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Yes/no question-marking in Italian dialects

A typological, theoretical and experimental approach

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Abbreviations

1	first person
2	second person
3	third person
ABS	absolutive case
C	complementizer head
CL	clitic
COMPL	complementizer
COND	conditional mood
CM	class marker
CP	complementizer phrase
DAT	dative case
DECL	declarative morpheme
DIR	directional marker
ERG	ergative case
EV	<i>enkehvoud</i> 'singular'
F	feminine
FOC	focus marker
FUT	future tense
GER	gerundive
HAB	habitual marker
IMP	imperative mood
IMPF	imperfective aspect
INF	infinitive
ISI	inter-stress interval
LDA	linear discriminant analysis
MV	<i>meervoud</i> 'plural'
neg	negation
Obj	object
PAST	past tense
PBL	pre-boundary vowel lengthening
PERS	person marker
PFV	perfective aspect
PI	plural
PP	past participle
PRP	present participle
PRES	present tense
PROG	progressive aspect
PROX	proximity marker
QP	question particle

viii Abbreviations

REFL	reflexive
Sg	singular
Spec	specifier
Subj	subject
SUBJ	subjunctive mood
T	tense head
TT	<i>tegenwoordige tijd</i> 'present tense'
TEL	telicity marker
TMA	tense, mood and aspect
TOP	topic marker
TP	tense phrase
vP	(little) verb phrase
VP	verb phrase
VT	<i>verleden tijd</i> 'past tense'
WH	<i>wh</i> -element

Italian provinces

AO	Aosta
AQ	L'Aquila
AR	Arezzo
BG	Bergamo
BR	Brindisi
BS	Brescia
BZ	Bolzano
CB	Campobasso
CH	Chieti
CL	Caltanissetta
CN	Cuneo
FC	Forlì-Cesena
FR	Frosinone
GE	Genova
KR	Crotone
LE	Lecce
LO	Lodi
MI	Milano
MS	Massa-Carrara
NA	Napoli
NU	Nuoro
PA	Palermo
PD	Padova
PU	Pesaro-Urbino
SP	La Spezia
TN	Trento
VE	Venezia

VR	Verona
UD	Udine

1. Introduction

The goal of this dissertation is to provide an account of polar questions in Italian dialects from a typological, theoretical and empirical perspective. Special attention is given to Tuscan, Central and Southern Italian dialects, as they have often been neglected in favor of Northern Italian dialects in the past¹.

Polar questions, a.k.a. yes/no questions, are those interrogatives whose expected answer is either *yes* or *no*. Since the late 1970's, scholars have proposed various typological classifications of yes/no questions in the world's languages (Ultan, 1978; Sadock & Zwicky, 1985; Dryer, 2005; Miestamo, 2007). Despite the high degree of variation, it was shown that they can be reduced to eight main categories:

- Question Particle;
- Interrogative intonation;
- Interrogative verb morphology;
- QP + interrogative verb morphology;
- Interrogative word order;
- Disjunction (A-not-A);
- Absence of declarative morpheme;
- No distinction between declarative and yes/no question.

Although much work has been done on question marking in recent and less recent years (cf. Poletto, 1993, 2000; Poletto & Vanelli, 1995; Obenauer, 2004; Damonte & Garzonio, 2008, 2009; Garzonio, 2012; Cruschina, 2008, 2012), no attempt has been made to build such a typological classification for the Italian dialects. The present work aims at filling this gap by exploring whether the variation in polar question-marking attested in the Italian dialects can be accounted for along (some of) the eight categories listed above.

It is shown that Italian dialects display a relatively large number of typologically diverse yes/no question-marking strategies, as opposed to Standard Italian and Romance. Furthermore, Several Tuscan, Central and Southern Italian dialects display a construction that poses a challenge for standard typological classifications of polar questions. In these dialects, yes/no questions are introduced by *che*, a question particle homophonous with the *wh*-word corresponding to *what*, followed by a finite form of the verb *fare* 'do'. An example contrasting a declarative sentence with the corresponding yes/no question is provided in (1.a-b).

¹ As far as Tuscan dialects are concerned, this is mainly due to their close relatedness to Standard Italian.

2 Chapter 1

- 1) a. Vai al mare.
go-PRES.2.Sg to-the sea
'You are going to the sea.'
- b. Che fai vai al mare?
che do-PRES.2.Sg go-PRES.2.Sg to-the sea
'Are you going to the sea?'

[Sienese]

The question in (1.b) is problematic because it seems to display a biclausal structure, as two finite verbs occur. At first sight, it may look like a biclausal discourse containing two questions: *What are you doing? Are you going to the sea?*

In order to shed some light on the nature of this construction in Sienese and related dialects, a detailed analysis of its syntactic properties is proposed. Several syntactic tests are developed to show that it should be analyzed as a monoclausal construction rather than as a biclausal discourse containing two questions. A possible derivation is provided to account for the underlying structure of *che fare* questions in Sienese and related dialects.

Additional evidence for analyzing *che fare* questions as monoclausal constructions comes from the results of empirical testing. A production experiment was carried out to investigate the phonetic realization of *che fare* questions and the corresponding biclausal discourses in Sienese.

1.1 The structure of this dissertation

This dissertation is divided in two parts. Part one provides a typological overview of yes/no question-marking in Italian dialects, showing that one construction poses a challenge for standard typological classifications of polar questions à la Dryer (2005). Part 2 singles out this construction and accounts for its syntactic properties from a theoretical and experimental perspective.

1.1.1 Part one – Chapter 2

Chapter 1 deals with yes/no question-marking from a typological perspective. First, an overview is provided of the yes/no question-marking strategies attested in the world's languages. Then, the discussion is narrowed down to Latin and Romance languages. Eventually, a typological classification of yes/no question-marking in the Italian dialects is proposed. The focus of the discussion lies on the grammatical choices made by these languages among the strategies available in the world's languages. The main research questions tackled in this chapter are the following:

- i. Can the yes/no question-marking strategies attested in the Italian dialects fit into a broader typology of polar questions as proposed by Ultan (1978), Sadock & Zwicky (1985) and Dryer (2005)?

- ii. Are there any correlations between the distribution of the strategies available in the Italian dialects and other parameters?
- iii. What can yes/no question-marking in the Italian dialects tell us about the structure of natural language?

It is shown that not all yes/no question-marking devices found in the Italian dialects can fit into standard typological classifications as proposed by e.g. Dryer (2005).

To answer question (ii), it is shown that there is a correlation between the availability of subject clitics and strategies such as sentence-initial question particles, Interrogative Intonation alone and the use of a question particle in combination with interrogative verb morphology. In particular, the data suggest that an isogloss should be added to the Massa-Senigallia line, namely one that separates the dialects that display a sentence-initial question particle homophonous with the *wh*-word *what* and those that don't.

Finally, it is shown that most yes/no question-marking strategies employed in the Italian dialects are used in a number of different non-veridical contexts, such as hypothetical, concessive and optative clauses. This suggests that veridicality (or the absence thereof) may be marked morphologically in these varieties rather than clause type. Despite the availability of typologically diverse morphosyntactic devices, interrogative intonation seems to be the only dedicated strategy to mark yes/no questions in the Italian dialect.

1.1.2 Part two – Chapter 3 and 4

Chapter 3

Chapter 3 deals with the syntactic properties of *che fare* questions in Siennese and other Central and Southern Italian varieties. The main research question tackled in this chapter is the following:

- i. What is the underlying structure of polar questions headed by *che fare* in Siennese?

First, some restrictions on the occurrence of *fare* in Siennese are presented. Then, a comparison is made with other Central and Southern Italian dialects, with particular reference to Sicilian. Eventually, four syntactic tests are developed in order to show that *che fare* questions should be analyzed as monoclausal yes/no questions rather than as biclausal discourses containing two questions. These tests involve:

- a) Phi-, Tense, Mood and Aspect feature-sharing between *fare* and the lexical verb of the question;
- b) the possibility of having more than one negation;
- c) the positions available for the subject;

4 Chapter 1

- d) the possibility for *fare* and the lexical verb to assign different theta-roles to their subject.

These tests show that many restrictions that apply to biclausal discourses do not apply to *che fare* questions, suggesting that they should be analyzed as two different constructions.

A derivation is proposed for *che fare* questions in Sienese, where the lexical verb moves to T and *fare* is merged in C. I argue that the agreement morphology showing up on *fare* and the lexical verb is the result of two AGREE relations. Once the phase head *fare* is merged in C, AGREE takes place: both *fare* and the lexical verb simultaneously establish an AGREE relation with the subject, as it is the only element with the appropriate features in their c-command domain.

Finally, a working hypothesis is explored that may account for the different syntactic and semantic properties of Sienese and Sicilian *che fare* questions from a diachronic perspective.

Chapter 4

Chapter 4 deals with the phonetic realization of *che fare* questions in Sienese. The aim of this chapter is to provide empirical evidence for the theoretical claims made in chapter 3, where I argue that *che fare* questions should be analyzed as monoclausal yes/no questions rather than as biclausal discourses containing two questions. The main research questions tackled in this chapter are the following:

- i. Do speakers use grammatical cues, other than morphosyntactic ones, to distinguish between *che fare* questions and the corresponding biclausal discourses?
- ii. How can the distinction between *che fare* questions and biclausal discourses be established when they form a minimal pair?

To answer the questions in (i-ii), a production experiment was conducted. Eleven Sienese speakers were asked to pronounce a sample of 35 sentences, including several minimal pairs of *che fare* questions and biclausal discourses. The recordings were stored in a database and digitally analyzed with the *Praat* speech processing software (Boersma & Weenink, 2005). Duration, intensity and pitch curve measurements were automatically extracted with the help of a *Praat* script. Eventually, a statistical analysis was performed on these measurements with SPSS, including descriptive statistics, paired-samples t-tests and Linear Discriminant Analysis. The results of the statistical analysis provide evidence in favor of a sharp distinction between *che fare* questions and their corresponding biclausal discourses, even in the absence of any morphosyntactic cues. Specifically, they show that Sienese speakers produce a significant difference between minimal pairs of *che fare* questions and biclausal discourses when it comes to duration.

As expected, biclausal discourses containing two questions are subject to pre-boundary vowel lengthening, which affects the duration of *fare*. The fact that the mean duration of *fare* is significantly shorter in *che fare* questions than in their corresponding biclausal

discourses suggest that *che fare* questions do not contain a clause boundary, and hence that they are monoclausal yes/no questions.

2 The typology of yes/no question-marking in Italian dialects

1. Introduction

As is well known, matrix yes/no questions are not marked by any morphosyntactic device in Standard Italian (cf. Lepschy & Lepschy, 1977; Tekavčić, 1980; Fava, 1995; Maiden & Robustelli, 2000; Cruschina, 2012). While subordinated yes/no questions are marked by an overt complementizer (see 1.b), only intonation distinguishes matrix yes/no questions from the corresponding declarative sentences (see 1.c):

- 1) a. Va al mare.
go-PRES.3.Sg to-the sea
'(S)he goes to the sea.'
[declarative sentence]
- b. Non so se va al mare.
neg know-PRES.1.Sg if go-PRES.3.Sg to-the sea
'I don't know if (s)he is going to the sea.'
[embedded yes/no question]
- c. Va al mare?
go- PRES.3.Sg. to-the sea
'Does (s)he go to the sea?'
[matrix yes/no question]

As opposed to Standard Italian, Northern, Tuscan, Central and Southern Italian Dialects display a rich variety of morphosyntactic devices to mark yes/no questions. An example from the Sardinian variety spoken in Nuoro (Bentley, 2011) is provided in (2) below:

- 2) a. Ses imbreacu.
be-PRES.2.Sg. drunk
'You are drunk.'
[declarative sentence]
- b. Itte ses imbreacu?
itte be-PRES.2.Sg drunk
'Are you drunk?' (Bentley, 2011:5)
[matrix yes/no question]

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- c. A ses imbreacu?
a be-PRES.2.Sg. drunk
'Are you drunk?'

[matrix yes/no question]

- d. Imbreacu ses?
drunk be-PRES.2.Sg
'Are you drunk?'

[matrix yes/no question]

As shown by the contrast between (2.a) on the one hand and (2.b), (2.c) and (2.d) on the other hand, there are three ways to form a yes/no question in the dialect of Nuoro¹. One possibility is to use a question particle, as in (2.b) and (2.c). Another option is provided by the use of a different word order with respect to the corresponding declarative, as in (2.d).

In fact, similar considerations can be made with respect to all main dialectal areas of Italy, which display a very high degree of variation in their yes/no question-marking systems. This has led to a growing interest in standard² and non-standard question-marking strategies in Italian Dialects (cf. Poletto & Vanelli, 1995; Obenauer, 2004; Damonte & Garzonio, 2008, 2009; Garzonio, 2012; Cruschina, 2008, 2012) in recent years. Following up on this line of research, the present section aims at contributing to the existing literature with a previously undiscussed set of data from Central and Southern Italian varieties. Furthermore, it aims at defining the locus and limits of the observed microsyntactic variation. To sum up, the main goals of this chapter are:

- to provide an exhaustive overview of the yes/no question-marking strategies employed in the Italian dialects;
- to investigate whether the yes/no question-marking strategies found in the Italian dialects can fit into a broader typology of polar questions as proposed by Ultan (1978), Sadock & Zwicky (1985) and Dryer (2005).

Among others, the following research questions will be tackled in the next pages:

- i. Is there a correlation between the frequency and distribution of the strategies available in the Italian dialects and other parameters?
- ii. What can yes/no question-marking in the Italian dialects tell us about the structure of natural language?

¹ The data in (2.b) are taken from Bentley (2011:5), while those in (2.a), (2.c) and (2.d) were collected by the author.

² The term standard vs. non-standard question is a general term taken from cf. Munaro (1999), Obenauer (2004), and Garzonio (2004). Standard questions are those sentences that can be uttered out of the blue, and whose semantics is that of an interrogative. On the contrary, non-standard questions always come with some kind of special presupposition/expectation which modifies its semantics and can only be uttered in specific contexts.

The chapter is organized as follows. In section 2, a typological overview of yes/no question-marking in the world's languages will be provided. Then, the discussion will be narrowed down to the major Romance languages. After a brief note on Latin, the strategies employed in Standard Italian, Portuguese, Spanish, Catalan, French and Romanian will be presented. Eventually, the discussion will be further narrowed down to Italian dialects. This issue will be tackled in section 3, where a typological overview of all yes/no question-marking strategies available in Italian dialects will be provided. It will be shown that some of these strategies pose a challenge for standard typological classifications such as the one proposed by Dryer (2005). Section 4 includes a detailed discussion of these strategies. Furthermore, it explores the possible correlations between the availability yes/no question-marking strategies and other parameters in the Italian dialects. Section 5 will provide a summary and some general conclusions and questions for further research.

2. Typological aspects of yes/no question-marking

The languages of the world exhibit a very rich diversity in every aspect of their linguistic systems. Even though the degree of variation is remarkably high, there seem to be specific limitations which prevent different languages from following certain patterns. In fact, linguistic variation is not arbitrary. Only a small subset of all logically possible combinations of linguistic properties is actually attested in the world's languages. Typology is the linguistic field which aims to defining the limits of linguistic variation through extensive cross-linguistic comparison (cf. Comrie 1989; Croft 2003; Greenberg 1963).

The aim of this section is to provide an overview of the yes/no question-marking strategies that are found in the languages of the world from a typological perspective (cf. Moravcsik, 1971; Ultan, 1978; Sadock & Zwicky, 1985; Dryer, 2005; Miestamo, 2007). After discussing Dryer's (2005) typology of polar questions in the world's languages, the discussion will focus on Latin and Romance. It will be shown that Latin has a more articulated yes/no question-marking system than most Standard Romance languages. In addition, it will be shown that only a few of the strategies available in the world's languages are actually attested in Romance.

2.1 Yes/no question-marking in the world's languages

The following main categories have been identified³ in recent and less recent typological studies on the marking of polar questions (c.f. Moravcsik, 1971; Ultan 1978; Dryer 2005, Miestamo 2007):

- Question Particle (henceforth QP);
- Interrogative intonation;

³ Dryer (2005) and Miestamo (2007) are taken as the main references here, as they provide the most comprehensive typological classifications.

- Interrogative verb morphology;
- QP + interrogative verb morphology;
- Interrogative word order;
- Disjunction (A-not-A);
- Absence of declarative morpheme;
- No distinction between declarative and yes/no question.

Each of the strategies mentioned in the list above will be presented and discussed in detail in the next eight subsections.

2.1.1 QP

The most widespread morphosyntactic device for marking yes/no questions in the world's languages involves the use of a QP. QPs can be found in several different positions in the clause. According to Dryer (2005, 2008), they occur most frequently in the sentence-final position, followed by the sentence-initial position. An example from Cantonese is provided in (3.a), where a sentence-final QP is shown. The Polish sentence in (3.b) shows a sentence-initial QP.

- 3) a. Lei yam gaafe maa?
 you drink coffee QP
 'Do you drink coffee?' (Kuong, 2008:1)

[Cantonese]

- b. Czy idziesz nad morze?
 QP go-PRES.2.Sg. to-the sea
 'Are you going to the sea?' (Pisarek, p.c.)

[Polish]

Interestingly, Miestamo (2007) and Dryer (2008) classify French *est-ce que* questions as being headed by a sentence-initial QP. The morphological set-up of *est-ce que* strongly suggests that it is the result of a process of grammaticalization involving a verb, a demonstrative and a complementizer. Nevertheless, it is treated as a single interrogative element. An example is provided in (4) below:

- 4) *Est-ce que* Euphrasie est arrivée?
 be-PRES.3.Sg -it.CL that Euphrasie be-PRES.3.Sg arrive-PP
 'Did Euphrasie arrive?' (Rooryck, 1994:216)

[French]

The sentence-initial and sentence-final positions are not the only available sites for QPs (cf. Dryer, 2005, 2008; Bailey, 2010). QPs can also occur in the second position of the sentence⁴, as shown in the Finnish example below:

- 5) Osti *-keo* Joni kirjan?
 buy-PAST.3.Sg *-keo* Joni-NOM book-ACC
 ‘Did Joni buy the book?’ (Schardl, 2009:2)
- [Finnish]

In addition, QPs can occur in some other specific position other than initial, second or final position. This is the case of Niuean (Oceanic), where QPs always occur to the right of the verb:

- 6) Foaki age *nakai* e koe e fakamailoga ki a taha
 give DIR QP ERG you ABS prize to PERS someone
 ‘Did you give the prize to someone?’ (Seiter 1980:25)
- [Niuean]

In some other languages, QPs have a relatively free order because their function is to focus and question one constituent of the sentence. They usually occur right after the constituent that they focus. An example from Bulgarian is provided in (7) below.

- 7) a. Mandzjata gotova *li* e?
 Dish-the ready QP be-PRES.3.Sg.?
 ‘Is the dish ready?’ (Gulian, p.c.)
- [Bulgarian]
- b. Mandzjata *li* e gotova?
 Dish-the QP be-PRES.3.Sg ready?
 ‘Is the dish ready?’ (Gulian, p.c.)
- [Bulgarian]

As shown by the contrast between (6.a) and (6.b), the QP *li* can occur either after the subject or after the predicate. The positions where *li* is inserted correlate with a different interpretation of the sentence, as two different constituents are focused.

Finally, there are some languages, such as Hunde (Bantu), Ngiti (Nilo-Saharan), and Abun (West Papuan), where QPs can be placed in more than one of the positions discussed above. Dryer (2008) treats them as a separate category.

⁴ As mentioned in Bailey (2010), there are two types of second-position particles: those that are placed after the first word and those that occur after the first constituent. This distinction is not discussed in this chapter.

2.1.2 Interrogative verb morphology

The second most widespread yes/no marking strategy in the world's languages involves the use of a different verb morphology that is specific to interrogatives (Dryer, 2008). Frequently, an affix is attached to the verb to signal that the sentence is a yes/no question. An example from West Greenlandic (Eskimo) is illustrated in (8) below.

- 8) Niri -riir -*p* -it?
 eat-PAST -already -QP -you
 'Have you already eaten?' (Fortescue, 1984:4)

[West Greenlandic]

The morpheme *-p* unambiguously marks the sentence in (8) as a polar question. At first glance, one may argue that it does not actually attach to the verb, as it is not adjacent to it in the example in (8). However, this is due to the fact that Greenlandic is a polysynthetic language, which requires multiple morphemes to be attached to a root morpheme.

2.1.3 QP + interrogative verb morphology

Another morphosyntactic device that is commonly employed to mark polar questions in the world's languages involves the use of a QP in combination with interrogative verb morphology. The languages that use this strategy can usually choose whether to mark the yes/no question either with a QP, or with an interrogative verbal suffix, or with a combination of both. An example from Pirahã is reported in (9):

- 9) a. Xii bait -áo -p -i *bix*
 cloth wash -TEL -IMPF -PROX QP
 'Are you going to wash clothes?' (Everett 1986:236-237)
- b. Xisi ib -áo -p -*óxói*
 animal hit.arrow -TEL -IMPF -QP
 'Did you arrow fish?' (Everett 1986:236-237)

[Pirahã]

The example in (9.a) shows a yes/no question formed by adding a sentence-final QP, while the example in (9.b) illustrates a yes/no question marked by an interrogative morpheme that attaches to the verb. According to Everett (1986), it is also possible to combine the QP and the interrogative morpheme in the same question.

2.1.4 Interrogative word order

A further strategy to mark yes/no questions involves the use of a word order that is different from that of the corresponding declaratives. Although this pattern is very

common in Indo-European languages (especially Germanic languages), it is not very frequent in the world's languages from a typological point of view. An example from Dutch is illustrated in (10) below:

- 10) a. Ze heeft haast.
 she have-PRES.3.Sg hurry
 ‘She is in a hurry.’
 b. Heeft ze haast?
 have-PRES.3.Sg she hurry
 ‘Is she in a hurry?’

[Dutch]

Dryer (2005) classifies English yes/no questions as a subset of this group. Although they do not display simple inversion between the subject and the lexical verb, as in the Dutch example in (10), they still employ a different word order as compared to the corresponding declaratives.

- 11) a. She has gone away.
 b. Has she gone away?

[subject-auxiliary inversion]

- 12) a. She plays the piano.
 b. Does she play the piano?

[*do*-insertion]

The sentences in (11) show a case of inversion between the subject and the auxiliary, which is reminiscent of the Germanic pattern of subject-verb inversion. The sentences in (12) illustrate an example of *do*-insertion instead. Although the order of the lexical verb and the subject is the same in (12.a) and (12.b), a dummy auxiliary verb appears before the subject in (12.b). Therefore, it can be argued that they involve interrogative word order, as the subject is never preceded by an auxiliary in simple declaratives.

2.1.5 Disjunction (A-not-A)

A further morphosyntactic device that needs to be included in a comprehensive typology of yes/no question marking is the type of disjunction that gives rise to the so-called A-not-A questions (cf. Li & Thompson, 1981; Huang, 1990, 1991b; Cheng, 1991; Hagstrom, 2005; Miestamo, 2007, 2011). A-not-A questions are polar questions that take a disjunctive form and require the addressee to confirm either the affirmative or the negative disjunct. Unlike disjunctive questions proper, however, A-not-A questions do not contain an overt disjunction such as ‘or’. An example from Mandarin Chinese is provided in (13) below.

- 13) Ta xihuan -bu -xihuan zheben shu?
 he like-PRES -not -like-PRES this book
 ‘Does he like or not like this book?’ (Hagstrom, 2005:2)

[Mandarin Chinese]

From a diachronic point of view, it is generally agreed that this construction type is derived from a fully-fledged disjunctive question where a deletion process applied. However, it cannot be classified as a disjunctive question proper from a synchronic point of view. This is motivated by the fact that this construction type is now employed as a default yes/no question-marking device. It is very common in the Chinese languages, and relatively common in the world’s languages from a typological point of view.

