

'Since how many years does she work in Moena?'

138

(7) Ordine delle parole

(24)

- a. Con cala pa de ele Maria la fasc l viac?
- b. Maria, con cala pa de ele la fasc l viac?
- c. Maria, con cala de ele fajela pa l viac?

139

(7) Word order

(24)

- a. Con cala pa de ele Maria la fasc l viac?
- b. Maria, con cala pa de ele la fasc l viac?
- c. Maria, con cala de ele fajela pa l viac?

'With which one of them will Maria go on the trip?'

140

(7) Ordine delle parole

(25)

- a. Maria, con cala de ele che la fasc l viac?
- b. Con cala de ele che Maria la fasc l viac?
- c. Con cala de ele él pa che Maria la fasc l viac?
- d. Maria, con cala de ele él pa che la fasc l viac?

141

(7) Word order

(25)

- a. Maria, con cala de ele che la fasc l viac?
- b. Con cala de ele che Maria la fasc l viac?
- c. Con cala de ele él pa che Maria la fasc l viac?
- d. Maria, con cala de ele él pa che la fasc l viac?

'With which one of them will Maria go on the trip?'

142

(7) Ordine delle parole

(26)

Lei chiede a Franca da quanti anni Maria lavora a Moena.
Ma Franca non ha capito bene e Le racconta invece da quanti anni *Rita* lavora a Moena.
Ma Lei vuole chiedere di **Maria**...

- a. Da tenc de egn pa **MARIA** la laora a Moena (no Rita)?
- b. **MARIA**, da tenc de egn pa la laora a Moena (no Rita)?
- c. **MARIA**, da tenc de egn laorela pa a Moena (no Rita)?

143

(7) Word order

(26)

You ask Franca since how many years Maria works in Moena. But Franca did not understand correctly and tells you since how many years *Rita* works in Moena. But you want to know about **Maria**...

- a. Da tenc de egn pa **MARIA** la laora a Moena (no Rita)?
- b. **MARIA**, da tenc de egn pa la laora a Moena (no Rita)?
- c. **MARIA**, da tenc de egn laorela pa a Moena (no Rita)?

'Since how many years does **MARIA** work in Moena (not Rita)?'

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3. Syntactic questionnaire (Quantifier test)

Varieties: Gherdëina, Nònes

Please provide the following sentences in your local variety.

- (1) Quando non ha mangiato niente? / Wann hat er nichts gegessen?
'When did he eat nothing?'

- (2) Dove hai mangiato qualcosa? / Wo hat er etwas gegessen?
'Where did he eat something?'

- (3) Quando non è venuto nessuno? / Wann ist niemand gekommen?
'When did nobody arrive?'

- (4) Che cosa ha mangiato qualcuno? / Was hat jemand gegessen?
'What did somebody eat?'

- (5) Quante volte hai visto ogni nonno? / Wie viele Male hast du jeden Großvater gesehen?
'How many times did you see every grandfather?'

- (6) Dove hanno incontrato qualcuno? / Wo haben sie jemanden getroffen?
'Where did they meet somebody?'

- (7) Quando non hanno trovato niente a Roma? / Wann haben sie nichts in Rom gefunden?
'When did they find nothing in Rome?'

- (8) Quando avete mangiato tutto? / Wann habt ihr alles gegessen?
'When did you eat everything?'

3. Addendum to Chapter 8

Variation in Nònes early narrow focus statements with main stress on open penultimate syllables

My corpus contains up to three early narrow focus statements with main stress on an open penultimate syllable per speaker. For some speakers, the corpus does not include data for all three focus constituents either because the constituent was not clearly stressed or because the speaker phrased the statement in a different way using syntactic means of focusing, for instance. The focus constituents are the proper names MAra, MAUro and MaRIa (main stressed syllables in capitals). Table 1 shows the tonal implementation per speaker in these three Nònes early narrow focus statements.

| | N1 | N2 | N3 | N4 | N5 | N6 | N7 | N8 |
|-------|----|----|----|----|----|----|----|----|
| MAra | | | | | | | | |
| MAUro | | | | | | | | |
| MaRIa | | | | | | | | |

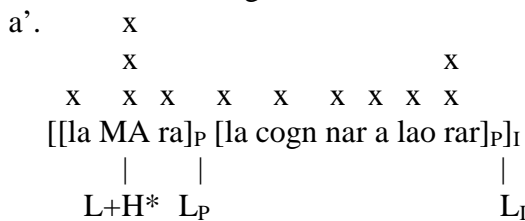
Table 1: The variation in Nònes early narrow focus statements with main stress on open penultimate syllables

The distribution of the two types of tonal implementation (rise vs. peak) is striking: The focus constituent MaRIa is always implemented with a rise, whereas MAra and MAUro can be realised with a rise or a peak. The distribution in speakers N1 and N2 suggests that MAra and MAUro are realised with the same tonal implementation, i.e. either with a rise or a peak. Consequently, we observe two patterns: Speakers N2, N4 and N7 realise all focus constituents with a rise (pattern 1) whereas speakers N1, N3, N5, N6 and N8 realise MAra and MAUro with a peak and MaRIa with a rise (pattern 2). Note that the variation between pattern 1 and 2 does not show any correlation with variables such as sex, age or local dialect of Nònes.