2.1.6 Absence of declarative morpheme

A different yes/no question-marking strategy consists in the absence of a declarative morpheme. Languages such as Zayse (Omoti) and Kabardian (Northwestern Caucasian) display a specific morpheme in declarative sentences, which is not present in the corresponding yes/no questions. An example from Zayse is illustrated in (14):

- 14) a. Hamá -tt -isen.
 go-PRES -DECL -she
 ‘She will go’. (Hayward, 1990b:307)
- b. Háma -ysen?
 go-PRES -she
 ‘Will she go?’ (Hayward, 1990b:307)

[Zayse]

The lack of the declarative morpheme *-tt* turns the declarative sentence in (14.a) into a yes/no question, as shown in (14.b).

This strategy is not very frequent in the world’s languages from a typological point of view.

2.1.7 Interrogative intonation

The most common non-morphosyntactic strategy to mark polar questions in the world’s languages is interrogative intonation. In fact, polar interrogatives typically come with an intonation that is different from that of the corresponding declaratives. This is also true of languages that may employ one (or more) morphosyntactic strategy to mark yes/no questions. In some languages, however, interrogative intonation is the only available grammatical device to distinguish declaratives from the corresponding polar interrogatives.

Among these languages is Standard Italian, as already mentioned in the introduction of this chapter. The examples in (1.a) and (1.c) are reported below as (15.a-b). They show

a declarative sentence and its interrogative counterpart, which is only marked by interrogative intonation:

- 15) a. Va al mare.
 go-PRES.3.Sg to-the sea
 ‘(S)he goes to the sea.’
- b. Va al mare?
 go-PRES.3.Sg to-the sea
 ‘Does (s)he go to the sea?’

[Standard Italian]

A falling-rising intonational contour seems to be the most common pattern crosslinguistically, although the world’s languages exhibit a great deal of variation. This is due to the interplay of many different syntactic, semantic, pragmatic and phonological requirements on prosodic phrasing and accenting (c.f. Nespor & Vogel, 1986; Selkirk 1984, 1995, 2000; Vallduví, 1990; Avesani, 1990; Schwarzschild, 1993-94, 1999; Büring, 1997, 2001; D’Imperio, 2002).

2.1.8 No distinction between declarative and yes/no question

A further language type discussed by Dryer (2005) and Macaulay (1996) includes those varieties that do not display any difference whatsoever between declaratives and the corresponding yes/no questions. It seems that this language type is very rare, as only one language is reported to show this pattern. An example is provided in (16) below.

- 16) Xakú -ro.
 laugh-PRES -2.Sg
 ‘You are laughing/Are you laughing?’ (Macaulay 1996:126)

[Chalcatongo Mixtec]

The example in (16) is from Chalcatongo Mixtec, a language spoken in Mexico that belongs to the Oto-Manguean family. It is an ambiguous sentence; its force can only be inferred from the context.

2.2 Yes/no question-marking in Latin and Romance

The main yes/no question-marking devices that are found the world’s languages were presented in section 2.1 (cf. Dryer, 2005, Miestamo, 2007). The aim of the present section is to provide a typological overview of yes/no question-marking in the major Romance languages. The strategies employed in Portuguese, Spanish, Catalan, French and Romanian⁵ will be thoroughly discussed in the next five subsections. The focus will

⁵ No separate section will be dedicated to Standard Italian, as it has already been discussed in the introduction and in section 2.1.7.

lie on the grammatical choices made by these languages within the set of available strategies.

Before entering a discussion of modern Romance, an overview of polar question formation in Latin will be provided. It will be shown that Latin and modern Romance languages differ dramatically in this specific area of syntax. Despite their close relatedness, their yes/no question-marking systems display a number of unexpected differences.

No specific discussion of polar question formation in (Koinè) Greek will be included in this section. Although Greek influenced some specific areas of the syntax of Southern Italian dialects, no correlations could be found in the varieties included in the present study. I do not exclude the existence of (Romance) Southern varieties whose yes/no question-marking system might show some influence of Greek. However, this lies outside the scope of the present study.

As opposed to Standard Italian, Latin employs a number of morphosyntactic devices to mark polar questions. Declaratives can be turned into yes/no questions by adding a QP, *-n(e)*, which usually cliticizes onto the first word of the sentence. Therefore, *-n(e)* can be classified as a second-position QP, just like Finnish *-ko* (see section 2.1.1). The grammatical category of the word to which *-n(e)* attaches is not relevant. In fact, *-n(e)* can virtually attach to any kind element. The example in (17) shows a sentence where *-n(e)* attaches to the main verb:

- 17) Novisti *-ne* hominem?
 know-PRES.2.Sg. -QP man-ACC
 ‘Do you now the man?’ (Plautus, Bacchides:837)

[Latin]

Although *-n(e)* usually appears in the second position of the clause, it may occur in other positions. To account for those cases, it has been proposed that the constituents preceding the word onto which *-n(e)* cliticizes are dislocated (cf. Brown, Joseph and Wallace, 2009). An example is given in (18) below, where *-n(e)* cliticizes onto the subject:

- 18) Postquam ceciderunt spes omnes consuli
 after-that fall-PAST.3.Pl. hopes all consult-PRES.2.Sg
 tu *-n* me?
 you -QP me
 ‘After all hopes have fallen, do you ask me for advice?’
 (Corpus Inscriptionum Latinarum, I²:2187)

[Latin]

The interrogative morpheme *-n(e)*, was never obligatory at any stage in the history of Latin. Its use is very frequent in the work of early authors who wrote in classical Latin, like Plautus and Terence. However, it tends to become less and less common in later writers, such as Petronius and Persius. An example of a yes/no question that is not marked by any dedicated morphosyntactic device is given in (19) below:

- 19) Uis pugnare?
 want-PRES.2.Sg fight
 ‘Do you want to fight?’ (Plautus, *Rudens*:1011)

[Latin]

The question now arises whether interrogative intonation served as a grammatical strategy to mark polar question in the absence of any morphosyntactic device. Unfortunately, this issue will have to remain open, given the total absence of evidence for sentence intonation in Latin. However, some scholars (cf. Touratier 1994) pointed out that intonation might have played a role in distinguishing sentence-types in Latin. This claim is based on some passages from *Institutio Oratoria*, where Quintilian describes the ‘amazing force of *pronuntiatio*’. One of these passages is reported in (20) below:

- 20) ‘Quid, quod eadem uerba mutata pronuntiatione indicant, adfirmant, exprobrant negant, mirantur, indignantur, interrogant, irrident, eleuant?’

[Latin]

‘So what then of the fact that, by a change of delivery, one can use the same words to either demonstrate or affirm, express reproach, denial, wonder or indignation, interrogation, mockery, or to make light of something?’ (Quintilian, *Institutio Oratoria*:11, 3, 5)

[Brown, Joseph and Wallace, 2009:496]

In addition to the QP *-n(e)*, a further QP is used to signal polar questions in Latin. Biased yes/no questions that suggest a positive or a negative answer are marked by the QPs *non(ne)*, *nihil(ne)* and *num*. These QPs are all sentence-initial. *Non(ne)* and *nihil(ne)* are used when a positive answer is expected, while *num* is employed in questions that expect a negative answer. Examples are provided in (21), (22) and (23) below:

- 21) Nonne ego nunc sto ante aedes nostras?
 neg-QP I now stand-PRES.1.Sg before house our
 ‘Am I not standing in front of our house right now?’ (Plautus, *Amphitryon*:406)

[Latin]

- 22) Nihilne te . . . fabulae malignorum terrent?
 nothing-QP you stories terrible frighten-PAST.3.Pl
 ‘Didn’t those terrible stories frighten you?’ (Tacitus, *Dialogus de Oratoribus*:3)

[Latin]

- 23) Num negare audes?
 QP deny-INF dare-PRES.2.Sg.
 ‘You don’t dare to deny it, do you?’ (Cicero, *In Catilinam*:1,8)

[Latin]

A further type of polar question in Latin involves the use of subjunctive mood. No QP is used in these constructions, which are usually referred to as deliberative questions. They probably originated as hortatory subjunctives and are usually found in

pragmatically marked contexts (Brown, Joseph and Wallace, 2009). An example is given in (24) below:

- 24) Ego intus seruem?
 I inside work-PRES.1.Sg.
 ‘Do I/Am I supposed to work inside?’ (Plautus, *Aulularia*:81–82)
- [Latin]

This question type can be classified as involving interrogative verb morphology. Although subjunctive mood is not specific to interrogatives, it still acts as a specific morphosyntactic device for marking the utterance as a polar question in contexts such as (24).

To sum up, Latin makes use of a rich system of QPs to mark polar questions. These QPs are either found in the second position or in sentence-initial position. In addition, interrogative verb morphology may be used as a yes/no question-marking device. Given the optionality of QPs, the question remains open whether intonation alone played a role in marking yes/no questions in Latin.

2.2.1 French

The most common morphosyntactic device for marking yes/no questions in French involves the use of *est-ce que*. Following Dryer (2005), French *est-ce que* questions are classified into the category of polar questions headed by a sentence-initial QP in the present study (see section 2.1.1). In fact, French *est-ce que* is not a standard QP (cf. Bailey, 2010; Biberauer & Sheehan, 2011b). Rather, it is a complex interrogative element which results from a process of grammaticalization involving a verb, a demonstrative and a complementizer (cf. Rooryck, 1994). However, its syntactic behavior resembles more that of a sentence-initial QP in that it is invariable, cannot be modified and always occurs in the sentence-initial position. An example is given in (25) below:

- 25) a. Est -ce que Paul avait réussi son examen?
 be-3.Sg.PRES -it.CL that Paul have-PRES.3.Sg pass-PP his exams
 ‘Did Paul pass his exams?’
- b. *Était -ce que Paul avait réussi son
 be-3.Sg.PAST -it.CL that Paul have-PRES.3.Sg pass-PP his
 examen?
 exams
 ‘Did Paul pass his exams?’
- [French]

As shown by the contrast between (25.a) and (25.b), the verb *être* ‘be’ always occurs in the present tense, third person singular form. Sharing the same tense feature of the lexical verb results in ungrammaticality, as shown in (25.b).

Another grammatical strategy employed in French to mark yes/no questions is subject clitic-verb inversion. An example is provided below:

- 26) a. Il est là.
 he.Subj.CL be-PRES.3.Sg there
 'He is there.'
- b. Est -il là?
 be-PRES.3.Sg -he.Subj.CL there
 'Is he there?'
- c. *Est -Jean là?
 be-PRES.3.Sg -John there
 'Is John there?'
- d. Jean est -il là?
 John be-PRES.3.Sg -he.Subj.CL there
 'Is John there?'

[French]

As shown in (26.a-b), it is possible to turn a declarative sentence into a polar question by moving the verb to the left of the subject clitic. This strategy is only allowed with pronominal subjects. Full DPs cannot participate in this type of syntactic inversion, as shown by the ungrammaticality of (26.c). As illustrated in (26.d), when the subject is a full DP (and not a pronoun), it remains in its preverbal position, and a resumptive subject pronoun is postponed to the verb. This type of inversion is often referred to as 'complex inversion' in the literature (cf. Harris 1988; Rizzi & Roberts, 1989; Byrne & Churchill 1993; Jones, 1996). It should be mentioned that complex inversion is commonly used in written and formal French but rarely used in the spoken language. Interestingly, French is the only Romance language where interrogative word order may be used to mark polar questions.

In addition to the two morphosyntactic strategies described so far, French yes/no questions may also be marked through interrogative intonation alone (c.f. Cheng & Rooryck, 2001). An example showing a declarative sentence and its interrogative counterpart is illustrated in (27.a-b) below:

- 27) a. Tu cuisines ce soir.
 you cook-PRES.2.Sg this evening
 'Are you cooking this evening?' (Rooryck, p.c.)
- b. Tu cuisines ce soir?
 you cook-PRES.2.Sg this evening
 'Are you cooking this evening?' (Rooryck, p.c.)

[Spoken French]

This strategy is mainly confined to spoken French. In addition, it often comes with some kind of positive expectation with respect to the answer. Its intonation is different from polar questions headed by *est-ce que*.

2.2.2 Portuguese

The most common strategy to mark yes/no questions in both European and Brazilian Portuguese is interrogative intonation. A minimal pair including a declarative and its corresponding polar question is shown in (28.a-b) below:

- 28) a. (Ele) já encontrou a chave.
 he already find-PAST.3.Sg the key
 ‘He has already found the key.’ (Santos, 2003:269)
- b. (Ele) já encontrou a chave?
 he already find-PAST.3.Sg the key
 ‘He has already found the key.’ (Santos, 2003:269)

[Portuguese]

In addition to interrogative intonation, some non-standard European Portuguese varieties may recur to a morphosyntactic strategy for marking yes/no questions. This involves a cleft-like construction that resembles very much the structure of French yes/no questions:

- 29) a. (Tu) o fazes?
 you it.Obj.CL do-PRES.2.Sg
 ‘Are you doing it?’ (Rudder, 2012:110)
- b. É que (tu) o fazes?
 be-PRES.3.Sg that you it.Obj.CL do-PRES.2.Sg
 ‘Are you doing it?’ (Rudder, 2012:110)

[Non-standard European Portuguese]

As in French, a declarative sentence can be turned into a polar question by adding a copula, followed by an overt complementizer. I consider these constructions as an instance of sentence-initial QP, following up on Dryer’s treatment of *est-ce que* questions in French.

2.2.3 Spanish

As in many other Romance languages, interrogative intonation is the standard yes/no question-marking device in all Spanish varieties⁶. An example is given in (30.a-b) below:

⁶ As pointed out by a.o. Green (1988), Escandell Vidal (1999) and Butt & Benjamin (2000), verb-subject inversion is a specific word order associated with yes/no questions in Spanish.

- 30) a. Vienes a la fiesta.
 come-PRES.2.Sg to the party
 ‘You are coming to the party.’
- b. ¿Vienes a la fiesta?
 come-PRES.2.Sg to the party
 ‘Are you coming to the party?’

[Spanish]

However, in some (non-standard) varieties it is possible to mark yes/no questions with a sentence-initial QP:

- 31) a. ¿*Que* vienes a la fiesta?
 QP come-PRES.2.Sg to the party
 ‘Are you coming to the party?’ (Pablos, p.c.)

[Colloquial Peninsular Spanish]

- b. ¿*Que* viene mañana?
 QP come-PRES.2.Sg tomorrow
 ‘Is (s)he coming tomorrow’ (Di Tullio, 2010:77)

[River-Plate Spanish]

The construction illustrated in (31.a) comes from peninsular Spanish and its use is mostly confined to a colloquial register. It is characterized by a different intonation from standard yes/no questions such as (30.b). It is very widespread in the production of Catalan speakers of Spanish, probably due to the influence of Catalan.

The example in (31.b) comes from River-Plate Spanish, where such constructions are very frequent. They are not necessarily limited to colloquial situations, as opposed to what is observed in peninsular Spanish. However, polar questions headed by *que* often come with an additional presuppositional meaning in this variety.

A further possibility for marking polar questions in Spanish comes from Dominican Spanish⁷. As the Portuguese example in (29), it involves a construction including a copula and a complementizer:

Nevertheless, it is not treated as a yes/no question-marking strategy proper in the present study because its use is always motivated by language-specific information-structure requirements. When the subject is a topic it stays in the preverbal position, while it appears after the verb when it is interpreted as a focus. The same is true for Spanish simple declaratives. Similar considerations can be extended to Catalan (cf. Hualde, 1992).

⁷ In fact, this construction type is found in all Spanish varieties but it usually comes with an additional meaning. In Standard Spanish, for instance, it is only used when the speaker wants to suggest a possible motivation for the behavior of the interlocutor. These cases will not be discussed in the present work.

- 32) a. (Tú) lo hace.
 you it.Obj.CL do-PRES.2.Sg
 ‘You are doing it’. (Rudder, 2012:111)
- b. ¿E que (tú) lo hace?
 be-PRES.3.Sg that you it.Obj.CL do-PRES.2.Sg
 ‘Are you doing it?’ (Rudder, 2012:111)

[Dominican Spanish]

I consider these constructions as an instance of sentence-initial QP, following up on Dryer’s treatment of *est-ce que* questions in French.

2.2.4 Catalan

Polar questions may be introduced by a number of sentence-initial QPs in Catalan. As pointed out by Prieto & Rigau (2005, 2007), Catalan has a very rich system of sentence-initial QPs. This includes dedicated interrogative markers for (anti-)expectational and confirmatory questions. However, only unbiased yes/no questions will be discussed in this section.

Two minimal pairs of declaratives and their corresponding polar questions in two varieties of Catalan are provided in (33.a-b) and (34.a-b) below:

- 33) a. Plou.
 rain-PRES.3.Sg
 ‘It is raining’. (Prieto & Rigau, 2007:1)
- b. *Que* plou?
 QP rain-PRES.3.Sg
 ‘Is it raining?’ (Prieto & Rigau, 2007:1)

[Central Catalan]

- 34) a. Vindran a Ciutadella.
 come-FUT.3.Pl to Ciutadella
 ‘They will come to Ciutadella.’ (Prieto & Rigau, 2007:1)
- b. O vindran a Ciutadella?
 QP come-FUT.3.Pl to Ciutadella
 ‘Will they come to Ciutadella?’ (Prieto & Rigau, 2007:1)

[Balearic Catalan]

Both *que* and *o* are sentence-initial QPs and they do not trigger any special interpretation of the question that they introduce.

In addition to QPs, Central Catalan can also mark yes/no questions through Interrogative Intonation alone. An example is provided in (35.b):

- 35) a. L' heu llogada.
 it.Obj.CL have-PRES.2.Sg rented
 'You rented it'. (Prieto & Rigau, 2007:5)
- b. L' heu llogada?
 it.Obj.CL have-PRES.2.Sg rented
 'Did you rent it?' (Prieto & Rigau, 2007:5)

[Central Catalan]

Nevertheless, the use of QPs does not seem to be optional in Catalan. Their presence patterns with a specific intonation that is different from the intonation of polar questions not headed by QPs (cf. Payrató, 2002). This suggests that the choice between QPs and of a special intonation should be regarded as a grammatical choice between two different yes/no question-marking strategies.

2.2.5 Romanian

Interrogative Intonation is the most widespread yes/no question-marking strategy in Romanian. An example is given below:

- 36) a. Va ploua azi.
 go-3.Sg.PRES rain-PRES.3.Sg today
 'It is going to rain today'. (Camelia Constantinescu, p.c.)
- b. Va ploua azi?
 go-PRES.3.Sg rain-PRES.3.Sg today
 'Is it going to rain today?' (Camelia Constantinescu, p.c.)

[Romanian]

In addition to Interrogative Intonation, a morphosyntactic device may be optionally employed to mark polar questions. The sentence-initial QP *oare* can be used to turn declarative sentences into yes/no questions, as shown in the example below:

- 37) *Oare* va ploua azi?
 QP go-PRES.3.Sg rain-PRES.3.Sg today
 'Is it going to rain today?' (Camelia Constantinescu, p.c.)

[Romanian]

Oare is described in traditional grammars of Romanian as a QP that adds a dubitative meaning to polar questions. Unlike most QPs, however, it also occurs in embedded contexts. An example is provided in (38) below:

- 38) Mî întreb oare Ion va primi o carte?
REFL.CL ask-PRES.1.Sg QP Ion go-3.Sg.PRES receive-INF a book
'I ask myself whether Ion will receive a book.' (Camelia Constantinescu, p.c.)
[Romanian]

The QP *oare* fall under Dryer's (2005) category of sentence-initial QPs. When one (or more) constituents precede *oare*, its interpretation suggests that it has been left-dislocated.

It is interesting to notice that Romanian *oare* shares a distinctive feature with some Slavic QPs, such as for instance Bulgarian *li* (see the discussion in section 1.2.1.1.1). Namely, it picks up one constituent and focalizes it, affecting the information structure of the polar question where it occurs. As opposed to Bulgarian *li*, however, *oare* always occurs before the focalized constituent. An example is provided in (39.a-b):

- 39) a. Scrisorile, oare ieri le -a primit John or today
letters-the QP yesterday them.Obj.CL -has received Ion (sau azi)?
'As for the letters, was it yesterday that John received them (or today)?'
(Motapanyane, 1994:729)
- b. Ieri, oare scrisori a primit Ion (sau colet)?
yesterday Q letters has received John or parcel
'As for yesterday, was it letters that John received (or a parcel)?'
(Motapanyane, 1994:729)
- [Romanian]

The polar questions reported in (39) differ in that *oare* focalizes the temporal adverb *ieri* 'yesterday' in (39.a), whereas in (39.b) it focalizes the object *scrisori* 'letters'. This variation correlates with different interpretations, as expressed by the translation of (39.a) and (39.b).

2.3 Summary and *ad interim* conclusions

An overview of the yes/no question-marking strategies employed by the major Romance languages is provided in table 1 below:

Table 1: Overview of the yes/no marking-strategies employed in Romance.

Language	Yes/no question-marking strategy
Italian	Interrogative intonation
French	Interrogative intonation, sentence-initial QP, interrogative word order
Portuguese	Interrogative intonation, sentence-initial QP
Spanish	Interrogative intonation, sentence-initial QP
Catalan	Interrogative intonation, sentence-initial QP
Romanian	Interrogative intonation, sentence-initial QP

The data discussed in section 2.2.1 to 2.2.5 show that French is the language with the widest choice of grammatical strategies to mark yes/no questions among Romance languages. In addition to Interrogative Intonation, which is available in all Romance languages, French may employ two morphosyntactic devices: a sentence-initial QP and interrogative word order. Although the choice of these strategies is regulated by specific syntactic and pragmatic constraints, it is possible to conclude that French displays a richer system yes/no question-marking system than any other (standard) Romance language.

On the contrary, Standard Italian is the Romance language with the least articulated yes/no-marking system, interrogative intonation being the only available grammatical device.

Portuguese, Spanish, Catalan and Romanian score in between French and Italian in the richness of their yes/no question-marking systems. Two grammatical devices are available in these languages: Interrogative Intonation and a sentence-initial QP. Only Catalan, however, may optionally choose between Interrogative Intonation and a sentence-initial QP.

In Spanish, Portuguese and Romanian, the use of a sentence-initial QP is constrained by pragmatic factors that do not arise in Catalan.

3. The typology of yes/no question-marking in Italian Dialects

In the previous sections of the present chapter, I provided an overview of the grammatical devices employed to mark yes/no questions in the world's languages. Eventually, the discussion focused on Romance. It was shown that only a few of the yes/no question-marking strategies available in the world's languages are actually attested in Romance.

In this section, the focus of our discussion will be further narrowed down to Italian dialects. The aim is to provide a comprehensive typological overview of the yes/no question-marking strategies available in the Italian dialects. Further, it will be investigated whether such a typological classification can fit into a broader typology of polar questions (Ulan, 1978; Sadock & Zwicky, 1985; Dryer, 2005).

As is well known, the degree of morphosyntactic microvariation found in Italian dialects is very high. Yes/no question-marking is not an exception in this regard. Whereas standard Italian can only mark polar questions through interrogative intonation, Italian dialects display a rich variety of morphosyntactic devices. Because of this huge variation, it is necessary to make some choices to categorize dialectal data according to general typological principles. The choices made to build up the typology of yes/no question-marking strategies in Italian dialects as presented in this chapter will be discussed in the following subsections.

The structure of the present section is as follows: the type of dialectal data collected for the present work will be discussed in section 3.1. Then, 4 subsections will follow, each of them dedicated to one main category of yes/no question-marking strategies found in Italian dialects. Some of these categories include several strategies. It will be shown that some yes/no question devices found in Italian dialects challenge typological classifications of polar questions as proposed by e.g. Dryer (2005). This issue will be tackled in the discussion in 4.

3.1 The data

Before beginning our exploration of yes/no question-marking in Italian dialects, it is necessary to spend a few words to describe the type of dialectal data included in this chapter.

The rich literature available on the topic served as a starting point for my research. Although no comprehensive typology of polar questions in the Italian dialects has been proposed before, a considerable amount of work is available on strictly related topics such as subject clitic-verb inversion (cf. Poletto, 1993, 1999, 2000; Munaro, 1997, 2000; Manzini & Savoia, 2005; Pollock, 2000), non-standard interrogatives (cf. Munaro & Obenauer, 1999; Obenauer & Poletto, 2000; Munaro, 2005), question particles (cf. Poletto & Zanuttini, 2003, 2010; Munaro & Poletto, 2003; Garzonio, 2004; Manzini & Savoia, 2005; Munaro, 2005; Damonte & Garzonio, 2008, 2009) and clause typing (cf. Rizzi, 1997, Munaro, 2003). In fact, there are some works that offer a typological insight on question formation. However, they are mostly restricted to Northern Italian dialects and do not specifically focus on yes/no questions (cf. Benincà & Poletto, 1997; Munaro, 1997; Parry, 1997; Poletto & Vanelli, 1997; Hack, 2010). It should be mentioned that it is Cruschina's (2008, 2012) work on yes/no question-marking in Sicilian and other Central and Southern varieties that paved the way for a typological approach to polar questions in Italian dialects.

A considerable amount of the data included in the present chapter, however, is the result of first-hand data collection. A questionnaire (see Appendix 1) was set up and mailed to 34 informants. It should be specified that only Italo-Romance dialects were included in my survey. As a result, non-Romance varieties, such as for instance Cimbrian, Griko and Arbëreshë were not taken into consideration. The traditional division of Italy in macrodialectal areas (Pellegrini, 1977) was taken as the main reference to determine the linguistic areas to be investigated in the present work. At least one speaker was chosen to represent each macrodialectal area. Defining the geographical space of linguistic variation is a central issue in dialectology. Over the last decades, there have been many significant developments on both a conceptual and methodological level as to how the locus and limits of dialectal variation should be defined. However, the remarkable amount of fine-grained linguistic variation that characterizes Italian dialects is still very hard to frame. More specifically, it is extremely difficult to define the boundaries between microdialectal areas and draw the areal limits of linguistic microvariation. This is due to the very high concentration of linguistic variants in such a limited geographical area. This unique situation resulted from interplay of historical, cultural, social and economic factors that has no parallel in any other European country. For these reasons, it is necessary to stress that the aim of the present work is to present an accurate picture of yes/no question-marking in Italian dialects but by no means complete. A map illustrating the fieldwork locations covered in this study is provided in figure 1 below.



Figure 1: Map of fieldwork locations.

Fieldwork locations:

1. Abbadia Cerreto (LO), Lombardy
2. Albiano (TN), Trentino Alto Adige
3. Ancona, Marches
4. Arenzano (GE), Liguria
5. Arielli (CH), Abruzzo
6. Ayas (AO), Aosta Valley
7. Bari, Apulia
8. Bergamo, Lombardy
9. Carrara (MS), Tuscany
10. Castro dei Volsci (FR), Lazio
11. Civitella in Valdichiana (AR), Tuscany
12. Cosenza, Calabria
13. Dorgali (NU), Sardinia
14. Este (PD), Veneto
15. Florence, Tuscany

16. Frabosa Soprana (CN), Piedmont
17. Francavilla Fontana (BR), Apulia
18. Gatteo a Mare (FC), Emilia Romagna
19. Isola del Piano (PU), Marches
20. Martano (LE), Apulia
21. Mussomeli (CL), Sicily
22. Ortonovo (SP), Liguria
23. Pizzoli (AQ), Abruzzo
24. Ponticelli (NA), Campania
25. Quarto (NA), Campania
26. Rome, Lazio
27. San Bonifacio (VR), Veneto
28. Serradifalco (CL), Sicily
29. Siena, Tuscany
30. Soleto (LE), Apulia
31. Squinzano (LE), Apulia
32. Sutrio (UD), Friuli
33. Torino, Piedmont
34. Trivento (CB), Molise

The questionnaire includes 15 questions on different aspects of yes/no question-marking and the complementizer system of Italian dialects (see Appendix 1 for the complete set of materials used in the questionnaire). No grammaticality judgments were required from the informants. Rather, they were presented with different yes/no question types and asked whether those types were productive in their dialects. Also, they were asked to translate several sentences which contained different kinds of complementizers and *wh*-elements. A special attention was dedicated to this part because I wanted to check whether any correlation exists between the complementizer system and the availability of certain yes/no question-marking devices. The questionnaire was not specifically designed for one dialect group. As a result, many questions were not relevant for speakers of Northern varieties and vice versa, which made the compilation of the questionnaire very fast.

Usually, old informants that live in isolated communities are regarded as the unique source of authentic dialectal data. Nevertheless, I decided not to concentrate on the more archaic forms found in the speech of a minority of elderly speakers in remote locations. Rather, I investigated Italian dialects as they are currently spoken by the majority of the population, in order to obtain truly synchronic data. Therefore, I selected a group of informants composed of relatively young, high educated dialect speakers, with an average age of 38 years. An overview of their gender, age, educational level and region of origin is provided in table 2 below.

Table 2: Overview of the informants.

Gender	Age	Educational level	Region
M	33	PhD degree	Veneto
F	30	PhD degree	Trentino Alto Adige
F	50	PhD degree	Marches
M	49	MA degree	Liguria
F	38	PhD degree	Abruzzo
M	58	MA degree	Aosta Valley
M	26	MA degree	Apulia
M	60	MA degree	Lombardy
M	28	MA degree	Liguria
F	64	High school diploma	Lazio
M	35	High school diploma	Tuscany
F	44	PhD degree	Calabria
M	63	MA degree	Sardinia
F	35	PhD degree	Veneto
M	34	PhD degree	Tuscany
F	61	MA degree	Piedmont
F	29	MA degree	Apulia
M	58	Lower Secondary school diploma	Emilia Romagna
M	30	MA degree	Marches
M	33	MA degree	Apulia
M	31	PhD degree	Sicily
M	28	MA degree	Tuscany
M	29	High school diploma	Abruzzo
F	25	BA degree	Campania
M	24	BA degree	Campania
F	27	MA degree	Tuscany
M	33	PhD degree	Lombardy
M	29	MA degree	Sicily
F	27	MA degree	Lazio
F	29	PhD degree	Apulia
F	31	PhD degree	Apulia
F	31	MA degree	Friuli
M	65	MA degree	Piedmont
F	28	PhD degree	Molise

3.2 Interrogative word order

As discussed in section 2.1.4, interrogative word order is a relatively uncommon yes/no question-marking strategy in the world's languages from a typological point of view. This device is mostly found in Indo-European and is particularly frequent in Germanic languages⁸. Against this trend, one of the most wide-spread morphosyntactic devices

⁸ Among Romance languages, only French may use interrogative inversion to mark yes/no questions.

for marking polar questions in Italian dialects involves the use of Interrogative Word Order. More specifically, three strategies found in Italian dialects fall under the category of Interrogative Word Order:

- subject clitic-verb inversion;
- *do*-support;
- clefted polar constructions.

Subject clitic-verb inversion will be discussed in section 3.2.1. *Do*-support will be the topic of section 3.2.2. Finally, clefted polar questions will be tackled in section 3.2.3.

Before entering the discussion, however, it is necessary to mention another construction that is often described as being typical of polar questions in traditional grammars. In Sardinian and Sicilian, it is very frequent to find yes/no questions characterized by predicate fronting (cf. Jones, 1993; Cruschina, 2006, 2010; Cruschina & Remberger, 2009; Remberger, 2010; Mensching & Remberger, 2010b):

- 40) a. Mandicatu as?
 eaten-PP have-PRES.2.Sg
 ‘Have you eaten?’ (Jones, 1993:339)

[Sardinian]

- b. Spusata sini?
 married-PP be-PRES.2.Sg
 ‘Are you married?’ (Cruschina, 2010:252)

[Sicilian]

Nevertheless, this construction is not specific to yes/no questions. It is found very frequently in exclamative and declarative sentences, too. In addition, there are no restrictions on the syntactic categories that can be fronted. Cruschina (2006, 2010), Mensching & Remberger (2010b) and Cruschina & Remberger (2009) analyze these constructions as instances of Focus Fronting, which arises as a consequence of the information structure packaging of the sentence in these varieties. For these reasons, predicate fronting will not be analyzed as a yes/no question-marking device in the present study.

3.2.1 Subject clitic-verb inversion

Subject clitic-verb inversion, or interrogative inversion, is a morphosyntactic phenomenon that consists in the encliticization of a pronominal subject onto the inflected verb. In fact, interrogative inversion is a general term which refers a heterogeneous class of phenomena with different syntactic, semantic and pragmatic properties. At least three types of subject clitic-verb inversion have been described in the literature so far (cf. Poletto, 1993, 1999, 2000; Munaro, 1997, 2000; Manzini & Savoia, 2005; Pollock, 2000). The first type is subject clitic-verb inversion proper, i.e. the configuration that obtains when a subject clitic appears preverbally in declarative sentences and postverbally in yes/no questions. The postverbal form is usually slightly different from the preverbal one from a morphological point of view. Also, it is

frequent to find mixed paradigms, where only one or two persons display inversion and the other persons display a different pattern. An example of this type of subject clitic-verb inversion is provided in (41) below.

41) a.	dɔrmo	‘I sleep’
	ti dɔrmi	‘you sleep’
	a/la dɔrme	‘he/she sleeps’
	dormimo	‘we sleep’
	dormi	‘you sleep’
	i/le dɔrme	‘they sleep’
b.	dɔrmo?	‘do I sleep?’
	dɔrmis-tu?	‘do you sleep?’
	dɔrm-elo/-ela?	‘does he/she sleep?’
	dormimo?	‘do we sleep?’
	dormi?	‘do you sleep?’
	dɔrm-eli/-ele?	‘do they sleep?’ (Manzini & Savoia, 2005:363)

[Chioggia, VE]

The paradigm reported in (41.a) is defective, as it lacks subject clitics for the 1st person singular and plural, and for the 2nd person plural. As a result, no inversion can take place when polar questions are formed, as shown in the corresponding forms in (41.b). All other persons display inversion; the preverbal subject clitics in (41.a) become enclitic elements attached to the verb. Constructions of this type have been traditionally analyzed as a combination of the raising of the inflected verb to C, followed by encliticization of the subject pronoun with the inflected verb in C⁹ (cf. Poletto, 1993, 2000, 2003; Rizzi & Roberts, 1989).

In fact, it is not clear whether the subject clitics found in the declarative paradigm are distinct from those found in the interrogative paradigm. Some scholars have argued that subject clitics and interrogative clitics are of a fundamentally different nature. It has been proposed that interrogative clitics fall under the category of inflectional morphology, as opposed to the subject clitics found in declaratives (cf. Fava, 1993; Hulk, 1993; Vanelli, 1998; Sportiche, 1999; Gorla, 2002). In this study, Poletto’s (2000b) criteria will be taken as the main diagnostics to establish whether or not a set of subject clitics is distinct from the corresponding set of interrogative clitics in a given dialect. According to Poletto (2000b), whether subject clitics are distinct from interrogative clitics depends on:

- whether the number of clitics inside each paradigm is different;
- whether or not subject clitics and interrogative clitics have a different morphology;
- whether or not they co-occur.

⁹ Some scholars have proposed that interrogative enclitics target the highest projection of the IP rather than C (see Munaro, 1997).

Following these criteria, the clitics found in declarative and interrogative paradigm of the dialect of Chioggia (see ex. 41) are not distinct. I will treat similar cases as instances of subject clitic-verb inversion proper rather than as verbal affixation. This pattern is found in five of the investigated dialects. These are the dialects spoken in:

- Albiano (TR), Trentino;
- Bergamo, Lombardy;
- Este (PD), Veneto;
- San Bonifacio (VR), Veneto;
- Sutrio (UD), Friuli.

It is necessary to point out that none of these dialects display inversion for all grammatical persons. However, they all use inversion whenever they can, i.e. whenever there is a subject clitic in the declarative paradigm, there is one in the interrogative paradigm, too. In addition, the morphological shape of the clitics found in the interrogative paradigm is the same of (or at least very similar to) the clitics in the declarative paradigm. Finally, the clitics found in the interrogative paradigm never co-occur with those found in the declarative paradigm. For these reasons, it is possible to conclude that they are in fact the same elements. The dialects of Este (PD) and San Bonifacio (VR) only display inversion for the 2nd and 3rd person singular and the 3rd person plural. Yes/no questions involving other grammatical persons are only marked through Interrogative Intonation. The data are reported in (42) and (43) below:

- 42) a. dormo ‘I sleep’
 te dormi ‘you sleep’
 el dorme ‘he sleeps’
 dormimo ‘we sleep’
 dormite ‘you sleep’
 i dorme ‘they sleep’
- b. dormo? ‘Do I sleep?’
 dormi-to? ‘do you sleep?’
 dorme-o? ‘does he sleep?’
 dormimo? ‘do we sleep?’
 dormite? ‘do you sleep?’
 dorme-i? ‘do they sleep?’

[Este, PD]

- 43) a. dormo ‘I sleep’
 te dormi ‘you sleep’
 el/la dorme ‘he/she sleeps’
 dormimo ‘we sleep’
 dormì ‘you sleep’
 i dorme ‘they sleep’

b.	dormo?	‘do I sleep?’
	dormi-to?	‘do you sleep?’
	dorme-lo/la?	‘does he/she sleep?’
	dormimo?	‘do we sleep?’
	dormi?	‘do you sleep?’
	dorme-li?	‘do they sleep?’

[San Bonifacio, VR]

The dialect of Bergamo only displays inversion for 3rd person, both singular and plural. Yes/no questions involving 1st and 2nd person singular are only marked through interrogative intonation. A different clitic is attached to the verb when the question involves 1st and 2nd person plural. The declarative and interrogative paradigms are shown in example (44) below:

44) a.	dórme	‘I sleep’
	te dórmet	‘you sleep’
	(a)l dórma/la dórma	‘he/she sleeps’
	an dórma	‘we sleep’
	dormí	‘you sleep’
	i dórma	‘they sleep’
b.	dórme?	‘do I sleep?’
	te dórmet ?	‘do you sleep?’
	dórme-l/-la?	‘does he/she sleep?’
	an dórme-i ?	‘do we sleep?’
	dormí-f?	‘do you sleep?’
	dórme-i?	‘do they sleep?’

[Bergamo]

Finally, the dialect of Sutrio (UD) only applies inversion with the 2nd and 3rd person singular. Polar questions involving all other grammatical persons are formed by attaching an invariable clitic to the verb, which never shows up in the declarative paradigm. An example is shown in (45):

45) a.	i duarmi	‘I sleep’
	tu duarmis	‘you sleep’
	al duarm	‘(s)he sleeps’
	a durmin	‘we sleep’
	i durmîs	‘you sleep’
	a duarmin	‘they sleep’
b.	duarmi-o?	‘do I sleep?’
	duarmis-tu?	‘do you sleep?’
	duarmi-al?	‘does (s)he sleep?’
	durmin-o?	‘do we sleep?’
	durmîs-o?	‘do you sleep?’
	duarmin-o?	‘do they sleep?’

[Sutrio, UD]

A second type of subject clitic verb-inversion that occurs in many Italian dialects involves clitic doubling. It results in a configuration where a proclitic subject co-occurs with an enclitic one (Poletto, 1993; Manzini & Savoia, 2005; Munaro, 2010), as shown in the example below¹⁰:

- 46) a. t 'durum 'you sleep'
 e/la 'dɔərmɜ 'he/she sleeps'
 a dur'mɜ 'we sleep'
 a dur'mi 'you sleep'
 a/al 'dɔərmɜ 'they sleep'
- b. a durm-at? 'do you sleep?'
 a dɔərm-al? 'does (s)he sleep?'
 a dörmɛ-mɜ? 'do we sleep?'
 a dörmi:-f? 'do you sleep?'
 a dɔərm-i? 'do they sleep?' (Manzini & Savoia, 2005:374)
- [Forlì, FC]

As already mentioned, it is not uncommon to find mixed paradigms exhibiting different morphosyntactic properties. In the paradigms reported in (46), only the 2nd and 3rd person singular display this type of complex interrogative inversion. As shown by the contrast between (46.a) and (46.b), the preverbal subject cliticizes onto the verb and co-occurs with an invariable preverbal clitic, which is absent from the corresponding forms in the declarative paradigm. Manzini & Savoia (2005) point out that the preverbal clitic is not always invariable. In some Piedmontese dialects, for instance, it can encode person specification. This type of complex inversion is not found in any of the dialects that were investigated for the present study.

Finally, it should be mentioned that there is a third type of interrogative inversion that also displays a type of clitic doubling. However, it differs from the inversion shown in (46) in that the preverbal clitic does not cliticize onto the verb in the interrogative paradigm. Rather, it stays in its preverbal position and co-occurs with a different postverbal clitic, which is absent from the declarative paradigm (cf. Manzini & Savoia, 2005). This type of doubling will not be treated as an instantiation of interrogative inversion in the present work. It will be analyzed as a type of verbal affixation that falls under Dryer's (2005) category of interrogative verb morphology (see section 2.1.2).

3.2.2 *Do*-support

In some Alpine Lombard dialects, polar questions are characterized by the insertion of a dummy auxiliary that supports inflectional features and triggers inversion with the subject clitic (Benincà & Poletto, 1998; Manzini & Savoia, 2005). This is especially striking because such a syntactic device only finds a parallel in Modern English *do*-

¹⁰ The first person singular was not reported in the original example of Manzini & Savoia (2005: 374).

support. Following Dryer's (2005) categorization of *do*-support in English, this strategy will be analyzed as an instance of interrogative word order in the present study.

Benincà & Poletto (1998) report the insertion of a dummy auxiliary to form yes/no questions for the dialect spoken in Monno (BS). The verb *fare* 'do' is obligatorily inserted in root yes/no questions but never surfaces in declarative sentences. An example is shown in (47) below:

- 47) a. Fe -t majà?
do-PRES.2.Sg -you.Subj.CL eat-INF
'Are you eating?' (Benincà & Poletto, 1998:41)
- b. Fa -l plöer?
do-PRES.3.Sg -it.Subj.CL rain-INF
'Is it raining?' (Benincà & Poletto, 1998:41)

[Monno, BS]

As in English, *do*-support is not restricted to polar interrogatives in Monnese. It occurs in *wh*-questions too, where it is in complementary distribution with simple subject clitic-verb inversion. A minimal pair is illustrated in (48.a-b).

- 48) a. Ngo fe -t ndà?
where do-PRES.2.Sg -you.Subj.CL go-INF
'Where are you going?' (Benincà & Poletto, 1998:42)
- b. Ngo ve -t?
where go-PRES.2.Sg -you.Subj.CL
'Where are you going?' (Benincà & Poletto, 1998:42)

[Monno, BS]

Benincà & Poletto (1998) analyze Monnese *do*-support as a last resort strategy, triggered by the impossibility of the verb to raise to a given functional projection in the IP domain.

There are many interesting differences and similarities between English and Monnese *do*-support but for the time being they will not be included in the present discussion. From the examples reported in (47) and (48), however, it is possible to conclude that Monnese *do*-support is not a specific morphosyntactic device for marking yes/no questions. Rather, it appears to be a general question-marking strategy.

Another interesting set of data comes from the Sicilian varieties spoken in Cefalù and Pollina (PA). As shown in the examples in (48), it is possible to insert a dummy *do* in yes/no questions:

- 49) a. Iri m? Palermu fai?
go-INF to Palermo do-PRES.2.Sg
'Are you going to Palermo?' (Bentley, 2011:5)

- b. L' armali sempri supurtari avi a fari?
 the animal always put.up.with-INF have-PRES.3.Sg. to do-INF
 'Does (s)he always have to put up with the animal?' (Mirto, 2009:157)
 [Cefalù and Pollina, PA]

As opposed to the Alpine Lombard dialects discussed in Benincà & Poletto (1998) and Manzini & Savoia (2005), however, *do*-insertion is not limited to interrogative contexts. It appears very frequently in declaratives too, as illustrated in (50) below:

- 50) a. Babbjari fa.
 joke-INF do-PRES.3.Sg
 'He is joking.'
- b. U Palermu sempri pareggiari fa.
 the Palermo always draw-INF do-PRES.3.Sg
 'The Palermo team always draws (in its matches).'
- [Cefalù and Pollina, PA]

According to Mirto (2004, 2009) and Bentley (2011), these constructions are in fact pseudo-clefts where the infinitival part represents new or contrastive information. Therefore, this strategy is not specific to yes/no questions. However, it is interesting to point out that English *do*-support is not specific to yes/no questions either. It can be used as an intensifier in declarative contexts, as shown in (51):

- 51) She DID call.

In the English sentence in (51), *do* is focused and carries a pitch accent. The reverse is true for Sicilian, where the infinitival verb that precedes *fare* is focused and carries pitch accent:

- 52) DORMIRI fai?
 sleep do-PRES.2.Sg
 'Are you sleeping?' (Bentley, 2011:5)
 [Cefalù and Pollina, PA]

Although the parallelism between the dialects of Cefalù and Pollina and English is an imperfect one, it still provides evidence for classifying Sicilian *do*-support as a possible yes/no question-marking strategy.

3.2.3 Cleft constructions

A final type of yes/no question-marking strategy that falls under the category of interrogative word order is represented by cleft constructions.

Clefts are very frequent in Northern Italian dialects and occur both polar and wh-questions. By contrast, they are completely absent from most Central and Southern Italian dialects.

Although cleft questions are usually associated to a specific information packaging of the sentence, the data collected through my questionnaire strongly suggest that this is not always the case. There seems to be no clear-cut distinction between cleft questions that come with a specific information structure-driven interpretation and neutral yes/no questions in some dialects. An example of a neutral clefted yes/no question in a Piedmontese dialect is provided in (53) below:

- 53) É -lo da sì k' as passa?
 be-PRES.3.Sg -it.Subj.CL through here that IMP.CL pass-3.Sg.PRES
 'Does one pass by here?' (Brero & Bertodatti, 1988, in Parry, 1997:95)
 [Piedmontese]

It is true that most speakers of Northern Italian Dialects regard polar clefted questions as more appropriate in communicative situations where there is some mutually shared background information. Nevertheless, they might use this type of constructions also when such information is missing. These considerations apply to the dialects spoken in Este (PD) and Ortonovo (SP), for instance, but can probably be extended to larger dialectal areas above the Massa-Senigallia line. Two examples from these varieties mentioned above are reported in (54) below:

- 54) a. Sé el pan che te ghe comprà?
 be-PRES.3.Sg the bread that you.Subj.CL have-PRES.2.Sg buy-PP
 'Is it bread that you bought?/Did you buy bread?/You bought bread, right?'
 [Este, PD]
- b. I è l pan k t
 it.Subj.CL be-PRES.3.Sg the bread that you.Subj.CL
 a compr?
 have-PRES.2.Sg buy-PP
 'Is it bread that you bought?/Did you buy bread?'
 [Ortonovo, SP]

In the dialect of Este, clefted polar questions are also used as confirmation questions, as shown by the multiple translation of the sentence in (54.a). This indicates that their semantics is no longer entirely dependent on information structure constraints. Further evidence in favor of this idea is provided by the generalized use of clefted *wh*-questions in (almost) all Northern Italian Dialects. An example is shown in (54) below:

- 55) Chi xe che ti ga visto?
 who be-PRES.2.Sg that you.Subj.CL have-PRES.2.Sg see-PP
 'Who did you see?' (Franco, p.c.)
 [Venetian]

As opposed to clefted polar questions, clefted *wh*-questions are completely equivalent to standard *wh*-questions without clefts. They do need to be licensed by a specific context.