The fact that the focus constituent MaRIa is always realised with a rise might be due to the length of the main stressed syllable. Compare MAra (1a, figure 1) to MaRIa (1b, figure 2): the main stressed syllable in MAra (0,3850 s) is considerably longer than the main stressed syllable in MaRIa (0,2061 s). Hence, in MAra, F₀ can begin to fall earlier than in MaRIa to attain the low target at the phonological phrase boundary (L_P) giving rise to a peak-shaped contour instead of a rise as in MaRIa.

(1) Penultimate stress on open syllables (Nònes)

- a. La MAra la cogn nar a laorar.
 the Mara she must-3SG go-INF to work-INF
 ‘MARA has to go to work.’



- b. La MaRIa la manda l formai a la Nina.
 the Maria she send-3SG the cheese to the Nina
 ‘MARIA sends the cheese to Nina.’

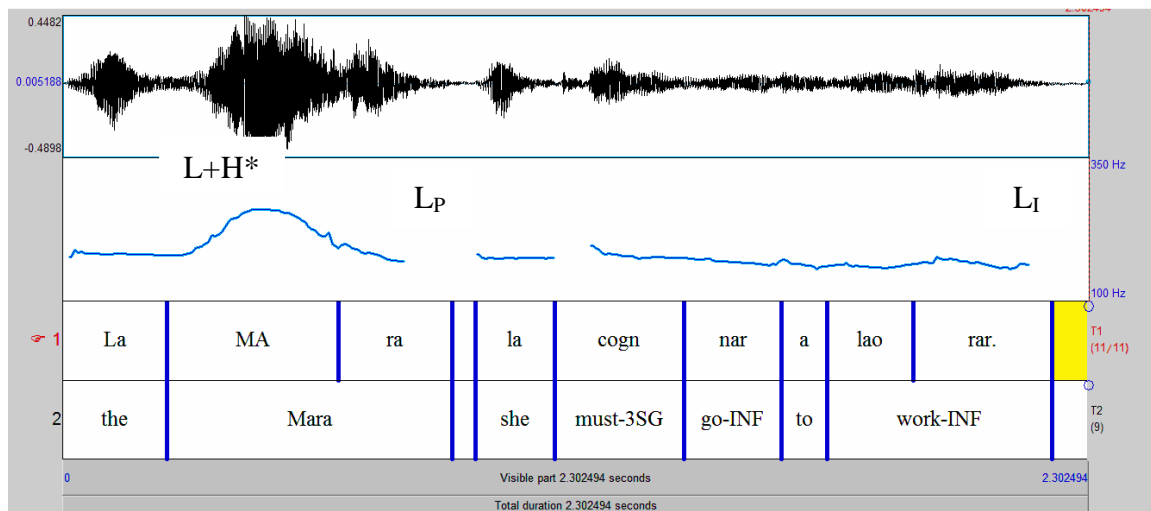
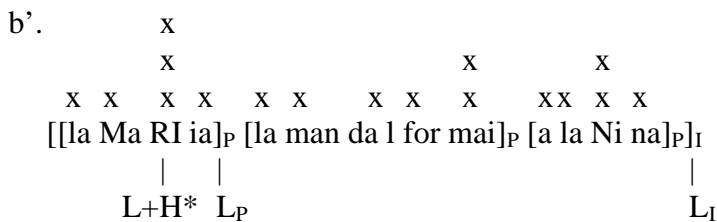


Figure 1: Nònes 8 La MAra la cogn nar a laorar.

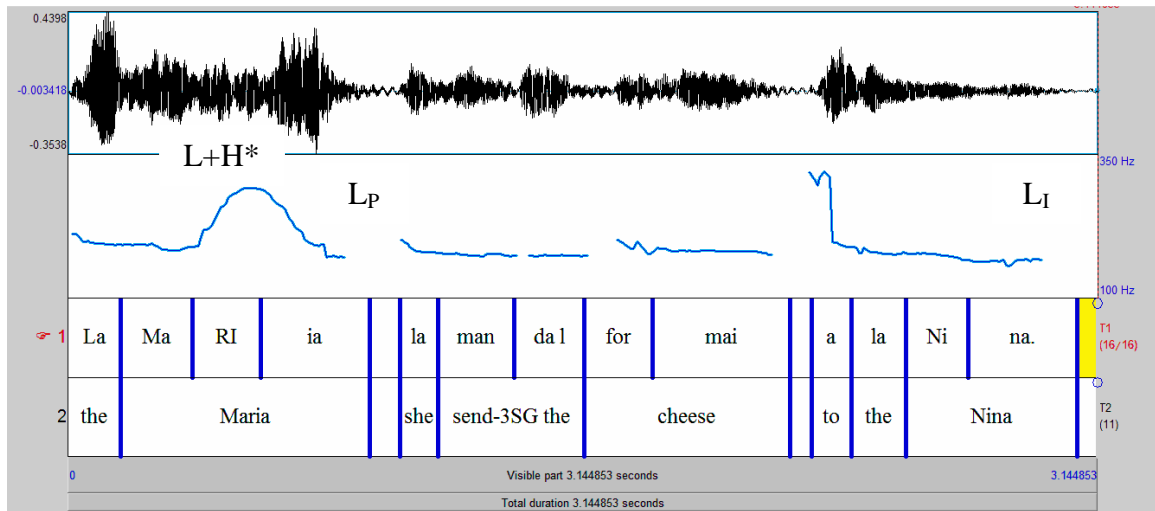


Figure 2: Nònes 8 La MaRIa la manda l formai a la Nina.