3.3 Interrogative verb morphology

As discussed in section 3.2, Northern Italian Dialects display at least three phenomena that fall under the category of interrogative word order. One of them is characterized by the encliticization of the subject clitic onto the verb. Another one involves clitic doubling and results in a configuration where the preverbal clitic cliticize onto the verb in polar questions, while a different clitic is inserted in a preverbal position. These two types of interrogative inversion have been classified as instances of interrogative word order because they both involve movement of the verb to the left of the subject clitic. Poletto's (2000b) criteria for determining whether the set of subject clitic is distinct from the set of interrogative clitics in a given dialect were taken as the main diagnostic indicator.

The third type of interrogative inversion, however, was not included in the section on interrogative word order. Described in Manzini & Savoia (2005) as complex inversion, it involves the insertion of an interrogative affix onto the verb, which never shows up in the declarative paradigm. The preverbal subject clitic retains its preverbal position in interrogatives, too. If there are more preverbal subject clitics, the same order of the declarative is preserved. This configuration suggests that no inversion takes place and that the set of subject clitics is distinct from the set of interrogative clitics in these dialects. Taking a look at these data through the lens of Poletto's (2000b) criteria corroborates this idea, as preverbal clitics always co-occur with interrogative affixes and have a different morphological shape. For these reasons, these constructions will be analyzed as an instance of interrogative verb morphology rather than as interrogative word order in the present work.

An example from a dialect that marks polar questions through interrogative verb morphology is provided below:

56) a.	a drø:m	'I sleep'
	i t drømi	'you sleep'
	u/a drø:m	'he/she sleeps'
	a drimuma	'we sleep'
	i drømi	'you sleep'
	i drømu	'they sleep'
b.	a drøm-ni miŋ?	'do I sleep?'
	i t drøm-ti?	'do you sleep?'
	u drøm-le/a drøm-ra?	'does he/she sleep?'
	a drimum-ni?	'do we sleep?'
	i drømi?	'do you sleep?'
	i drøm-n-u?	'do they sleep?' (Manzini & Savoia, 2005:377)

[Cortemilia, CN]

As illustrated in (56), polar questions are formed by adding an interrogative affix to the verb in the dialect of Cortemilia. Preverbal subject clitics maintain their preverbal position also in the interrogative paradigm. The interrogative affixes encode person specification, i.e. each grammatical person has a dedicated interrogative affix. Although

the set of interrogative affixes is relatively rich in this dialect, the paradigm in (56.b) is defective as it lacks an interrogative affix for the 2nd person plural. Polar questions involving the 2nd person plural are only marked through Interrogative Intonation.

It should be pointed out, however, that most dialects that mark polar questions through Interrogative Verb Morphology display paradigms that are way more defective than that of the dialect of Cortemilia. An example is provided by the dialect spoken in Forlì, whose paradigm has been mentioned before in the discussion on interrogative inversion involving clitic doubling (see section 1.3.2.1). The paradigm in (46) is repeated here as (57).

- 57) a. a dorum 'I sleep'
 t durum 'you sleep'
 e/la dɔərmɜ 'he/she sleeps'
 a durmɜ 'we sleep'
 a durmi 'you sleep'
 a/al dɔərmɜ 'they sleep'
- b. (ɔ-ja da v'ni?) 'do I have to come?'
 a durm-at? 'do you sleep?'
 a dɔərm-al? 'does (s)he sleep?'
 a dɔərmɛ-mɜ? 'do we sleep?'
 a dɔərm-i:-f? 'do you sleep?'
 a dɔərm-i? 'do they sleep?' (Manzini & Savoia, 2005:374)

[Forlì, FC]

As shown in (57), the dialect of Forlì only displays specific interrogative verb morphology for 1st, 2nd and 3rd person plural. Whereas the preverbal undifferentiated clitic *a* maintains its preverbal position, an interrogative affix that encodes person specification cliticizes onto the verb. This sharply contrasts with the pattern exhibited by the 2nd and 3rd person singular, where the preverbal clitic *a* only appears in the interrogative paradigm.

Among the dialects investigated for the present work, only three employ interrogative verb morphology to mark polar questions. These are the dialects spoken in:

- Bergamo, Lombardy;
- Sutrio (UD), Friuli;
- Frabosa Soprana (CN), Piedmont.

The dialects of Bergamo and Sutrio have already been mentioned in the section on interrogative word order because they display a mixed paradigm where different yes/no question-marking strategies are employed. The declarative and interrogative paradigm for the dialect of Bergamo was given in example (44), repeated here as (58).

- 58) a. *dórme* 'I sleep'
te dórmet 'you sleep'
(a)l dórma/la dórma 'he/she sleeps'
an dórma 'we sleep'
dormí 'you sleep'
i dórma 'they sleep'
- b. *dórme?* 'do I sleep?'
te dórmet ? 'do you sleep?'
dórme-l/dórme-la? 'does he/she sleep?'
an dórme-i ? 'do we sleep?'
dormí-f? 'do you sleep?'
dórme-i? 'do they sleep?'

[Bergamo]

The paradigm reported in (58) shows that an interrogative affix cliticizes onto the verb in the interrogative form for the 1st and 2nd person plural. This interrogative affix is not present in the declarative paradigm. As in the dialects of Cortemilia and Forlì, it encodes person specification in the dialects of Bergamo.

A different pattern is found in the Friulian dialect of Sutrio, where the interrogative affix is undifferentiated. As the dialect of Bergamo, the dialect of Sutrio has already been mentioned in the section on interrogative word order, as the 2nd and 3rd person singular display subject clitic-verb inversion. The declarative and interrogative paradigms shown in (45) are reported in (59) below:

- 59) a. *i duarmi* 'I sleep'
tu duarmis 'you sleep'
al duarm '(s)he sleeps'
a durmin 'we sleep'
i durmîs 'you sleep'
a duarmin 'they sleep'
- b. *duarmi-o?* 'do I sleep?'
duarmis-tu? 'do you sleep?'
duarmi-al? 'does (s)he sleep?'
durmin-o? 'do we sleep?'
durmîs-o? 'do you sleep?'
duarmin-o? 'do they sleep?'

[Sutrio, UD]

As shown in (59.b), the undifferentiated interrogative affix *-o* cliticizes onto the verb to mark yes/no questions involving the 1st person singular and plural, and the 2nd and 3rd person plural. The preverbal subject clitics that occur in the declarative paradigm never show up in the interrogative paradigm. This configuration is not likely to result from interrogative inversion because the preverbal clitics are differentiated with respect to person in the declarative paradigm, as opposed to the interrogative paradigm. The only true instances of interrogative inversion in the dialect of Sutrio are found with the 2nd and 3rd person singular. For these persons, the subject clitics encode person

specification and maintain the same morphological shape in both the declarative and the interrogative paradigm.

Another example of a dialect that marks polar questions through interrogative verb morphology is provided by the Piedmontese variety spoken in Frabosa Soprana (CN). The data are shown in (60) below:

60) a.	i dròm	‘I sleep’
	t dròmi	‘you sleep’
	u/a dròma	‘he/she sleeps’
	i drùmima	‘we sleep’
	i dròmi	‘you sleep’
	i dròmu	‘they sleep’
b.	(i) dròm-le?	‘do I sleep?’
	(it) dròm-tu?	‘do you sleep?’
	(u/a) dròm-lu?/-le?	‘does he/she sleep?’
	i drùmima?	‘do we sleep?’
	i dròmi?	‘do you sleep?’
	(i) dròm-le?	‘do they sleep?’

[Frabosa Soprana, CN]

As in most dialects discussed so far, the interrogative paradigm in (60.b) displays more than one yes/no question-marking strategy. While questions involving the 1st and the 2nd person plural are only signaled through interrogative intonation, the other persons are marked by an interrogative affix. The 1st person singular and the 3rd person plural display the same affix, *-le*. This suggests that *-le* does not encode person specification. The same undifferentiated affix is found in questions involving the 3rd person singular feminine. On the contrary, a specific affix is used for the 3rd person masculine, as well as for the 2nd person singular.

The fact that preverbal subject clitics are optional in polar questions and can co-occur with interrogative affixes provides further evidence for their distinct status in the varieties discussed in the present section.

3.4 QPs

As discussed in section 2.1.1, QPs are very wide-spread in the world’s languages from a typological point of view (Dryer, 2005, 2008). They are generally classified according to the position they occupy in the sentence. They can occur in the sentence-initial, sentence-final or second position (either after the second word or the second constituent of the sentence). In addition, some types of QPs always occur right after a specific constituent, such as for instance the lexical verb. Finally, some other QPs may have a relatively free word order because they function as focus markers and appear right before or after the element that they focalize.

QPs are used quite frequently in Romance languages too, such as French and Catalan (and marginally Portuguese and Spanish). All QPs found in standard Romance languages are sentence-initial.

Italian dialects do not represent an exception in this respect. The use of QPs is indeed very pervasive in many local varieties. Although more frequent in Central and Southern Italian dialects, QPs are found in many Northern dialects too. The syntactic and semantic features of QPs in Italian dialects represent a fertile field for research, as shown by the growing interest in this topic in recent years (cf. Munaro & Poletto, 2002; Obenauer, 2004, 2006; Garzonio, 2004, 2012; Cruschina, 2008, 2012). In fact, the distribution of QPs is subject to a very high degree of microvariation throughout the Italian peninsula, which has never been described in detail before. Therefore, it is necessary to provide some analytical tools before discussing the data, in order to be able to capture the complete picture in all its facets.

To start with, QPs in Italian dialects can be classified both on a syntactic and on a semantic level, yielding different types of typological distinctions. Both the syntactic and the semantic sides of the issue will be explored in the present section.

It should be mentioned that there is no widely shared consensus as to which grammatical elements can be regarded as actual QPs (cf. Bailey, 2010; Biberauer & Sheehan, 2011b). One very general property of the elements traditionally labeled as QPs is that they all exhibit some degree of semantic, phonological and/or morphosyntactic defectivity. Some of the specific properties that all QPs seem to have in common are discussed in Bailey (2010), following up on Struckmeier's (2008) and Bayer & Obenauer's (2008) analysis of German modal particles with QPs. Bailey's (2010) summary of the core properties of QPs in the world's languages is reported below:

- they constitute a closed lexical class;
- they are often stressless (or may be phonologically null);
- they do not select an argument as a complement;
- they lack descriptive content;
- they are invariant in form;
- they usually have a lexical counterpart to which they are historically related;
- they are immobile;
- they are typically monosyllabic;
- they cannot be modified;
- they appear in fixed order in relation to other particles of the same class;
- they are sensitive to sentence type;
- they usually appear only in matrix clauses.

[Bailey, 2010:25]

As pointed out in Biberauer & Sheehan (2011b), however, features such as those listed in Bailey (2010) might just be surface rather than core properties of QPs, which result from the complex interaction of a limited number of deficiency sources. They mention the following potential sources of deficiency:

- inability to project in any way (Toivonen, 2003);
- inability to project full structure (van Riemsdijk, 1998; Cardinaletti, 2011);
- inability to select (Biberauer, Holmberg and Roberts, 2010)
- lack of categorial identity/syncategorematicity (Rothstein, 1991; Biberauer, 2009, Biberauer, Holmberg and Roberts, 2010; Bayer & Obenauer, 2011);

- inability to assign Case (Aboh, 2004);
- inability to realize a featurally complex head (cf. Giorgi & Pianesi, 1997; Starke, 2009; Caha, 2009).

[Biberauer & Sheehan, 2011b:400]

The set of properties discussed in Bailey (2010) and Biberauer & Sheehan (2011b) will be taken as a general criterion to determine whether a given grammatical element can be defined as a QP proper in the present work.

As previously mentioned, not only the syntactic side of QPs in Italian dialects will be explored. A discussion of the semantic properties of QPs will also be included in this section. This is necessary because Italian dialects display a rich degree of microvariation when it comes to the semantic contribution of QPs. On the one hand, there are QPs that do not add any specific meaning to the questions where they occur. On the other hand, however, there are many QPs that convey a number of fine-grained semantic interpretations,

both in Northern and Southern Italian dialects. An outline of the QPs found in Italian dialects will be provided in section 3.4.1. The semantic properties of QPs will be discussed *in itinere*.

3.4.1 QPs in Italian dialects

In the present work, the following QPs found in Italian dialects will be discussed:

- Sardinian *a* and its variants (Jones, 1993, Manzini & Savoia, 2005, Remberger, 2010; Mensching & Remberger, 2010b; Bentley, 2010);
- Lombard, Piedmontese, Venetian and Trentino *po/pa* (cf. Benincà, 1997; Munaro & Poletto, 2002, 2003; Manzini & Savoia, 2005; Hack, 2010);
- Tuscan *o* (Poletto, 2000; Chinellato & Garzonio, 2003; Garzonio, 2004; Lusini, 2008);
- Calabrian *ca* (Damonte & Garzonio, 2009);
- Central and Southern *che (fare)* (Leone, 1995; Cruschina, 2008, 2012) and its variants;
- Marchigian *perché*.

The sentence-initial QP *a* (and its variants *e* and ε) is mostly found in Northern Sardinian dialects. An example of a yes/no question introduced by *a* is shown in (61):

- 61) *A faches su brodo?*
 QP make-PRES.2.Sg the broth
 ‘Are you making broth?’ (Jones 1993:358)

[Sardinian]

As shown by the contrast between (62.a) and (62.b), *a* is in complementary distribution with predicate fronting (see section 1.2.2).

- 62) a. Istracco ses?
 tired be-PRES.2.Sg
 ‘Are you tired?’ (Jones 1988:339)
- b. *A istraccu ses?
 a tiredbe-PRES.2.Sg
 ‘Are you tired?’ (Remberger & Mensching, 2010:2)

[Sardinian]

The QP *a* may make a semantic contribution to the semantics of the sentences where it occurs, although this is not necessarily the case. As pointed out in Jones (1993) and Bentley (2010), it may signal requests, invitations and offers, in addition to simple requests for information.

The QP *pa/po* is found in many Lombard, Piedmontese, Venetian, Trentino and Friulian dialects (cf. Munaro & Poletto, 2002, 2003; Manzini & Savoia, 2005). It is obligatory in both yes/no and *wh*-questions in many Central Dolomitic Ladin varieties (Hack, 2010). As opposed to Sardinian *a*, it is not sentence-initial. Rather, it displays a relatively free word order, although it occurs most frequently in the sentence-final position. An example from a Lombard dialect is given in (63.a). The data provided in (63.b-c) come from two Trentino dialects:

- 63) a. εɲ -ei po?
 come-PRES.3.Pl -they.Subj.CL QP
 ‘Are they coming?’
- b. N e -l pa ɲut?
 neg be-PRES.3.Sg -he.Subj.CL QP come-PP
 ‘Didn’t he come?’
- c. Plwøv -əl pa?
 rain-PRES.3.Sg -he.Subj.CL QP?
 ‘Is it raining?’

[Grumello, BG]

[Colfosco, BZ]

[Selva Val Gardena, BZ]

As shown in the examples (63), *po/pa* co-occurs with subject clitic-verb inversion. Its semantic contribution to the interpretation questions containing *po/pa* is subject to a great deal of microvariation. In some dialects, such as the Gherdëina dialects described in Hack (2009, 2010), *po/pa* does not modify the semantics of the questions where it occurs. In other dialects, however, it may induce specific presuppositions and mark the speaker’s surprise or disapproval, for instance. Among others, this is the case of the Pagotto dialect discussed in Munaro & Poletto (2003).

A further case of QP proper is represented by Tuscan *o* (Poletto, 2000; Chinellato & Garzonio, 2003; Garzonio, 2004; Lusini, 2008). *O* can be classified as a sentence-initial

QP. If one (or more) element is left-dislocated, it may duplicate and appear before the dislocated element, too¹¹. An example is shown in (64) below:

- 64) a. O un viene anche Maria alla festa?
 QP neg come-PRES.2.Sg too Mary to-the party
 ‘Isn’t Mary coming to the party too?’
- b. O alla festa o un ci viene
 QP to-the party QP neg there-CL come-PRES.3.Sg
 anche Maria
 too Mary?
 ‘Isn’t Mary coming to the party too?’

[Sieneſe]

The QP *o* appears in both yes/no and *wh*-questions, as shown in (65.a-b).

- 65) a. O un lo conosci?
 QP neg Obj.CL know-PRES.2.Sg
 ‘Don’t you know him?’
- b. O che hai comprato?
 QP what have-PRES.2.Sg buy-PP
 ‘What did you buy?’

[Sieneſe]

The distribution of *o* in yes/no questions is, however, characterized by some syntactic restrictions. It can only occur either in negative yes/no questions (see the examples in (64.a-b) and (65.a)), or in yes/no questions introduced by the QP *che*¹² (see (66.a)). The absence of the negation or of the QP *che* results in ungrammaticality, as shown in (66.b).

- 66) a. O che vai al mare domani?
 QP QP go-PRES.2.Sg to-the sea tomorrow
 ‘Are you going to the sea tomorrow?’
- b. O *(un/che) vai al mare domani?
 QP neg/QP go-PRES.2.Sg to-the sea tomorrow
 ‘Are you going to the sea tomorrow?’

[Sieneſe]

¹¹ As shown in Garzonio (2004) and Damonte & Garzonio (2009) for Florentine, *o* can only appear before left-dislocated elements but not before hanging topics. If both elements are present, *o* occurs after hanging topic and before left-dislocated elements. The same applies to Sieneſe (Lusini, 2008).

¹² A detailed discussion of the QP *che* will be provided later on in this section.

As pointed out in Garzonio (2004), *o* is used to mark what he calls *non-standard interrogatives* in Florentine. He assumes that *o* encodes additional properties that modify the default interpretation of questions. In Florentine, *o*-questions may be of the following types: surprise, can't-find-the-value, rhetorical, exclamative or imperative questions. As expected, the interpretation of *o*-questions is subject to variation in Tuscan dialects. As a result, some of the interpretations mentioned above may or may not be present in a given dialect. Nevertheless, it is worth to mention that *o* always appears in questions that have a special semantics (Garzonio, 2004; Lusini, 2008).

Calabrian *ca* is of a similar nature (Damonte & Garzonio, 2009). It is a sentence-initial QP¹³ and it is compatible with both yes/no and *wh*-questions. An example is illustrated in (67) below:

- 67) a. *Ca* iddru ancora ccà è?
 QP he still here be-PRES.3.Sg
 'Is he still here?'

[Catanzaro]

- b. *Ca* chini u dicia?
 QP who Obj.CL say-PRES.3.Sg
 'Who's saying it?'

[Crucoli, KR]

As Tuscan *o*, Calabrian *ca* always triggers a non-standard interpretation of the question in which it occurs. Some of the most common semantic nuances conveyed by *ca* are surprise and disapproval. Again, this is subject to a great deal of cross-dialectal variation.

The last bullet in the list provided at the beginning of this section refers to a large family of QPs that is found in all Central and Southern Italian dialects (islands included) under the Massa-Senigallia line. For some reason, this set of data has been overlooked for too long by Italian dialectologists, with the exceptions of Cruschina (2008, 2012) for Sicilian, Garzonio (2004) for Florentine and Lusini (2010) for Siennese. As a result, the data that will be discussed in this section come from my own fieldwork (unless stated otherwise). In these dialects, yes/no questions are introduced by a QP homophonous with the *wh*-word corresponding to *what*. In some of these dialects, the QP can be followed by a form of the verb *fare* 'do' or *essere* 'be', which is not interpreted lexically but may modify the default semantics of the questions where it occurs.

This construction exhibits a very high degree of microvariation in both its syntactic and semantic properties. In the proposed typology of yes/no question-marking strategies in Italian dialects, I chose to categorize this morphosyntactic device into the category of sentence-initial QPs. As will become clear, however, this construction poses several problems for a typological classification such as the one proposed by Dryer (2005). These problems will be discussed in detail in the following pages.

First, an overview will be provided of those dialects where polar questions can be introduced by a sentence initial QP homophonous with the *wh*-word *what*. Then, the

¹³ As Tuscan *o*, it occurs between hanging topics and left-dislocated elements (Damonte & Garzonio, 2010).

discussion will focus on those dialects where this sentence-initial QP can be followed by a form of the verb *fare* 'do' or *essere* 'be'. The question will be tackled whether the construction with and without *fare* or *essere* are actually the same.

Among the dialects that were investigated for this study, 21 dialects display a yes/no QP that is homophonous with the *wh*-word *what*. A map showing the geographical distribution of these varieties is provided in figure 2.



Figure 2: Map of locations where yes/no questions can be introduced by a sentence-initial QP homophonous with the *wh*-word *what*.

1. Arielli (CH), Abruzzo;
2. Bari, Apulia;
3. Castro dei Volsci (FR), Lazio;
4. Civitella in Valdichiana (AR), Tuscany;
5. Cosenza, Calabria;
6. Dorgali (NU), Sardinia;
7. Florence, Tuscany;
8. Francavilla Fontana (BR), Apulia;

9. Isola del Piano (PU), Marches;
10. Mussomeli (CL), Sicily;
11. Martano (LE), Apulia;
12. Pizzoli (AQ), Abruzzo;
13. Ponticelli (NA), Campania;
14. Quarto (NA), Campania;
15. Rome, Lazio
16. Serradifalco (CL), Sicily;
17. Siena, Tuscany;
18. Soleto (LE), Apulia;
19. Squinzano (LE), Apulia;
20. Trivento (CB), Molise

Some examples of yes/no questions in these dialects are provided in (68) below:

- 68) a. Che uscite domani?
 QP go.out-PRES.3.Pl tomorrow
 ‘Are you going out tomorrow?’
[Civitella in Valdichiana, AR]
- b. Che stamo a anna?
 QP stay-PRES.3.Pl to go-INF
 ‘Are we leaving?’
[Rome]
- c. Che dourmi?
 QP sleep-PRES.2.Sg
 ‘Are you sleeping?’
[Pizzoli, AQ]
- d. Chə chiagnə?
 QP cry-PRES.2.Sg
 ‘Are you crying?’
[Trivento, CB]
- e. Ce sta chiangi?
 QP stay-PRES.2.Sg cry-INF
 ‘Are you crying?’
[Squinzano, LE]

The question immediately arises whether these QPs are actually derived from a complementizer or from a *wh*-word. In order to find out, a closer look was taken at the complementizer and *wh*-systems of the dialects investigated. Special attention was given to Southern Italian dialects.

Most Central dialects only have one complementizer. As a result, the chances of it being homophonous with the *wh*-word corresponding to *what* are high. By contrast,

many Southern Italian dialects display a very articulated complementizer system. The morphological shape of the complementizer introducing basic declarative clauses is often different from that of the *wh*-word corresponding to *what*. As a result, these dialects are ideal candidates for telling us more about the nature of their yes/no QPs.

Among the dialects investigated, the complementizer that introduces basic declarative clauses and the *wh*-word corresponding to *what* were different only in the following locations:

- Bari;
- Cosenza;
- Dorgali (NU);
- Martano (LE);
- Mussomeli (CL);
- Ponticelli (NA);
- Serradifalco (CL);
- Soleto (LE);
- Squinzano (LE).

An overview of the *wh*-words corresponding to *what* and the complementizer that introduces basic declarative clauses in these dialects is provided in table 3 below:

Table 3: A comparison between complementizers that introduce basic declarative clauses and *wh*-words corresponding to *what* in dialects where they have a different morphological shape.

Geographical area	Declarative complementizer	<i>Wh</i> -word corresponding to <i>what</i>
Bari	ca	ci
Cosenza	ca	chi
Dorgali (NU)	chi	itte
Martano (LE)	ca	ce
Mussomeli (CL)	ca	chi
Ponticelli (NA)	che	ca
Serradifalco (CL)	ca	chi
Soleto (LE)	ca	ce
Squinzano (LE)	ca	ce

In all the dialects mentioned in the list above, it is the *wh*-word corresponding to *what* that is used as a QP rather than the complementizer. Using the complementizer to introduce yes/no questions would yield ungrammaticality in these varieties.

A different use of this particle is found in the dialects spoken in the Marchigian city of Macerata and some surrounding areas. In these varieties, it is possible for *che* to double and appear both in sentence-initial and sentence-final position (Giusti and Paciaroni, p.c.). An example of this construction is shown in (69) below:

- 69) Che vai a scola che?
 QP go-PRES.2.Sg to school QP?
 ‘Are you going to school?’

[Macerata]

This doubling process is not attested in any other dialectal area among those investigated.

As far as the semantic contribution of this QP is concerned, it should be mentioned that it does not modify the standard interpretation of the yes/no questions where it occurs. Unlike Tuscan *o* and Calabrian *ca, che* (and its variants) does not induce any specific presupposition, nor marks the speaker’s attitude toward the answer in any way. These considerations apply to all dialects included in the maps in figure 2, Florentine being the only exception. In Florentine, yes/questions introduced by *che* are not standard interrogatives. They are only licensed in contexts where the speaker wants to express his/her disapproval or surprise towards the topic of the question, or when (s)he has specific expectations with respect to the possible answer.

As already anticipated, the QP *che* (and its variants) can be followed by a form of the verb *fare* ‘do’ and/or *essere* ‘be’ in many Central and Northern Dialects. In fact, this is possible in all dialects mentioned in figure 2. However, there are several differences between the use of this construction in these dialects both on a syntactic and on a semantic level. Concerning its syntax, two main variables play a role:

- whether *fare* ‘do’¹⁴ shares the phi- and tense feature of the lexical verb of the question;
- whether *essere* ‘be’ can be employed alongside with *fare* ‘do’.

In the following dialects, *fare* shares the phi- and tense features of the lexical verb:

- Bari, Apulia;
- Florence, Tuscany;
- Civitella in Valdichiana (AR), Tuscany;
- Rome, Lazio;
- Cosenza, Calabria;
- Francavilla Fontana (BR), Apulia;
- Martano (LE), Apulia;
- Pizzoli (AQ), Abruzzo
- Quarto (NA), Campania
- Siena, Tuscany
- Soleto (LE), Apulia
- Squinzano (LE), Apulia
- Trivento (CB), Molise

Some examples of yes/no questions in these dialects are provided in (70) below.

¹⁴ *Essere* ‘be’ never shares the same phi- and tense features of the lexical verb, so this question only concerns *fare* ‘do’.

- 70) a. Che fa piove?
 QP do-PRES.3.Sg rain-PRES.3.Sg
 ‘Is it raining?’
 [Florence]
- b. Chə faiə chiagnə?
 QP do-PRES.2.Sg cry-PRES.2.Sg
 ‘Are you crying?’
 [Quarto, NA]
- c. Ce sta fannu sta vennu?
 QP do-PRES.PROG.3.Pl come-PRES.PROG.3.Pl
 ‘Are they coming?’
 [Francavilla Fontana, BR]
- d. Ce ficera vinnera?
 QP do-PAST.3.Pl come-PAST.3.Pl
 ‘Did they come?’
 [Soleto, LE]
- e. Chi faciti nisciti?
 QP do-PRES.3.Pl go.out-PRES.3.Pl
 ‘Are you going out?’
 [Cosenza]

As shown in the sentences in (70.a-e), *fare* always shares the phi- and tense features of the lexical verb. The opposite situation arises in another group of dialects, where *fare* always appears in a default form displaying 3rd person singular and present tense. In these dialects, using a default form of *fare* would yield ungrammaticality¹⁵. Among the dialects investigated in this study, the following display this pattern:

- Arielli (CH), Abruzzo;
- Castro dei Volsci (FR), Lazio
- Mussomeli (CL), Sicily
- Serradifalco (CL), Sicily

¹⁵ Speakers of these varieties pointed out that it may be possible to use an agreeing form of *fare*. However, this is only possible under the conditions that the sentence has another prosody and the verb *fare* is interpreted lexically. For these reasons, I argue that sentences containing an agreeing form of *fare* are not polar questions in these varieties, as opposed to the sentences that contain a non-agreeing form of *fare*. Rather, they are biclausal discourses containing a *wh*-question and a yes/no question proper. This topic will be discussed extensively in chapters 3, where some syntactic tests to distinguish monoclausal yes/no questions from their corresponding biclausal discourses will be proposed. Additional experimental evidence in favor of the monoclausal status of *che fare* questions in the varieties that only display an agreeing form of *fare* will be provided in chapter 4.

- Ponticelli (NA), Campania

Some examples of polar questions displaying an invariable form of *fare* are reported in (71).

- 71) a. Chi fa a minutø quillø?
 QP do-PRES.3.Sg have-PRES.3.Pl come-PP those
 ‘Did they come?’
 [Arielli, CH]
- b. Che fa sciäte?
 QP do-PRES.3.Sg go.out-PRES.3.Pl
 ‘Are you going out?’
 [Castro dei Volsci, FR]
- c. Che fa veneno?
 QP do-PRES.3.Sg come-PRES.3.Pl
 ‘Are they coming?’
 [Ponticelli, NA]
- d. Chi fa chianci?
 QP do-PRES.3.Sg cry-PRES.2.Sg
 ‘Are you crying?’
 [Serradifalco, CL]
- e. Chi fa vinniru?
 QP do-PRES.3.Sg come-PAST.3.Pl
 ‘Did they come?’
 [Mussomeli, CL]

As shown in (71.a-e), *fare* always displays the same default phi- and tense features. The sentences in (71.a-d) show a person mismatch, while the sentence in (71.e) displays both a person and a tense mismatch.

Let us now take a look at the dialects where *essere* can be employed along with *fare*. Among the investigated dialects, the following display this pattern:

- Bari, Apulia;
- Rome, Lazio
- Martano (LE), Apulia
- Serradifalco (CL), Sicily

It should be mentioned that the Sardinian dialect of Dorgali (NU) is the only variety where only *essere* can be optionally employed. *Fare* would yield ungrammaticality. Some examples of yes/no questions introduced by a *wh*-like QP followed by a form of the verb *essere* are provided in (72).

- 72) a. Che è sta a piove?
 QP be-PRES.3.Sg stay-PRES.3.Sg to rain-INF
 ‘Was it raining?’
 [Rome]
- b. Ci è a Chiang sta?
 QP be-PRES.3.Sg to rain-INF stay-PRES.2.Sg
 ‘Is it raining?’
 [Bari]
- c. Ci è a piove steve?
 QP be-PRES.3.Sg to rain-INF stay-PAST.3.Sg
 ‘Was it raining?’
 [Martano, LE]
- d. Chi è chianci?
 QP be-PRES.3.Sg cry-PRES.2.Sg
 ‘Are you crying?’
 [Serradifalco, CL]
- e. Itt’ est proendu est?
 QP be-PRES.3.Sg rain-PPR be-PRES.3.Sg
 ‘Is it raining?’
 [Dorgali, NU]

As shown in the examples above, *essere* always occurs in an invariable form, disregarding the phi- and tense features of the lexical verb. As mentioned earlier, both *fare* and *essere* are available in these dialects. Whereas *essere* is always invariable, however, *fare* might or might not share the features of the lexical verb. An example contrasting an agreeing form of *fare* with a non-agreeing form of *essere* is provided in (73) below:

- 73) a. Che fate state a veni?
 QP do-PRES.3.Sg stay-PRES.3.Pl to come-INF
 ‘Are you coming?’
- b. Che è state a veni?
 QP be-PRES.3.Sg stay-PRES to come-INF
 ‘Are you coming?’
 [Rome]

In order to provide a comprehensive overview of the syntactic microvariation of this construction, it should be pointed out that two of the investigated dialects display a different pattern. As mentioned earlier, all dialects where yes/no questions can be introduced by a *wh*-like QP can optionally make use of a form of the verb *fare* and/or *essere*. Nevertheless, the data show that the reverse is not always true. In the Marchigian dialects spoken in Isola del Piano (PU) and Ancona, polar questions cannot be

introduced by a *wh*-like QP alone. If the QP is employed, it is obligatory to use a form of the verb *fare* or *essere*. The data are provided in the examples below:

74) a. Co/sa *(fet) scapet?
 QP do-PRES.2.Pl go.out-PRES.2.Pl
 ‘Are you going out?’

b. Co *(è) scapet?
 QP be-PRES.3.Sg go.out-PRES.2.Pl
 ‘Are you going out?’

[Isola del Piano, PU]

75) a. Cusa *(fai) piangi?
 QP do-PRES.2.Sg cry-PRES.2.Sg
 ‘Are you crying?’

b. Cus ’ *(è) piangi?
 QP be-PRES.3.Sg cry-PRES.2.Sg
 ‘Are you crying?’

[Ancona]

As illustrated in (74) and (75), either *fare* or *essere* must be included in polar questions headed by a *wh*-like QP in the dialects of Isola del Piano (PU) and Ancona. The absence of one of these two verbs would yield ungrammaticality.

It should be mentioned that the sentences in (74) and (75) can be rescued if *co/sa* is interpreted as a *why*-like element. This is the only available reading in the absence of *fare* or *essere*. Nevertheless, they cannot be classified as grammatical yes/no questions because their semantics is that of a *wh*-question headed by *why*. Questions headed by a *wh*-like element homophonous with *what* are common in many Italian dialects, as well as in many Romance and non-Romance languages, such as Icelandic, Czech, Hungarian, Hebrew, Japanese, Bangla (cf. Bayer & Obenauer, 2011). An example from German is provided below:

76) Was lachst du denn so dumm?!
 what laugh-PRES.2.Sg you then so stupidly
 ‘Why do you laugh so stupidly?’ (Bayer & Obenauer, 2011: 468)

[German]

A further peculiarity of the dialect of the dialect of Isola del Piano (PU) consists in the choice of the QP. While in the dialect of Ancona the QP is always *cusa* (and its phonological variants), the dialect of Isola del Piano (PU) differentiates between the questions that contain *fare* and those that contain *essere*. In the sentences with *fare* it is possible to choose between *co* and *sa*, while in the questions with *essere* the choice is limited to *co*.

The morphological shape of these QPs leaves no room for doubts about their nature. They clearly are homophonous with the *wh*-word corresponding to *what*, rather than with the complementizer.

One may wonder whether these Marchigian dialects can be classified on a par with the other Central and Southern Italian dialects that display a similar yes/no question-marking device. The fact that the presence of a verb after the QP is obligatory may be taken to suggest that the constructions in (74) and (75) are biclausal discourses containing two questions, rather than monoclausal yes/no questions. However, there seems to be some more compelling evidence to show that this is not the case. In biclausal discourses containing a *wh*-questions and a yes/no question proper, the verbs of both questions are of course interpreted lexically. This imposes some restrictions on the possible combinations of verbs in this type of biclausal discourse if the subjects of the two sentences have the same referent. Among others, there is a restriction on the theta-roles that these verbs can assign to their subjects. For instance, it is not allowed to combine a question containing a verb that assigns an agentive theta-role with a question containing a verb that assigns a different theta-role to its subject. An example is shown in (77) below:

- 77) a. Che fai? Esci stasera?
 what do-PRES.2.Sg go.out-PRES.2.Sg tonight
 ‘What are you doing? Are you going out tonight?’
- b. #Che fai? Ti piace la pizza?
 what do-PRES.2.Sg to.you.CL please-PRES.3.Sg the pizza
 ‘What are you doing? Do you like pizza?’
- [Standard Italian]

The biclausal discourse in (77.a) is felicitous, as both *fare* and *uscire* ‘go out’ assign an agentive to their subjects. On the contrary, the biclausal discourse in (77.b) is infelicitous (as indicated by the # sign) because the verb of the second question, *piacere* ‘like’ assigns an experiencer role to its subject. This contrasts with the agentive theta role assigned by *fare* to the subject of the first question, yielding an infelicitous combination. In fact, this is a general semantic requirement rather than a specific restriction of Italian or the Italian dialects. In the dialects of Isola del Piano (PU) and Ancona it is possible to combine *fare* with verbs that do not assign an agentive theta-role to their subjects. This is not allowed in the Northern Italian dialects that were investigated for this study, which indeed do not recur to this construction to mark polar questions. An example is provided in (78).

- 78) a. Co/sa fa piov?
 QP do-PRES.3.Sg rain-PRES.3.Sg
 ‘Is it raining?’
- [Isola del Piano, PU]
- b. *Se fa, (el) piöf?
 what do-PRES.3.Sg it.Subj.CL rain-PRES.3.Sg
 ‘What is it doing? Is it raining?’
- [Abbadia Cerreto, MI]

The ungrammaticality of (78.b) shows that *fare* is interpreted lexically. This suggests that the (78.b) should be analyzed as a biclausal discourse rather than as a monoclausal yes/no question.

A possible explanation for the syntactic behavior of this construction in the dialects of Isola del Piano (PU) and Ancona might rely on their geographical proximity with the Massa-Senigallia line. As is well known, this line demarcates a number of isoglosses that distinguish Northern Italian from Tuscan, Central and Southern dialects. All investigated dialects that are spoken above this line do not employ to a *wh*-like QP (optionally followed by a form of the verb *fare* or *essere*) to mark yes/no questions. On the contrary, this strategy is available in all investigated dialects that are spoken below the Massa-Senigallia line. Isola del Piano (PU) and Ancona are respectively situated slightly above and slightly below this line. As a result, it is not surprising that they might exhibit mixed patterns where features of both Northern and Central/Southern dialects emerge. With respect to yes/no question-marking, they align with Northern dialects in that they do not allow *wh*-like yes/no QPs. At the same time, however, they align with Tuscan, Central and Southern dialects because it is possible to introduce yes/no questions with a *wh*-like elements followed by a form of the verb *fare* or *essere*.

After discussing the syntactic microvariation of *che* (*fare/essere*) yes/no questions, let us now turn to the issue of their semantic interpretation. On a semantic level, two criteria need to be taken into consideration. First, it is necessary to make a distinction between the dialects where a *wh*-like QP does not make any semantic contribution to the interpretation of the sentence, and those where it does. Second, a boundary should be traced between those dialects where adding *fare/essere* to the question modifies its standard semantics and those where it doesn't.

As mentioned earlier, the use of a *wh*-like QP does not make any semantic contribution in any investigated varieties except for Florentine. In Florentine, *che* is only used to mark yes/no questions that come with some presupposition with respect to the answer. It can also signal the speaker's attitude towards the topic of the question, such as for instance surprise or disapproval. Crucially, they can never be uttered out of the blue.

In all other dialects shown in figure 2, QPs only have the role of marking yes/no questions. They are purely functional elements whose only function is to mark sentence type. They do not induce any presupposition, nor any link to the speaker's attitude toward a possible answer. Of course, it is possible to use them as special questions in the sense of Obenauer (2006, 2008) if an appropriate linguistic context is provided. But this is a general property of languages and depends on pragmatic and extra-linguistic factors rather than on the specific use of these QPs.

So far, the insertion of *fare* and/or *essere* in yes/no questions headed by a *wh*-like QP has been described as an optional process. It was pointed out that the dialects of Isola del Piano (PU) and Ancona represent an exception, as they always require the presence of *fare* and/or *essere* in order for yes/no questions to be grammatical. However, the insertion of *fare/essere* is not always completely optional. Rather, it depends on whether the verb makes a semantic contribution to the interpretation of the question or not. In the following dialects, it does not modify the standard semantics of polar questions in any way:

- Civitella in Valdichiana (AR), Tuscany
- Castro dei Volsci (FR), Lazio

- Florence, Tuscany
- Rome, Lazio
- Martano (LE), Apulia
- Ponticelli (NA), Campania
- Siena, Tuscany

Of all varieties included in the list above, however, Florentine deserves a special mention. As discussed earlier, yes/no questions introduced by *che* are not standard yes/no questions in Florentine. Inserting *fare* does not modify the semantics of these questions, which is already a non-standard one. In this sense, *fare* insertion is optional in Florentine. The presupposition and discourse-related features that it may introduce are already present in Florentine yes/no questions headed by *che*. Because of the exceptional restrictions on the use of this construction, the question now arises whether Florentine should be analyzed on a par with Northern dialects rather than with Tuscan, Central and Southern dialects. As was done for the dialects of Isola del Piano and Ancona, the availability of this construction with verbs that do not assign an agentive role to their subject will be taken as a diagnostic criterion here. Let us take a look at the examples in (70.a) and (78.b), repeated here as (79.a) and (79.b) respectively:

79) a. Che fa piove?
 QP do-PRES.3.Sg rain-PRES.3.Sg
 ‘Is it raining?’

[Florence]

b. *Se fa, (el) piöf?
 what do-PRES.3.Sg it.Subj.CL rain-PRES.3.Sg
 ‘What is it doing? Is it raining?’

[Abbadia Cerreto, MI]

As shown by the contrast between (79.a) and (79.b), it is allowed to combine *fare* with a meteorological verb in Florentine, as opposed to the dialect spoken in Abbadia Cerreto (MI). This shows that *fare* is not interpreted lexically, which implies that the sentence in (79.a) is probably monoclausal and should be analyzed on a par with Tuscan, Central and Southern dialects. On the contrary, the ungrammaticality of the sentence in (79.b) suggests that it is probably a biclausal discourse containing two questions, where each verb is interpreted lexically. The semantic restrictions found in Florentine might be due to its proximity to the Massa-Senigallia line. In fact, Florentine is a Tuscan dialect but it exhibits typical features of Northern dialects too, such as subject clitics.

In all the other varieties mentioned in the list above, *fare/essere* can be optionally inserted in any context. There is no difference in meaning between questions with and without *fare/essere*. They can both be uttered in contexts where the speaker does not have any presupposition, expectation or special attitude towards the topic of the question.

By contrast, *fare/essere* insertion always triggers a special interpretation of the question in the following dialects:

- Arielli (CH), Abruzzo

- Bari, Apulia
- Castro dei Volsci (FR), Lazio
- Cosenza, Calabria
- Francavilla Fontana (BR), Apulia
- Mussomeli (CL), Sicily
- Pizzoli (AQ), Abruzzo
- Quarto (NA), Campania
- Serradifalco (CL), Sicily
- Soleto (LE), Apulia
- Squinzano (LE), Apulia
- Trivento (CB), Molise

In these dialects, the presence of *fare/essere* is always bound to some type of presupposition or attitude that the speaker has with respect to the topic of the question. This special interpretation is not triggered if *fare/essere* is absent.

A further QP that needs to be included in a comprehensive typological overview of yes/no question-marking in Italian dialects is Marchigian *perché*. In some central Marchigian dialects, such as for instance the varieties spoken in Senigallia (AN), Falconara (AN) and Ancona, it is possible to mark polar questions by adding the sentence-final QP *perché* (Branchini, p.c.). This QP is homophonous with the *wh*-word *why*. An example is shown in (79) below:

- 80) Sei andato al mare perché?
 be-PRES.2.Sg go-PP to-the sea QP
 'Did you go to the sea?'

[Anconetan area]

Although this QP has the morphological shape of a *wh*-word, the sentences where it appears are polar questions proper. The only possible answers are *yes* or *no*.

As opposed to *che* (*fare/essere*) questions, however, polar questions marked by *perché* do not have the standard semantics of polar interrogatives. They always need an appropriate context to license their interpretation. A possible context to license the question in (80) is provided in (81.a) below. The question in (80) is repeated here as (81.b).

- 81) a. Guarda, mi sono scottato la pelle!
 look-IMP to.me.CL be-PRES.1.Sg burn-PP the skin
 'Look, my skin got burnt!'

- b. Sei andato al mare perché?
 be-PRES.2.Sg go-PP to-the sea QP
 'Did you go to the sea?/Is it because you went to the sea?'

[Anconetan area]

Perché-questions are always a follow-up on a previous sentence. The speaker tries to find possible motivations for the content of the sentence uttered by the interlocutor. This is

made explicit in the second translation of (81.b). Notice that the part of the question that precedes *perché* is not a piece of information that was previously introduced in the discourse. Therefore, a speaker who utters a question such as (81.b) is genuinely asking whether the interlocutor went to the sea. This is confirmed by the fact that both an affirmative and a negative answer would be appropriate.

3.5 Interrogative verb morphology + QP

As discussed in section 2.1.3, marking polar questions through a combination of interrogative verb morphology and a QP is a relatively common strategy in the world's languages (Dryer, 2005).

As far as the Italian dialects are concerned, there is one yes/no question-marking device that may be classified under this category. Some Northern dialects may mark yes/no questions by using a QP homophonous with the complementizer. In addition, the verb appears in the subjunctive mood rather than in the indicative mood. This construction is found in the following dialects among those investigated:

- Ayas (AO), Aosta Valley
- San Bonifacio (VR), Veneto
- Este (PD), Veneto
- Sutrio (UD), Friuli
- Torino, Piedmont

Some examples are shown in (82) below:

- 82) a. Qu' ou séi malado?
 QP he.Subj.CL be-PRES.SUBJ.3.Sg sick
 'Is he sick?'
[Ayas, AO]
- b. Che la dorma?
 QP she.Subj.CL sleep-PRES.SUBJ.3.Sg?
 'Is she sleeping?'
[San Bonifacio, VR]
- c. Che a dorma?
 QP she.Subj.CL sleep-PRES.SUBJ.3.Sg
 'Is she sleeping?'
[Este, PD]
- d. Ch' al duarmi?
 QP she.Subj.CL sleep-PRES.SUBJ.3.Sg
 'Is she sleeping?'
[Sutrio, UD]

- e. Ch' a dørma?
 QP she.Subj.CL sleep-PRES.SUBJ.3.Sg
 'Is she sleeping?'

[Torino]

The morphological shape of the QP leaves little room for doubts about its nature. An overview of the complementizers introducing basic declarative clauses and the *wh*-words corresponding to *what* in these varieties is provided in table 4 below.

Table 4. A comparison between complementizers that introduce basic declarative clauses and *wh*-words corresponding to *what* in dialects that employ a combination of QP and interrogative verb morphology to mark polar questions.

Geographical area	Declarative complementizer	Wh-word corresponding to what
Ayas, AO	què	què
San Bonifacio, VR	che	(co)sa
Este, PD	che	cozza
Sutrio, UD	che	ce
Torino	che	cò

As shown in table 4, all dialects but Ayas' (AO) have two different lexical entries for the complement and the *wh*-word corresponding to *what*. On the basis of this observation, it seems reasonable to assume that the QPs found in these constructions are homophonous with the declarative complementizer also in those varieties where they cannot be distinguished from the *wh*-word corresponding to *what*.

At first sight, the data provided in (82) may look mildly controversial to the eyes of native Italian speakers. One may argue that in fact they do not show an additional yes/no question-marking strategy in Italian dialects. Rather, they could be instances of conjectural questions marked by dubitative subjunctive mood, which are also found in standard Italian. An example is given in (83) below:

- 83) [Suonano alla porta] Che sia Gianni?
 ring-PRES.3.Pl at-the door QP be-PRES.SUBJ.3.Sg John
 '[Somebody's ringing the bell] Will it be John?' (Squartini, 2010: 114)

These types of polar question are only uttered when the speaker makes a conjecture, based on some evidence in his/her direct environment or previously introduced in the discourse. They aren't standard requests for information and cannot be uttered out of the blue. According to the judgments of the speakers of the dialects mentioned in (81), however, this construction is not necessarily used in conjectural contexts. It is in fact very frequent. It may

be employed also when the question is a genuine request for information.

Crucially, this construction is completely absent from any Tuscan, Central and Southern varieties investigated in this study. No speakers indicated that this construction is available in their dialects, not even in conjectural contexts. Its systematic absence in Tuscan, Central and Southern dialects and its widespread occurrence in Northern

dialects strongly suggest that it should be classified as a typologically different yes/no question-marking strategy.

3.6 Interrogative intonation

After discussing all morphosyntactic devices to mark yes/no questions in Italian dialects, let us now focus on those dialects where Interrogative Intonation is the only available grammatical device.

As discussed in section 2.1.7, interrogative intonation is frequently used as a formal device to mark polar questions in the world's languages. It is classified as the second most frequent strategy in Dryer's (2005) survey, being only surpassed by QPs.

In some of the investigated varieties, interrogative intonation is the only available yes/no question-marking device. In some others, speakers can optionally choose whether to employ a morphosyntactic device or recur to intonation alone. In addition, some dialects display a mixed paradigm where the choice of the yes/no question-marking strategy depends on grammatical person. All these differences will be discussed in detail in this section.

Among the investigated dialects, Interrogative Intonation is employed as a formal yes/no question-marking device in the following:

- Abbadia Cerreto (MI), Lombardy
- Albiano (TR), Trentino
- Ayas (AO), Aosta Valley
- Carrara (MS), Tuscany
- Este (PD), Veneto
- Frabosa Soprana (CN), Piedmont
- Gatteo a mare (FC), Emilia Romagna
- Isola del Piano (PU), Marches
- Ortonovo (SP), Liguria
- San Bonifacio (VR), Veneto
- Torino, Piedmont

In the dialects of Abbadia Cerreto (MI), Carrara (MS), Gatteo a Mare (FC), Isola del Piano (PU), Ortonovo (SP), and Torino, interrogative intonation is the only available yes/no question-marking strategy. These varieties all have a full set of preverbal subject clitics.

On the contrary, the varieties spoken in Ayas (AO), Este (PD), Frabosa Soprana (CN) and San Bonifacio (VR) may optionally choose between intonation and subject clitic-verb inversion. However, optionality should not be considered a uniform and unambiguous feature of these dialects. In fact, there are specific restrictions on what can be optional in each of these dialects. For instance, interrogative intonation is in the process of becoming the only available strategy in the dialect of Ayas (AO). The other yes/no question-marking device found in this variety is subject clitic-verb inversion, but it is now perceived as obsolete by a majority of the speakers. It is only present in the production of elderly speakers and it involves all grammatical persons. Therefore, it is

not possible to conclude that the use of interrogative intonation and subject clitic-verb inversion is completely optional in the dialect of Ayas (AO). Rather, it depends on extralinguistic factors, such as the age of the speaker.

A different pattern is found in the dialects of Este (PD), Frabosa Soprana (CN) and San Bonifacio (VR). In these dialects, optionality seems to be restricted to specific persons. For these persons, it is possible to choose between interrogative intonation and a morphosyntactic device. For the other persons, only interrogative intonation is available.

Let us start our discussion with some data from the Romagnol dialect of Gatteo a Mare (FC):

- | | | |
|--------|-----------|------------------|
| 84) a. | a dorum | 'I sleep' |
| | t durum | 'you sleep' |
| | e durma | 'he sleeps' |
| | a durmem | 'we sleep' |
| | a durmei | 'you sleep' |
| | i dorma | 'they sleep' |
| b. | a dorum? | 'do I sleep?' |
| | t durum? | 'do you sleep?' |
| | e durma? | 'does he sleep?' |
| | a durmem? | 'do we sleep?' |
| | a durmei? | 'do you sleep?' |
| | i dorma? | 'do they sleep?' |

[Gatteo a Mare, FC]

As shown in (84.a-b), yes/no questions can only be marked through interrogative intonation. Although this variety has a full set of subject clitics, it does not use subject clitic-verb inversion for any person. Subject clitics appear in a preverbal position in questions, too. The paradigm is regular in that the same yes/no question-marking strategy is employed for all grammatical persons.

By contrast, the Piedmontese dialect of Frabosa Soprana (CN) exhibits a person-specific paradigm. An example is given in (85):

- | | | |
|--------|-----------|-----------------|
| 85) a. | i drøm | 'I sleep' |
| | t drømi | 'you sleep' |
| | u/a drøma | 'he/she sleeps' |
| | i drümima | 'we sleep' |
| | i drømi | 'you sleep' |
| | i drømu | 'they sleep' |

b.	i drøm?	c.	(i) drømle?	'do I sleep?'
	t drømi?		(it) drømtu?	'do you sleep?'
	u/a drøma?		(u/a) drømle?/-le?	'does he/she sleep?'
	i drümima?		i drümima?	'do we sleep?'
	i drømi?		i drømi?	'do you sleep?'
	i drømu?		(i) drømle?	'do they sleep?'

[Frabosa Soprana, CN]

First of all, the contrast between (85.b) and (85.c) shows that two strategies can be used to mark polar questions in this variety. One option is to recur to Interrogative Intonation, as shown in (85.b). In this case, the paradigm is not defective. Yes/no questions involving all grammatical persons may be marked through interrogative intonation alone. A second option involves the use of a different verbal morphology, as discussed in section 2.1.2. A morpheme that is different from the preverbal clitic attaches to the verb. However, this strategy does not apply to questions involving just any grammatical persons. As shown in (85.b), the 1st and 2nd person plural are excluded. The only possible strategy to form a polar question involving the 1st and 2nd person plural is interrogative intonation alone.

According to the judgments of my informants, there isn't any semantic difference between the paradigms in (85.b) and (85.c). The choice between one and the other strategy seems to be completely optional.

A different situation is found in the dialect of Este (PD), where interrogative intonation alternates with subject clitic-verb inversion. The data are given in the example below:

86) a.	dormo		'I sleep'
	te dormi		'you sleep'
	el dorme		'he sleeps'
	dormimo		'we sleep'
	dormite		'you sleep'
	i dorme		'they sleep'
		b.	dormo?
			te dormi?
			el dorme?
			dormimo?
			dormite?
			dorme?
		c.	dormo?
			dormi-to?
			dorme-o?
			dormimo?
			dormite?
			dorme-i?

[Este, PD]

As in the dialect of Frabosa Soprana (CN), interrogative intonation can be used to mark questions involving any grammatical persons in this variety. This is shown in (86.b). On the contrary, subject clitic-verb inversion is limited to the 2nd and 3rd person singular and to the 3rd person plural. Questions involving the 1st person singular and the 1st and 2nd person plural can only be marked through Interrogative Intonation, as shown in (86.c).

As opposed to the dialect of Frabosa Soprana, however, the choice between Interrogative Intonation and a different morphosyntactic device does not seem to be

completely optional in the dialect of Este (PD). In fact, the 1st person singular and the 1st and 2nd person plural do not display any subject clitic in the declarative paradigm in (86.a). Therefore, subject clitic-verb inversion is not expected to be available for those persons. Interrogative intonation is the only available grammatical device in these cases and seems to work as a repair strategy in the paradigm in (86.c). However, the data in (86.b) suggest that Interrogative Intonation can also function as an independent yes/no question-marking device, as it can mark a fully-fledged interrogative paradigm.

4. Discussion

In this section, the proposed typology of yes/no question-marking strategies in Italian dialects will be discussed in detail. First, the choices made in the categorization process will be made explicit. The discussion will focus on those morphosyntactic devices that pose a challenge for Dryer's (2005) typology of polar questions. Then, all strategies will be summarized and presented in order of frequency. Several maps showing the distribution of all yes/no question-marking strategies in Italian dialects will be provided in itinere. It will be shown that an additional isogloss should be added to the Massa-Senigallia line. Some final remarks concerning the origins and the possible correlations of these strategies with other features will be made. More specifically, the availability of subject clitics and the realization of non-veridicality in Italian dialects will be taken into consideration. As widely discussed in the previous sections, Dryer's (2005) typology of polar questions was taken as a starting point for classifying yes/no question-marking in Italian dialects. It was shown that all grammatical devices found in Italian dialects can be classified into one of the categories attested in the world's languages. A schematic representation of the typology proposed in the previous sections is provided in figure 3 below:

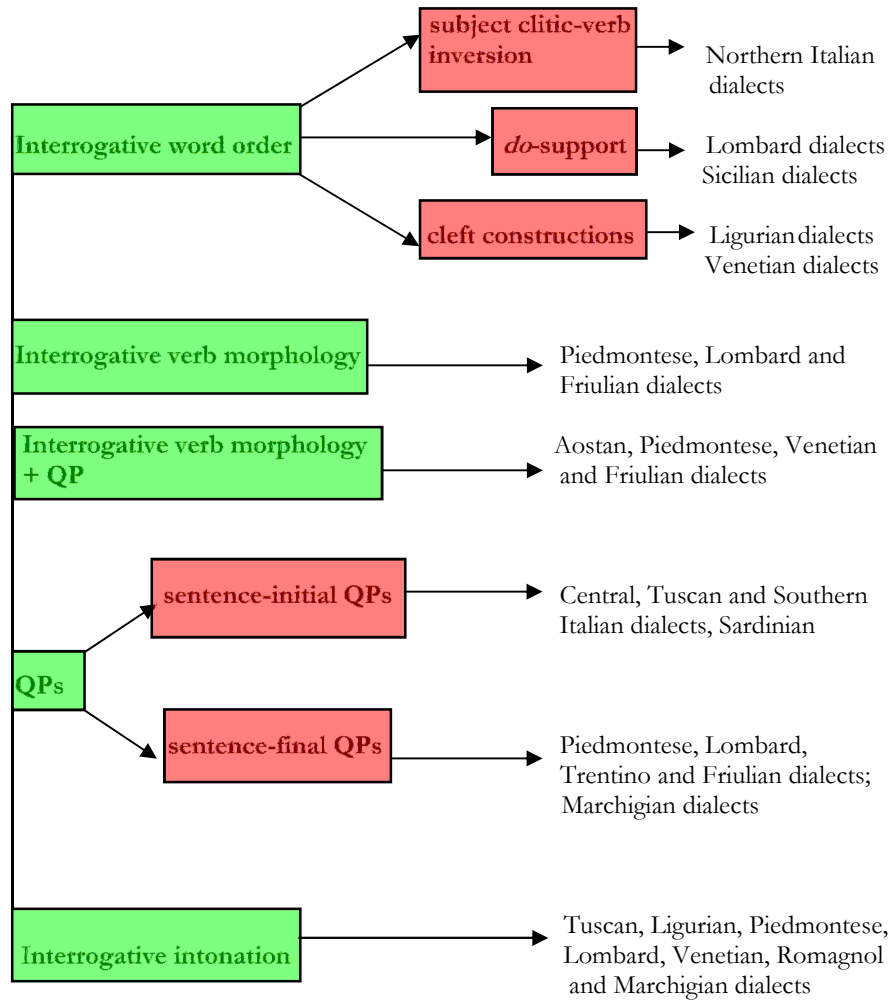


Figure 3: The typology of yes/no question-marking in the Italian dialects.

Only the two of the categories attested in the world's languages are not represented in Italian dialects. First, yes/no questions are never marked by the absence of a declarative morpheme. This follows from the fact that there are no declarative morphemes, neither in Italian dialects, nor in Standard Italian. Furthermore, there is no dialect in which yes/no questions and their corresponding declarative clauses are identical. This is not surprising, as the latter strategy is only very rarely attested in the world's languages (Dryer, 2005).

The overall categorization process, however, did not always go smoothly. Some strategies could be classified easily. This is the case of subject clitic-verb inversion,

which can be unambiguously classified into the category of interrogative word order. For some others, however, it was necessary to make a choice because their features do not tilt strongly towards a specific category among Dryer's (2005). This is the case of the following constructions:

- *do*-support in Lombard and Sicilian dialects;
- clefted polar questions in Venetian, Piedmontese and Ligurian dialects;
- *che fare/essere* questions in Tuscan, Central and Southern dialects.

The use of *do*-support could be analyzed as an instance of both interrogative verb morphology and interrogative word order. The lexical verb is realized as an infinitive, losing therefore its original morphological shape. A support verb is introduced, which realizes the features of the lexical verb. On the basis of these arguments, one may analyze *do*-support as an instance of interrogative verb morphology. However, I decided to follow Dryer's (2005) analysis of English *do*-support and include Lombard and Sicilian *do*-support in the category of interrogative word order. As in English, *do*-insertion triggers inversion with the subject:

- 87) a. It rains often there.
 b. Does it rain often there?
- 88) a. El pjøε.
 it.Subj.CL rain-PRES.3.Sg
 'It is raining.' (Manzini & Savoia, 2005:602)
- b. Fa -l pjøεr?
 do-PRES.3.Sg -it.Subj.CL rain-INF
 'Is it raining?' (Manzini & Savoia, 2005:602)

[VeZZa d'Oglio, BS]

The English declarative and interrogative paradigms reported in (87.a-b) are parallel to those of the Lombard dialect of VeZZa D'Oglio in (88.a-b). The subject occurs before the finite (lexical) verb in the declarative sentences in (87.a) and (88.a), whereas in the polar questions in (87.b) and (88.b) it appears after the finite (auxiliary) verb. The fact that the subject clitic undergoes phonological reduction and cliticizes onto the auxiliary corroborates the idea that the subject clitic actually moved to a higher position.

It is not possible to extend the same reasoning to Sicilian *do*-support. Sicilian does not have subject clitics and is a pro-drop language. As a consequence, it is hard to determine whether the subject actually moves up to a higher projection when *do*-support comes into play. In fact, there are more differences between Lombard and Sicilian *do*-support, as discussed in section 3.2.2. However, Sicilian *do*-support was classified as an instance of interrogative word order by analogy with the Lombard and English data.

Another problematic case is provided by clefted polar questions, as found in some Venetian, Piedmontese and Ligurian dialects. The example in (53.a) is repeated below as (89.b):

- 89) a. Te ghe comprà el pan.
 you.Subj.CL have-PRES.2.Sg buy-PP the bread
 ‘You bought bread.’
- b. Sé el pan che te ghe buy-PP
 be-PRES.3.Sg the bread that you.Subj.CL have-PRES.2.Sg comprà?
 ‘Is it bread that you bought?/Did you buy bread?/You bought bread, right?’
 [Este, PD]

As with Lombard and Sicilian *do*-support, clefted polar questions are difficult to fit into Dryer’s (2005) typology. They could be treated as an instance of interrogative verbal morphology, given that the verb displays a different mood feature in the interrogative paradigm. Nevertheless, it seems more reasonable to analyze them as a case of interrogative word order. They are still different from questions with simple subject clitic-verb inversion in that their structure is biclausal, as opposed to their corresponding declaratives. At the same time, however, it is clear that the object moved to some higher projection in a sentence like (89.b), yielding a different word order from (89.a). This follows from the fact that a relativization process took place, triggering movement of the object. For this reason, clefted polar questions are treated as instances of interrogative word order in this study.

Finally, a few words should be spent on the most problematic yes/no question-marking device found in Italian dialects: *che fare/essere* questions (and their variants) in Tuscan, Central and Southern Italian dialects. As shown in section 3.4.1, all dialects where yes/no questions can be marked by a sentence-initial QP homophonous with the *wh*-word corresponding to *what* also allow this QP to be followed by a finite form of the verb *fare* and/or *essere*¹⁶. As discussed earlier, this verb may or may not share the phi- and tense-features of the lexical verb. An example illustrating the two different patterns is provided below.

- 90) a. Chi fa chianci?
 QP do-PRES.3.Sg cry-PRES.2.Sg
 ‘Are you crying?’
 [Serradifalco, CL]
- b. Che fai piangi?
 QP do-PRES.2.Sg cry-PRES.2.Sg
 ‘Are you crying?’
 [Siena]

¹⁶ The only exceptions are the dialect of Isola del Piano (PU) and Ancona, where both the QP and the verb must be present in order for the question to be grammatical (see the discussion in 3.4.1).

Sentences such as (90.a), where *fare* does not share the features of the lexical verb, can be easily classified as polar questions introduced by a sentence-initial QP. This is motivated by the fact that *fare* is invariable, as it always occurs in the 3rd person singular, present form. Further, nothing can occur between *chi* and *fa*. Therefore, *chi* and *fa* can be interpreted as a single QP that results from the reanalysis of a wh-element and a verb. As regular QPs, it is invariant, immobile, it cannot be modified, it only appears in matrix questions and has a lexical counterpart to which it is clearly historically related. Some additional evidence for the idea that *chi* and *fa* should be analyzed a single head comes from its spelling in contemporary written texts, both formal and informal. In fact, *chi* and *fa* are always spelled as a single word: *chiffà*¹⁷. Here are a few examples taken from the internet:

- 91) a. Chiffà pigghi po' culu?
 QP take-PRES.2.Sg for-the bottom
 'Are you kidding me?' (scrittorepersempre.forumfree.it/?t=60566167)
- b. Chiffà nun lu sapiti ca nascì
 QP neg it-Obj.CL know-PRES.2.Pl that be.born-PAST.3.Sg
 Gesù?
 Jesus
 'Don't you know that Jesus was born?'
 (<http://www.clesio.net/clipes/VINTI/>)
- c. Chiffà ci fusti?
 QP there.CL be-PAST.3.Sg
 'Did you go there?' [Leone, 1995: 61]

[Sicilian]

By contrast, sentences such as (90.b) pose a challenge for a typological classification of polar questions such as the one proposed by e.g. Dryer (2005). There is no category in Dryer's (2005) classification that can properly represent *che fare* questions when *fare* shares the same features of the lexical verb. No changes in the word order are involved, nor can be argued that they are an instance of interrogative verb morphology. At the same time, it is also problematic to fit them in the category of QPs because *fare* is not invariant, as its features depend on the features realized on the lexical verb. In fact, most of the canonical properties of QPs, as proposed by e.g. Biberauer & Sheehan (2011b), do not seem to apply to *che fare*. However, the syntax and semantics of this construction suggest that the most appropriate category is indeed that of QPs, if a label has to be chosen among the existing ones. Since this construction is hard to frame and

¹⁷ The consonant *f* geminates as a result of *Raddoppiamento Fonosintattico*. In fact, *Raddoppiamento Fonosintattico* between *che/chi* and *fare* always takes place in all Central and Southern dialects that display this construction. In the present study, it is only marked in the Sicilian data. Although there are no official spelling conventions for Sicilian, native speakers tend to write *chi* and *fa* as a single word and mark the gemination of the consonant *f*. I decided to follow this unwritten convention in the present study.

exceptional in many respects, a detailed discussion of its properties and underlying structure will be provided in chapter 3.

Do-support and clefts are also difficult to fit into Dryer's typology, but it is still possible to find a proper motivation to fit them into the category of interrogative word order. As discussed earlier in this section, relativization movement in clefts, and subject clitic-inversion in questions with *do*-support yield a word order that is different from the corresponding declaratives.

Let us now summarize the results and implications of the typology of polar questions in Italian dialects as proposed in the present section. The categories of strategies employed in Italian dialects to mark yes/no questions (in order of frequency) are listed below:

- QP;
- Interrogative intonation;
- Interrogative word order;
- Interrogative verb morphology + QP;
- Interrogative verb morphology.

The use of QPs is the most frequent yes/no question-marking device employed in Italian dialects. Different types of QPs are present in Northern, Tuscan, Central and Southern dialects.

The data presented in this chapter strongly suggests that a further isogloss should be added to the series of isoglosses marked by the Massa-Senigallia line. In all investigated dialects that are spoken below this line, polar questions can be introduced by a sentence-initial QP that is homophonous with the *wh*-word *what*. Despite the high degree of microvariation in the syntax (possibility for the QP to be followed by a form of the verb *fare/essere*) and the semantics (absence/presence of a specific semantic contribution of the QP) of these constructions, this pattern is very consistent across all Tuscan, Central and Southern dialects.

As far as the origins of this QP are concerned, it is likely to have developed from the Latin *wh*-word *quid* 'what'. In fact, *quid* appeared very frequently before yes/no questions in the production of both classical Latin writers, such as Cicero, and post-classical writers, such as Petronius. Some examples from these writers are given below:

- 92) a. Quid? Hoc plinius egissem, si ita
 what this more.openly do-PRES.SUBJ.1.Sg if so
 narrassem?
 tell-PRES.SUBJ.1.Sg
 'What? Could I have done this more openly, if I had told it in this way?'
 (Cicero, *In Verrem*:1, 10, 27)

- b. Quid? Illa, Caecili, contemnenda -ne
 What these Caecilius-VOC condemn-PRES.GER -QP
 tibi uidentur esse?
 to.you.CL seem-PRES.3.Pl be-INF
 ‘What? Do these things, Caecilius, seem worthy of condemnation to you?’
 (Cicero, *Divinatio in Caecilium*:35)
- c. Quid? Ego, inquit, non sum dignus qui
 what I ask-PRES.3.Sg neg be-PRES.1.Sg worthy that
 bibam?
 drink-PRES.SUBJ.1.Sg
 ‘What? Don’t I - he said - get to have a drink?’ (Petronius, *Satyricon* 20:5, 6)
 [Brown, Joseph and Wallace, 2009: 501]

As shown in (92.b), *quid* can occur before polar questions that are marked by the QP -*ne*. It also occurs before polar questions that are only marked through interrogative intonation, as shown in (92.a) and (92.c). As far as its semantic contribution is concerned, *quid* is often associated with deliberative, rhetorical and echo-questions, although this is not always the case.

As pointed out by Brown, Joseph and Wallace (2009), the standard punctuation used in Latin texts suggests that *quid* was interpreted as a distinct phrasal unit. However, they argue that this may not always have been the case. For instance, they take the position of the vocative *Caecili* and the QP -*ne* in the sentence in (92.b) to suggest that *quid* and *illa* should be interpreted as a singular prosodic unit. Whether QPs that are homophonous with the *wh*-word *what* actually derive from Latin *quid* is debatable. Still, *quid* remains the best candidate to account for the massive presence of *what*-like QPs in Tuscan, Central and Southern dialects from a diachronic point of view.

Another QP that is likely to have developed from a *wh*-element is Calabrian *ca*. According to Rohlf's (1969), *ca* derives from the Latin *wh*-element *quia* ‘why’. A similar origin should be attributed to Marchigian sentence-final QP *perché*, which is homophonous with the Italian word corresponding to *why*.

All QPs derived from a *wh*-element are found below the Massa-Senigallia line. However, the reverse is not always true. Not all QPs found below the Massa-Senigallia line are derived from a *wh*-element. This is the case of Tuscan *o*, which probably developed from the homophonous exclusive alternative operator *o* (Rohlf's, 1969). A similar origin is attributed to Sardinian *a*, which likely derives from the Latin exclusive alternative operator *aut* (Rohlf's, 1969). Crosslinguistically, exclusive alternative operators are in fact a very common source for sentence-initial QPs (Bencini, 2003). Despite their common origin, QPs such as *ca/perché* on the one hand, and *o/aut* on the other hand, have different morphological shapes. This suggests that they underwent a process of reanalysis and entered the language at different historical stages.

A different case is provided by the QP *po/pa*, which is found in many Piedmontese, Lombard, Trentino and Friulian dialects. As pointed out by Pellegrini (1972), this QP probably originated from the Latin adverb *post* ‘then, afterwards’ and developed into a focus marker. Eventually, it became an obligatory QP in several dialects. In some dialects, however, it still works as a focus marker rather than as a QP proper (cf. Hack, 2010).

A map showing the distribution of QPs in Italian dialects is provided in figure 4. Both data from the existing literature and from my own fieldwork studies are included. QPs derived from a *wh*-element are marked by a triangle. This group includes *che* (*fare/essere*) questions (and their variants) in Tuscan, Central and Southern dialects, as well as Marchigian *perché*-questions and Calabrian *ca*-questions. By contrast, QPs that do not derive from *wh*-elements are marked by a circle. This group includes Piedmontese, Lombard, Trentino and Friulian *po/pa*, Sardinian *a* and Tuscan *o*.



Figure 4: Distribution of QPs in Italian dialects.

- = QPs that do not derive from *wh*-elements
- ▲ = QPs that derive from *wh*-elements

1. Albiano (TR), Trentino ●
2. Ancona, Marche ▲
3. Arielli (CH), Abruzzo ▲
4. Bari, Apulia ▲
5. Castro dei Volsci (FR), Lazio ▲

6. Catanzaro, Calabria ▲
7. Civitella in Valdichiana (AR), Tuscany ▲
8. Cosenza, Calabria ▲
9. Dorgali (NU), Sardinia ▲
10. Falconara Marittima (AN) ▲
11. Florence, Tuscany ●▲
12. Francavilla Fontana (BR), Apulia ▲
13. Grumello (BS), Lombardy ●
14. Isola del Piano (PU), Marches ▲
15. Mussomeli (CL), Sicily ▲
16. Martano (LE), Apulia ▲
17. Nuoro (NU), Sardinia ●
18. Pizzoli (AQ), Abruzzo ▲
19. Ponticelli (NA), Campania ▲
20. Quarto (NA), Campania ▲
21. Rome, Lazio ▲
22. Selva Val Gardena (BZ), Trentino ●
23. Serradifalco (CL), Sicily ▲
24. Siena, Tuscany ●▲
25. Soleto (LE), Apulia ▲
26. Squinzano (LE), Apulia ▲
27. Trivento (CB), Molise ▲

As discussed in section 3.6, the second most frequent yes/no question-marking strategy in the investigated dialects is interrogative intonation. It was shown that all dialects where interrogative intonation is the only available yes/no question-marking strategy have a full set of subject clitics. These are the dialects spoken in Abbadia Cerreto (MI), Carrara (MS), Gatteo a Mare (FC), Isola del Piano (PU), Ortonovo (SP) and Torino. Although subject clitic-verb inversion is not available in these dialects, it is very widespread in many neighboring varieties, and it is largely attested in many old texts from closely-related linguistic areas (cf. Poletto, 1993; Murelli, 2006; Polo, 2007). In addition, it was shown that some dialects can optionally choose between subject clitic-verb inversion and Interrogative Intonation alone (for a discussion of optionality in this respect see the discussion in 1.2.6). These are the dialects spoken in Ayas (AO), Este (PD), Frabosa Soprana (CN) and San Bonifacio (VR). Also these dialects have subject clitics, although not all of them display a full set thereof. Evidence from both speakers' judgments¹⁸, comparisons with neighboring varieties, and diachronic data corroborates the idea that subject clitic-verb inversion is a more archaic strategy than intonation alone. This is in line with what has been argued by, among others, Poletto (1993) and Polo (2007) for Venetian and Murelli (2006) for Lombard dialects.

All Tuscan, Central and Southern dialects, which lack subject clitics, may employ recur to some morphosyntactic device in addition to interrogative intonation alone. This

¹⁸ As mentioned in 3.6, speakers of the dialect of Ayas pointed out that subject clitic-verb inversion is in principle possible, although it sounds extremely obsolete. Interrogative intonation alone is largely preferred by non-elderly speakers.

suggests that there might be a correlation between the availability of subject clitic-verb inversion and the absence of morphosyntactic yes/no question-marking devices.

A geographical representation of the varieties that mark polar questions through interrogative intonation alone is provided in figure 5. Both the varieties that may only recur to intonation for all grammatical persons, as well as the varieties that display optionality and/or a defective paradigm are included.



Figure 5: Distribution of the varieties that mark polar questions through interrogative intonation alone.

1. Abbadia Cerreto (MI), Lombardy
2. Albiano (TR), Trentino
3. Ayas (AO), Aosta Valley
4. Carrara (MS), Tuscany
5. Este (PD), Veneto
6. Frabosa Soprana (CN), Piedmont
7. Gatteo a mare (FC), Emilia Romagna
8. Isola del Piano (PU), Marches
9. Ortonovo (SP), Liguria

10. San Bonifacio (VR), Veneto
 11. Torino, Piedmont

The third most frequent yes/no question-marking device in the dialects investigated in this study involves the use of interrogative word order. As discussed in section 2.1, there are three constructions that may be classified in the category of interrogative word order: questions with subject clitic-verb inversion, questions with *do*-support and clefted polar questions. Minimal pairs showing each interrogative type and the corresponding declarative clause are shown below. The declarative form is shown in the examples in (a), while the interrogative form is shown in the examples in (b).

- 93) a. I dormirà.
 they.Subj.CL sleep-FUT.3.PL
 ‘They will sleep’.
- b. Dormirà -i?
 sleep-FUT.3.PL -they.Subj.CL
 ‘Will they sleep?’

[Bergamo: subject clitic-verb inversion]

- 94) a. El plöf.
 it.Subj.CL rain-PRES.3.Sg
 ‘It is raining’.
- b. Fa -l plöer?
 do-PRES.3.Sg -it.Subj.CL rain-INF
 ‘Is it raining?’ (Benincà & Poletto, 1998: 41)

[Monno, BS: *do*-support]

- 95) a. Te ghe comprà el pan.
 you.Subj.CL have-PRES.2.Sg buy-PP the bread
 ‘You bought bread’.
- b. Sé el pan che te ghe
 be-PRES.3.Sg the bread that you.Subj.CL have-PRES.2.Sg
 comprà?
 buy-PP
 ‘Did you buy bread?’

[Este, PD: cleft structure]

As introduced in section 2.1.4, yes/no question-marking strategies involving interrogative word order are not very common in the world’s languages (Dryer, 2005). They are frequent in Germanic, but rare from a typological point of view. Similar considerations can be made with respect to Italian dialects. In fact, interrogative word order is only found in a subgroup of Northern Italian dialects above the Massa-Senigallia line. As far as subject clitic-verb inversion is concerned, the data show that it

is losing ground in favor of interrogative intonation alone. This might be due to the influence of Standard Italian. The origins of this construction are certainly to be found in the influence of Germanic languages, which make massive use of inversion to mark polar questions.

A second strategy that was classified into the category of interrogative word order is *do*-support. English-style *do*-support is a typologically rare yes/no question-marking strategy in the world's languages. It is typically found in Germanic. Surprisingly, it is also employed in a well-delimited Alpine area in Lombardy, which includes the villages of Malonno (Benincà & Poletto, 1998), Monno (Benincà & Poletto, 1998), Incudine (Manzini & Savoia, 2005) and Vezza D'Oglio (Manzini & Savoia, 2005) in the Province of Brescia. As pointed out by Benincà & Poletto (1998), this is probably due to the influence of Swiss Germanic dialects, in combination with the geographical isolation of this area. All these villages could only be reached on foot until 1963. In addition, they are close to an ancient route that connected the city of Brescia with Romansch Switzerland.

In addition to Lombardy, *do*-support is also found in some Sicilian dialects, such as those of Cefalù (PA) and Pollina (PA) (Mirto, 2009). However, there is a fundamental difference between Lombard and Sicilian *do*-support. Whereas Lombard *do*-support patterns with English, in that it only appears in questions, Sicilian *do*-support patterns with German dialects, in that it is optional in both interrogatives and declaratives. The origins of this strategy are not easily identifiable, given the geographical distance that separates Sicily from the Germanic-speaking world. However, influence from Germanic varieties cannot be excluded.

Finally, the last strategy classified into the category of interrogative word order involves the use of clefted polar questions. As discussed in 3.2.3, clefted polar questions are relatively productive in a number of Northern Italian Dialects. Although they are not always interpreted as standard polar questions in these varieties, it is still worth to point out that they are completely absent from any Central and Southern dialects¹⁹.

All yes/no question-marking strategies found in Italian dialects that involve an interrogative word order are shown in figure 6. Different icons are used to signal subject-clitic verb inversion, *do*-support and clefted polar questions.

¹⁹ In fact, the dislocated constituent is often focalized in clefted polar questions in these dialects, in a similar fashion to Sardinian and Sicilian questions involving Focus Fronting (see the discussion in section 3.2). As opposed to Sardinian and Sicilian questions involving Focus Fronting, however, this strategy does not always imply focalization of the dislocated constituent. For this reason, it is classified as a yes/no question-marking strategy proper in the present study.



Figure 6: Distribution of yes/no question-marking strategies involving interrogative word order.

■ = subject clitic-verb inversion

▲ = *do*-support

● = clefted polar questions

1. Albiano (TR), Trentino ■
2. Bergamo, Lombardy; ■
3. Cefalù (PA), Sicily ▲
4. Este (PD), Veneto; ■●
5. Monno (BS), Lombardy ▲
6. Ortonovo (SP), Liguria ●
7. San Bonifacio (VR), Veneto; ■●
8. Sutrio (UD), Friuli. ■

One of the least common yes/no question-marking strategies in the investigated dialects involves the use of a QP in combination with interrogative verbal morphology. As discussed in section 3.5, some Northern dialects can mark polar questions through a QP that is homophonous with the complementizer, followed by a subjunctive verb (see section 3.5 for a discussion of the semantics of these questions). This construction

reminds of the Standard Italian dubitative subjunctive, but it is not necessarily restricted to the same contexts. It is worth mentioning that it in these dialects is relatively productive, whereas it is completely absent from any Northern and Southern dialects. A map showing its distribution in the investigated dialects is provided in figure 7.



Figure 7: Distribution of the dialects that mark yes/no questions through a combination of QP and interrogative verb morphology.

1. Ayas (AO), Aosta Valley
2. San Bonifacio (VR), Veneto
3. Este (PD), Veneto
4. Sutrio (UD), Friuli
5. Torino, Piedmont

Finally, the least common strategy for marking yes/no questions in the investigated dialects involves the use of interrogative verbal morphology. As discussed in 3.3, some Northern dialects mark polar questions through an interrogative affix that attaches to the verb. This affix co-occurs with subject clitics, which maintain their preverbal position in interrogatives too. A map showing the distribution of the dialects that employ this strategy is provided in figure 8.



Figure 8: Distribution of the dialects that mark polar questions through interrogative verb morphology.

1. Bergamo, Lombardy;
2. Sutrio (UD), Friuli;
3. Frabosa Soprana (CN), Piedmont.

This construction is only found in a subgroup of Northern Italian dialects that have a full set of subject clitics but do not use subject-clitic verb inversion in polar questions. It is never found in dialects that lack subject clitics. None of the dialects reported in figure 8, however, display a full interrogative paradigm marked by interrogative verb morphology. As discussed in section 1.2.3, only some grammatical persons are marked through interrogative verb morphology in these dialects. The dialect of Sutrio (UD), for instance, only marks the 1st person singular and all plural persons through interrogative verb morphology. Questions involving the remaining grammatical persons are marked through subject clitic-verb inversion.

- b. Ti vess -jo dit la veretà!
 to-you.CL have-PAST.1.Sg -I.Subj.CL said the truth
 ‘If only I had told you the truth!’ (Benincà, 1989 in Munaro, 2001:158)
 [Friulian: Optative sentence]
- c. No mi toci -al di pajà
 what to.me-CL force-PRES.3.Sg -it.Subj.CL to pay-INF
 la multe!!
 the fine
 ‘I even have to pay the fine!!’ (Benincà, 1989 in Munaro, 2001:158)
 [Friulian: sentence with negative presupposition]

Similar cases of inversion have been analyzed as instances of raising of the auxiliary verb to the Comp head by Rizzi (1982). A comparable analysis was proposed by Poletto (2000), according to which the auxiliary verb raises to a low head position in the CP field in order to check a [-realis] feature.

Interestingly, there seems to be a similar requirement about marking non-veridical contexts also in Central and Southern dialects. As amply discussed, the most widespread yes/no question-marking device in Central and Southern dialects involves the use of a sentence-initial particle homophonous with the *wh*-word corresponding to *what*. In these dialects, a sentence-initial QP homophonous with the *wh*-word *what* or the complementizer²⁰ is merged in optative, hypothetical, disjunctive, concessive, exhortative and desiderative contexts. Also sentences that come with a specific presupposition may share the same syntactic behavior. One example is provided by the sentences that contain a negation and express the speaker’s negative presupposition with respect to the propositional content. The data are given below:

- 97) a. Cə stèv chiù attind, non avess
 COMPL stay-PAST.3.Sg more careful neg have-PAST.2.Sg
 arrvat a stu pund.
 come-PP to this point
 ‘If he had been more careful, he wouldn’t have reached this point’.
 [Barese: Conditional sentence]

²⁰ Complementizers tend to occur more often than *wh*-elements in these contexts. In some dialects, such as the Abruzzese dialect of Arielli (CH), both the *wh*-element corresponding to *what* and the declarative complementizer can be employed. However, they yield a different semantic interpretation of the sentence:

- a. Ca nin chischel
 COMPL neg fall-PRES.2.Sg
 ‘Don’t worry, you are not going to fall!’
- b. Chi nin chischel
 WH neg fall-PRES.2.Sg
 ‘Be careful that you don’t fall!’

- b. Cə scev pur Giorg!
 COMPL go-PAST.3Sg also George
 'If only George had come too!'
[Barese: Optative sentence]
- c. Ca nin chische!
 COMPL neg fall-PRES.2.Sg
 'Don't worry; you are not going to fall!'
[Abruzzese: sentence with negative presupposition]

The striking parallelism between the data in (96) and those in (97) suggests that these dialects may mark veridicality or the absence thereof rather than clause type. In light of Poletto's (2000) proposal, we could hypothesize that a projection in the CP field hosts a [-realis] feature in non-veridical contexts in these dialects. This feature needs to be deleted before everything is sent to Spell-out. Internal merge, i.e. movement of the verb to a low head position in the CP field satisfies this requirement in the Northern dialects that have inversion. In a similar fashion, external merge of a particle satisfies this requirement in Central and Southern dialects. Dialects that lack a [-realis] feature do not need to satisfy this requirement, hence no internal or external merge comes into play.

As a matter of fact, no dedicated morphosyntactic device could be found in the Italian dialects that is exclusively employed in polar questions, neither in the literature nor in the data collected in this study. Only interrogative intonation seems to be specific to polar questions. All morphosyntactic devices that mark polar interrogatives are also employed in other non-veridical contexts, in addition to yes/no questions. A thorough investigation of the morphosyntactic realization of veridicality (or the absence thereof) in Italian dialects would be needed to shed some light on this issue. This falls outside the scope of the present work.

For the time being, however, it is worth to point out that some data from Standard Germanic display an interesting parallelism with Italian dialects. In English and German, for instance, Interrogative inversion may be used in a number of non-veridical contexts in addition to polar questions. The most common crosslinguistically are conditional, optative and concessive clauses (cf. Roberts, 1992; Grosz, 2011; Iatridou & Embick, 1993). Some examples are given below:

- 98) a. Komt Hans dann geht Susanne.
 come-PRES.3.Sg Hans then go-PRES.3.Sg Susanne
 'If Hans comes, Susanne goes'. (Iatridou & Embick, 1993:190)
[German: Conditional sentence]
- b. Had he said that he liked artichokes... (Iatridou & Embick, 1993:190)
[English: Conditional sentence]

As a final remark, the data discussed throughout the present section are not taken to indicate that syntactic marking of veridicality is a property of Italian dialects or of language in general. However, they suggest that more research is needed to establish whether this might actually be the case.

5. Summary and conclusions

The aim of this chapter was twofold: first, to provide a typological overview of yes/no question-marking in Italian dialects. Further, to investigate whether the yes/no question-marking strategies found in Italian dialects can fit into a broader typology of polar questions as proposed by Ultan (1978), Sadock & Zwicky (1985) and Dryer (2005).

First, all yes/no question-marking strategies available the world's languages were presented according to Dryer's (2005) categorization. It was shown that they can be reduced to eight main categories:

- QP;
- Interrogative intonation;
- Interrogative verb morphology;
- QP + interrogative verb morphology;
- Interrogative word order;
- Disjunction;
- Absence of interrogative morpheme;
- No distinction between declarative and yes/no question.

The discussion was eventually narrowed down to Romance languages. It was shown that only a few grammatical yes/no question-marking devices among those attested in the world's languages are available in the major Romance languages. The most widespread grammatical strategy in Romance is interrogative intonation. Most Romance languages may use a sentence-initial QP in addition to Interrogative Intonation, as opposed to Standard Italian. French represents an exception to this pattern, being the only Romance language that may recur to interrogative word order to mark polar questions. The fact that inversion is only found in French among the major Romance languages suggests that it may be due to the influence of Germanic.

An overview is given in table 1, repeated below as table 5:

Table 5: Overview of the yes/no marking-strategies employed in the major Romance languages.

Language	Yes/no question-marking strategy
Italian	Interrogative intonation
French	Interrogative intonation, sentence-initial QP, interrogative word order
Portuguese	Interrogative intonation, sentence-initial QP
Spanish	Interrogative intonation, sentence-initial QP
Catalan	Interrogative intonation, sentence-initial QP
Romanian	Interrogative intonation, sentence-initial QP

The availability of yes/no question-marking strategies in Romance is not remarkable if compared to the variety yes/no question-marking strategies found in the world's languages. Whereas six morphosyntactic devices are found in the world's languages in addition to intonation, Standard Romance languages only display two. This picture contrasts sharply with the situation found in Latin, where a very articulated system of QPs was used in addition to interrogative verb morphology and intonation. An even sharper contrast is provided by the comparison of Italian dialectal data with Standard Italian on the one hand, and with the world's languages on the other hand. As amply discussed in the previous sections, Standard Italian does not show an important typological variation in yes/no question-marking. Only Interrogative Intonation distinguishes polar questions from the corresponding declaratives. As opposed to Standard Italian, Italian dialects display an unexpectedly high degree of typological variation in yes/no question-marking. Five of the eight grammatical strategies available in the world's languages are represented in Italian dialects:

- QP;
- Interrogative intonation;
- Interrogative word order;
- Interrogative verb morphology + QP;
- Interrogative verb morphology.

The typological variation within these languages is surprising considering their close relatedness. This confirms once again the importance of Italian dialects as a fertile field to explore language diversity in all its aspects.

However, the profusion of linguistically diverse data found in Italian dialects may sometimes be hard to fit into an established grammatical model. With respect to yes/no question-marking, it was necessary to make some specific choices to fit all strategies into one of Dryer's (2005) category. In fact, at least three of the morphosyntactic yes/no question-marking devices found in Italian dialects pose a challenge for standard typological classifications such as the one proposed by e.g. Dryer (2005):

- *do*-support in Lombard and Sicilian dialects;
- clefted polar questions in Venetian, Piedmontese and Ligurian dialects;
- *che fare/essere* questions in Tuscan, Central and Southern dialects.

Although *do*-support and clefted questions may look problematic at first sight, it is still possible to fit them into the category of interrogative word order for a number of reasons (see the discussion in 1.2.7).

This is not so for *che fare/essere* questions. As discussed in section 3.4.1, it is possible to classify these constructions as being headed by a sentence-initial QP when *fare/essere* is invariable. This is the case of Sicilian and many other Southern dialects. When *fare*²¹ shares the phi- and tense features of the lexical verb, however, it is not possible to claim

²¹ *Essere* always occurs in the 3rd person singular form, disregarding the features of the lexical verb. Therefore, *che* and *essere* can always be interpreted as a single QP, similarly to *est-ce que* in French polar questions.

that *che* and *fare* form a unit and should be analyzed as a single QP. This is the case of Sienese and many other Tuscan and Central dialects. In order to shed some light on the syntax of these typologically exceptional constructions, a detailed analysis of their syntactic properties will be provided in chapter 3.

Two research questions were raised in the introduction. First, whether there is a correlation between the frequency and distribution of the yes/no question-marking strategies found in Italian dialects and other parameters. This question was partially tackled in the discussion in 4. It was shown that if a dialect has subject clitics, then the most common available yes/no question-marking strategies are interrogative inversion or intonation alone. In a subgroup of these dialects, it is possible to use a different verb morphology and /or verb morphology in combination with a QP. Crucially, no sentence-initial QPs are found in any dialect spoken above the Massa-Senigallia line, i.e. in any dialect that has subject clitics. Vice versa, strategies such as interrogative inversion, verb morphology and verb morphology in combination with a QP are never found in any dialect spoken below the Massa-Senigallia line, i.e. in any dialects that lack subject clitics. In all Tuscan, Central and Southern dialects, polar questions can be introduced by a sentence-initial QP homophonous with the *wh*-word corresponding to *what*.

Second, there was the question of what the typological set-up of yes/no question-marking strategies in Italian dialects can tell us about the structure of natural language. As discussed in section 4, the data presented in this chapter seem to suggest that there might be more to yes/no question-marking than what is traditionally assumed. It was shown that most morphological yes/no question-marking devices found in Italian dialects are commonly employed in many other non-veridical contexts. A parallelism was drawn between interrogative inversion in Northern dialects, and the placement of sentence-initial QPs in Central and Southern dialects. Although many differences make this parallelism imperfect, it is striking to notice that the same non-veridical contexts are marked by these two strategies in different dialects. This may be taken to suggest that what we see in Italian dialects is a syntactic expression of veridicality (or the absence thereof), rather than of sentence type. I leave it to future research to establish whether this may be a property of Italian dialects or of language in general.

1. Introduction

As discussed in chapter 2, some yes/no question-marking devices found in Italian dialects pose a challenge for typological classifications à la Dryer (2005). More specifically, it was shown that Tuscan, Central and Southern *che fare* questions are hard to fit into a specific typological category. Their interpretation suggests that they should be analyzed as polar questions headed by a sentence-initial QP. However, the fact that *fare* may share the features of the lexical verb shows that we are not dealing with a single, invariable QP. The aim of this chapter is to provide a detailed description of the syntax and of yes/no questions in Sienese (and related Central and Southern varieties) and to account for their underlying structure from a theoretical perspective. A previously undiscussed set of data will be presented, following up on other accounts of yes/no question-marking strategies in other Central and Southern Italian dialects (cf. Rohlf, 1969; Poletto & Vanelli, 1995; Obenauer, 2004; Damonte & Garzonio, 2008, 2009; Cruschina, 2008) as well as in other Romance varieties (Ronjat, 1913; Bouzet, 1951; Wheeler, 1988; Campos, 1992; Prieto & Rigau, 2005, 2007).

As shown in chapter 2, yes/no questions are introduced by *che* in Sienese, as opposed to Standard Italian. *Che* is homophonous with the *wh*-word corresponding to *what*. An example is given in (1.a). Furthermore, *che* can optionally be followed by a finite form of the verb *fare* ‘do’, as shown in (1.b):

- 1) a. Che andasti al mare?
 che go-PAST.2.Sg to-the sea
 ‘Did you go to the sea?’
- b. Che facesti andasti al mare?
 che do-PAST.2.Sg go-PAST.2.Sg to-the sea
 ‘Did you go to the sea?’

[Sienese]

A similar pattern is found in Sicilian and in many other Central and Southern Italian dialects (Cruschina, 2008), as opposed to in Northern Italian dialects. Some examples from Southern, Central and Northern Italian dialects are given in (2) and (3):

- 2) a. Ci (è) steve a chiove?
 ci be-PRES.3.Sg stay-PAST.3.Sg to rain-INF
 ‘Was it raining?’ (Andriani, p.c.)

[Barese]

- b. Che (fa) ci si jite a the
che do-PRES.3.Sg there.CL be-PRES.2.Sg go-PP to lu
 mare?
 sea
 ‘Did you go to the sea?’ (D’Alessandro, p.c.)

[Abruzzese]

- 3) a. Varde -lo?
 look-PRES.3.Sg he.Subj.CL
 ‘Is he looking?’ (Munaro, 2001:154)

[Bellunese]

- b. Magne -li?
 eat-PRES.3.Pl they.Subj.CL
 ‘Are they eating?’ (Munaro, 2001:155)

[Paduan]

The aim of this chapter is to provide a detailed description of the syntax and of yes/no questions in Sienese and to account for their underlying structure from a theoretical perspective.

At this point, some preliminary considerations need to be made before getting to the details. Many recent works on the syntax of Italian Dialects have focused on the role played by some particles in the Left Periphery of the clause in the semantic interpretation of questions (cf. Poletto and Munaro, 2002; Obenauer, 2004; Garzonio, 2004; Damonte & Garzonio, 2009; Garzonio & Obenauer, 2010; Garzonio, 2010).

Obenauer (2004) proposes a typology of *Special Questions*, which are characterized by two main aspects; namely, they are always introduced by some particle in the Left Periphery and they do not have an interrogative illocutive force proper. According to Damonte & Garzonio (2009), Garzonio & Obenauer (2010), and Garzonio (2010), Florentine yes/no questions introduced by *che* fall under the typology proposed in Obenauer (2004).

In light of the recent and ongoing studies just presented, it is necessary to stress that no special interpretation is associated with *che fare* questions. The verb *fare* does not make any additional semantic contribution to the interpretation of the yes/no question in Sienese, nor does *che*. As far as their semantics is concerned, they are just standard yes/no questions, which do not fall under the proposed typology of Special Questions. The same is true for Sicilian yes/no interrogative constructions analyzed by Cruschina (2008).

The chapter is organized as follows: in section 1, the basic Sienese data will be discussed. Other Central and Southern dialects will also be illustrated there, with special reference to Sicilian. An analysis of the syntactic properties of Sienese yes/no questions follows in section 2. Sienese yes/no interrogative constructions seem to involve a biclausal discourse containing two questions. A minimal pair of a yes/no question and the corresponding biclausal discourse is given in (4.a-b):

- 4) a. Che fai piangi?
che do-PRES.2.Sg cry-PRES.2.Sg
 ‘Are you crying?’

- b. Che fai? Piangi?
 what do-PRES.2.Sg cry-PRES.2.Sg
 ‘What are you doing? Are you crying?’

[Sieneſe]

On the baſis of proſodic and ſyntactic evidence it is ſhown that this is not the caſe. Section 3 is dedicated to an in-depth diſcuſſion of the agreement relations that characterize Sieneſe yeſ/no queſtions and their relevance for Syntactic theory. Tene, Mood and Aſpect feature-sharing is alſo diſcuſſed in detail. Finally, ſection 4 explores a hypothesis aſ to how the ſyntactic ſtructure of yeſ/no queſtions developed diachronically over time in Sieneſe and poſſibly in other Central and Southern Italian dialects. Section 5 preſents the concluſions.

2. The baſic data

As diſcuſſed in chapter 1, yeſ/no queſtions are introduced by *che* in Sieneſe, which can be optionally followed by a finite form of the verb *fare* ‘do’. An example is given in (5.a-b), :

- 5) a. Che partisti ieri?
 che leave-PAST.2.Sg yesterday
 ‘Did you leave yesterday?’
- b. Che facesti partisti ieri?
 che do-PAST.2.Sg leave-PAST.2.Sg yesterday
 ‘Did you leave yesterday?’

[Sieneſe]

Fare and the lower predicate ſhare the ſame tene and phi-features. This is illuſtrated by (5.b), where both *fare* and *partire* have 2nd perſon ſingular features and paſt tene features. *Fare* ſeems to be completely optional; there is no ſemantic difference between the ſentence in (5.a) and that in (5.b).

The aim of the following ſubſection is to ſhow the reſtrictions on the occurrence of the verb *fare* in yeſ/no queſtions in Sieneſe. Beſides, a comparison with Sicilian and other Southern and Central Italian dialects which ſhow a ſimilar pattern will be provided.

2.1 Reſtrictions on the occurrence of *fare* in Sieneſe yeſ/no queſtions

As already mentioned, *fare* does not add any meaning to the interpretation of yeſ/no queſtions. It behaves aſ ſome ſort of light, ſupportive verb, which is devoid of its original lexical meaning.

Fare is compatible with transitive verbs (ſee 6.a), unaccuſative verbs (ſee 6.b) and unergative verbs (ſee 6.c):

- 6) a. Che facesti vedesti Gianni?
che do-PAST.2.Sg see-PAST.2.Sg John
 'Did you see John?'
 [transitive verbs]
- b. Che hanno fatto hanno parlato con Gianni?
che have-PRES.3.Pl do-PP have-PRES.3.Pl talk-PP with John
 'Did they talk with John?'
 [unergative verbs]
- c. Che ha fatto è andata al mare?
che have-PRES.2.Sg do-PP is-PRES 3.Sg go-PP to-the sea
 'Did she go to the sea?'
 [unaccusative verbs]

The stative/eventive distinction does not seem to play a role; *fare* is perfectly compatible with both stative and eventive verbs, as shown in (7.a-b):

- 7) a. Che fa si tinge i capelli?
che do-PRES.3.Sg REFL.CL dye-PRES.3.Sg the hair
 'Does she dye her hair?'
 [eventive verbs]
- b. Che fa assomiglia al su babbo?
che do-PRES.3.Sg resemble-PRES.3.Sg to-the his/her father
 'Does (s)he look like his/her father?'
 [stative verbs]

Moreover, *fare* is also compatible with habitual interpretations; indeed, the sentence in (7.a) can be interpreted both as having a habitual and an eventive reading. Animacy of the subject does not seem to matter either. As shown in (8.a-b), *fare* is perfectly compatible with inanimate subjects:

- 8) a. Che fa perde il rubinetto?
che do-PRES.3.Sg leak-PRES.3.Sg the tap
 'Is the tap leaking?'
 [inanimate subjects]
- b. Il camper che fa consuma parecchio?
 the camper *che* do-PRES.3.Sg consume-PRES.3.Sg much
 'Does the camper burn much gas?'
 [inanimate subjects]

In addition, *fare* can also occur in sentences with a conjoined subject and with alternative questions, as shown respectively in (9.a) and (9.b):

- 9) a. Che fanno vengano anche il tu babbo
che do-PRES.3.Pl come-PRES.3.Pl too the your dad
 e la tu mamma?
 and the your mom
 ‘Are your mom and dad coming too?’
 [conjoined subjects]
- b. Che fanno vengano o no?
che do-PRES.3.Pl come-PRES.3.Pl or not
 ‘Are they coming or not?’
 [alternative questions]

However, some interesting asymmetries emerge with respect to the verb *essere* ‘be’ when stage-level and individual-level predicates come into play:

- 10) a. Che fa è stanco?
che do-PRES.3.Sg be-PRES.3.Sg tired
 ‘Is he tired?’
 [*be* + stage-level predicates]
- b. *Che fa è intelligente?
che do-PRES.3.Sg be-PRES.3.Sg intelligent
 ‘Is (s)he intelligent?’
 [*be* + individual-level predicates]

As shown by the ungrammaticality of (10.b), *fare* is incompatible with the verb *be* when it is combined with an individual-level predicate, but not when it is combined with a stage-level predicate (see 10.a).

2.2 Comparing Sienese and Sicilian yes/no questions

As discussed in chapter 2, Sicilian displays a yes/no question-marking strategy similar to Sienese. As pointed out by Cruschina (2008), yes/no questions are introduced by *chi* in Sicilian (see 11.a). As in Sienese, *chi* is homophonous with both the finite complementizer and the wh-word corresponding to *what*.¹ Leone (1995) and Cruschina (2008) indicate that *chi* can also be followed by a finite form of the verb *fare*, as shown in (11.b).

- 11) a. Chi vennu?
chi come-PRES.3.Pl
 ‘Are they coming?’

¹ Cruschina (2008) points out that in some varieties of Sicilian *chi* is only homophonous with the *wh*-word corresponding to *what* but not with the finite complementizer.

- b. Chi ffà vennu?
Chi do-PRES.3.Sg come-PRES.3.Pl
 ‘Are they coming?’

[Sicilian]

Despite the apparent similarities, there are in fact some substantial syntactic differences between Sicilian and Siennese. As opposed to Siennese, *fare* is frozen in the 3rd person singular present form in Sicilian, disregarding of the tense and phi-features of lower predicate.

A clear example of this mismatch is provided in (12.a), where *fare* occurs in the 3rd person singular present form, while the lower predicate displays 2nd person singular phi-features and past tense features. Agreement between *fare* and the lower predicate yields ungrammaticality in Sicilian, as shown in (12.b).

- 12) a. Chi ffa ci jisti a mari?
chi do-PRES.3.Sg there.CL go-PAST.2.Sg to sea
 ‘Did you go to the sea?’
- b. *Chi ffacisti ci jisti a mari?
chi do-PAST.3.Sg there.CL go-PAST.2.Sg to sea
 ‘Did you go to the sea?’

[Sicilian]

By contrast, *fare* must share the same phi- and tense- features of the lower verb in Siennese. Lack of agreement yields ungrammaticality, as shown by the contrast between (13.a) and (13.b):

- 13) a. *Che fa andasti al mare?
che do-PRES.3.Sg go-PAST.2.Sg to-the sea
 ‘Did you go to the sea?’
- b. Che facesti andasti al mare?
che do-PAST.2.Sg go-PAST.2.Sg to-the sea
 ‘Did you go to the sea?’

[Siennese]

The differences between Siennese and Sicilian yes/no questions are not only syntactic. In fact, *fare*-insertion is completely optional in Siennese. By contrast, Sicilian *fa* always triggers some expectation/presupposition towards the propositional content of the question (see the discussion in chapter 2). More specifically, *chiffà* questions are usually uttered in Sicilian when the speaker expects a positive answer, although they are by no means rhetorical questions. As a matter of fact, no such distinction can be found in Siennese because questions with and without *fare* have exactly the same semantics.

2.3 On the optionality of *fare*

It seems that there is an alternation between a covert and an overt version of *fare* in Sienese. The overt form will be referred to as the *che fare* question and the covert form will be referred to as the *che* \emptyset_{fare} question. This alternation seems not to be sensitive to syntactic constraints. At first sight, it looks like the size of the constituent(s) which follow *che* play a role in determining the alternation between the covert and the overt form. A couple of examples are shown below in (14):

- 14) a. *Che piove?
 che rain-PRES.3.Sg
 ‘Is it raining?’
- b. Che fa piove?
 che do-PRES.3.Sg rain-PRES.3.Sg
 ‘Is it raining?’
- c. Che piove domani/ a Firenze?
 che rain-PRES.3.Sg tomorrow in Florence
 ‘Is it raining tomorrow/in Florence?’

[Sienese]

As shown by the ungrammaticality of (14.a), the covert form cannot be used when the following predicate is restricted to a single inflected verb. There are two possible ways to make the sentence in (14.a) grammatical: either by inserting *fare* after *che* (as in (14.b)), or by inserting some other lexical item after the lexical verb (as in (14.c)). It does not matter what kind of element appears after the lexical verb: it could be an adverb, as well as a PP. This shows that syntax is not involved in the alternation between the overt and the covert form.

The size of the constituent(s) which follow *che* does not determine the alternation either. Indeed, *che* is followed by four syllables² in (15.a), one more than (15.b), but the sentence is still ungrammatical.

- 15) a. *Che [me] [lo] [da] [i]?
 che to.me.CL it.Obj.CL give-PRES.2.Sg
 ‘Are you giving it to me?’

[4 syllables]

- b. Che [fa] [pio] [ve]?
 che do-PRES.3.Sg rain-PRES.3.Sg
 ‘Is it raining?’

[3 syllables]

In order to account for the alternation between the overt and the covert form it is necessary to look at the prosody of *che fare* questions in Sienese. Sienese *che fare* questions have in fact a special intonation pattern which requires the sentence to have

² Square brackets indicate syllable boundaries in the examples in (15.a-b).

two intonation units with one pitch accent³. The presence of one pitch accent in both units is obligatory. If the *che* \mathcal{O}_{fare} question does not include two words that can possibly be stressed, as in (14.a) and (15.a), the result is ungrammatical. *Fare* always receives stress, if present. *Che* cannot receive stress, which accounts for the ungrammaticality of (14.a), where it is only possible to have a pitch accent on the lexical verb *piove* ‘rains’. The ungrammaticality of (15.a) depends on the fact that the two clitics which occur after *che* cannot receive stress. Since *che* cannot receive stress either, it is only possible to have one pitch accent (on the lexical verb *dai* ‘give’), which violates the prosodic requirements of Sienese *che fare* questions.

These considerations about prosodic requirements cannot be extended to Southern Italian dialects, such as Sicilian. Indeed, the covert form can be employed also when the following predicate is restricted to a single inflected verb (Cruschina, 2008):

- 16) Chi veni?
chi come-PRES.3.Sg
 ‘Is he coming?’

[Sicilian]

This suggests that Sicilian yes/no questions have a different prosody, which probably does not require two peaks of stress in the same questions.

Another piece of evidence to support the idea that syntax is not involved in the alternation between the overt and the covert form is provided by the absence of meaning alternation in Sienese. There is no semantic difference whatsoever between *che fare* questions and *che* \mathcal{O}_{fare} questions in Sienese.

The situation looks quite different in Sicilian. As pointed out by Cruschina (2008), the alternation between *chi ffà* and *chi* $\mathcal{O}_{ffà}$ corresponds to a different interpretation of the yes/no question in Sicilian. Cruschina (p.c.) points out that *chi fare* questions have a presuppositional meaning. Namely, the *chi fare* question is only employed if the speaker expects a positive answer, while the *chi* \mathcal{O}_{fare} question is just a standard yes/no question, with no associated presuppositional meaning. Therefore, it is possible to conclude that the alternation between the two forms is semantically driven in Sicilian.

In fact, the interpretation associated with *chi fare* questions in Sicilian is not exceptional in yes/no questions. As discussed in chapter 2, it can be found in other European languages as well, such as English and French. In these languages, the presuppositional meaning of yes/no questions which expect a positive answer is marked through both syntax and intonation. As far as their syntax is concerned, they are characterized by a lack of subject-verb inversion. Besides, they have a raising intonation, which differs

³ This prosodic pattern is not as surprising as it might look at first sight. As it will be shown in chapter 4, *che fare* questions share the same structure of their corresponding biclausal discourses when it comes to prosodic phrasing. Namely, they are both characterized by the presence of two intonational units with a falling pitch at the end. This leads us to think that the prosodic structure of *che fare* questions might in fact be derived from that of biclausal discourses, which would explain the presence of a double intonational unit in monoclausal *che fare* questions.

from the intonation of standard yes/no questions. A couple of examples are shown below in (17.a-b):

- 17) a. You are cooking tonight? [English]
- b. Tu cuisines ce soir?
 you cook-PRES.2.Sg this evening
 'You are cooking tonight?' [French]

Both (17.a) and (17.b) expect a positive answer; they couldn't be uttered out of the blue, in a context where the speaker does not have any presupposition regarding the answer. The same considerations can be extended to Sicilian *chiffà* questions, as opposed to Sienese *che fare* questions.

2.4 Brief comparison with other Central and Southern Italian varieties

As discussed in chapter 2, the yes/no question marking strategy illustrated above is found in most Central and Southern Italian dialects. Some examples from other Central varieties are provided below:

- 18) a. Che (vu fate) vu c' andate ?
che you.Subj.CL do-PRES.3.Pl you.Subj.CL there.CL go-PRES.3.Pl
 'Are you going there?'
- b. *Che la fa vu c'
che she.Subj.CL do-PRES.3.Pl you.Subj.CL there.CL
 andate?
 go-PRES-3.Pl
 'Are you going there?' [Florentine]
- 19) a. Qu' (ae fatto) ce si gido
que have-PRES.2.Sg do-PP there.CL be-PRES.2.Sg go-PP
 al mare?
 to-the sea
 'Did you go the sea?'
- b. *Que (fa) ce si gido al
que do-PRES.3.Sg there.CL be-PRES.2.Sg go-PP to-the
 mare?
 sea
 'Did you go the sea?' [Marchigiano]

The example in (18.a) is taken from urban Florentine (Garzonio, p.c.), while the example in (19.a) is taken from *Marchigiano*⁴ (Peverini, p.c.). As in Siennese, agreement between *fare* and the lower predicate is required in order for the sentence to be grammatical. Lack of agreement yields ungrammaticality in these varieties too, as shown in (18.b) and (19.b).

A different pattern is shown in the following examples. The sentences illustrated in (20.a) and (21.a) are taken respectively from Abruzzese and Urban Barese⁵, which display the same agreement pattern of Sicilian yes/no questions. Indeed, *fare* is frozen in the 3rd person singular present form. As in Sicilian, marking agreement on *fa* yields ungrammaticality, as shown in (20.b) and (21.b) below:

- 20) a. Che (fa) ci si jite a lu mare?
che do-PRES.3.Sg there.CL be-PRES.2.Sg go-PP to the sea
 ‘Did you go to the sea?’
- b. *Che fai ci si jite a lu mare?
che do-PRES.3.Sg there.CL be-PRES.2.Sg go-PP to the sea
 ‘Did you go to the sea?’
- [Abruzzese]
- 21) a. Ci (è) stève a cchiòve ?
ci be-PRES.3.Sg be-PAST.3.Sg to rain-INF
 ‘Was it raining?’
- b. *Ci era stève a cchiòve ?
ci be-PAST.3.Sg be-PAST.3.Sg to rain-INF
 ‘Was it raining?’
- [Barese]

There seems to be a clear-cut distinction between the agreeing, Siennese-like varieties and the non-agreeing, Sicilian-like varieties.

Florentine and Marchigiano behave like Siennese, while Abruzzese and Barese behave like Sicilian. In fact, Florentine and Marchigiano are geographically and linguistically closer to Siennese. Instead, Abruzzese is a Southern dialect, despite its geographically central location. Barese is a typically Southern Dialect.

3. The analysis

This section proposes an analysis of the syntactic properties of yes/no questions in Siennese. As already discussed, in Siennese *fare* shares the same phi- and tense features of the lower lexical verb, while in Sicilian it is invariable:

⁴ Marchigiano is a Central Italian Dialect. The Marchigiano data are taken from a Central Marchigiano variety, namely from the Sassoferrato/Fabriano area in the province of Ancona.

⁵ Abruzzese is an Upper-Southern Italian Dialect; the Abruzzese data are taken from the variety spoken in Arielli, in the Province of Chieti. Barese is an Upper Southern Italian Dialect too.

- 22) a. Che andasti al mare?
che go-PAST.2.Sg to-the sea
 ‘Did you go to the sea?’
- b. Che facesti andasti al mare?
che do-PAST.2.Sg go-PAST.2.Sg to-the sea
 ‘Did you go to the sea?’

[Sienese]

- 23) a. Chi vennu?
chi come-PRES.3.Pl
 ‘Are they coming?’
- b. Chi ffa vennu?
chi do-PRES.3.Sg come-3.Pl
 ‘Are they coming?’

[Sicilian]

The Sicilian form in (23.b) is unproblematic. As discussed in chapter 2, it can be analyzed as a single complex interrogative C, similar to invariable *est-ce que* in French (e.g. Rooryck 1994). Just like in French cleft interrogatives, the verb *fare* is frozen in the 3rd person singular present form, independently from the features of the lower lexical verb and its subject.

- 24) a. Est -ce que Euphrasie est arrivée ?
 be-PRES.3.Sg -it.CL that Euphrasie be-PRES.3.Sg arrive-PP
 ‘Did Euphrasie arrive?’ (Rooryck, 1994:216)
- b. *A -ce été que Euphrasie est
 have-PRES.3.Sg -it.CL be-PP that Euphrasie be-PRES.3.Sg
 arrivée ?
 arrive-PP
 ‘Did Euphrasie arrive?’

[French]

The Sienese form in (22.b) is instead more interesting. At first sight, it might look like a biclausal discourse containing two separate questions: *What did you do? Did you go to the sea?*

Contra *prima facie* evidence, I will argue that the underlying structure of (22.b) is monoclausal and should be given an analysis as in (25), where *facesti* in C and *andasti* in T agree with the subject in SpecvP:

- 25) [CP *che* [C *facesti* [TP *andasti* [_{VP} *pro* [_{VP} ~~*andasti*~~ [PP *al mare*]]]]]

The four arguments below show some syntactic restrictions which would apply to a biclausal discourse involving two separate questions. However, it is shown that they do not hold for the Sienese interrogative constructions with *fare*, which provides strong evidence for their monoclausality.

3.1 Establishing monoclausality

In the present section I will explore four syntactic arguments in favor of a monoclausal analysis of Sienese yes/no questions. Sienese yes/no questions show four syntactic restrictions that do not apply to a biclausal discourse containing two questions.

The first argument involves agreement of phi-, tense, mood and aspect features. The second argument is based on negation. The third argument is provided by the position of the subject and the fourth argument relies on some considerations regarding theta-roles.

3.1.1 Phi-, tense, mood and aspect feature-sharing

The first argument in favor of a monoclausal analysis is provided by the obligatory match between the phi-, tense, aspect and mood features of *fare* and those of the lower predicate. *Fare* must always have the same phi-, tense, mood and aspect features of the lower lexical verb. This restriction does not apply to a biclausal discourse, where the restrictions affecting phi-, tense, mood and aspect features are less strict or non-existent.

- **Phi-feature sharing:** As shown in (26.a), both *fare* and *uscire* ‘go out’ have 2nd person plural features. This match is not required in a biclausal discourse involving two questions, such as (26.b). (26.b) is characterized by a mismatch between the 2nd person singular feature of *fare* and the 3rd person singular feature of *uscire*.

- 26) a. Che fai esci?
 che do-PRES.2.Sg go.out-PRES.2.Sg
 ‘Are you going out?’
- b. Che fate? S’ esce?
 what do-PRES.2.Pl we.Subj.CL go.out-PRES.1.Pl⁶
 ‘What are you doing? Are we going out?’

[Sieneſe]

- **Tense sharing:** As with phi-features, *fare* and the lower predicate must always share the same tense features. As shown in (27.a), *fare* has a present tense feature and so does the lower verb, *preparare* ‘make’. A tense mismatch yields ungrammaticality, as shown in (27.c). However, this condition is not required in a biclausal discourse involving two questions, where switching from a tense to another is allowed to a certain extent. As shown in (27.b), *fare* has present tense

⁶ A morphosyntactic phenomenon found in Sieneſe and many other Tuſcan dialects is the personal use of a particle identical to the impersonal particle *si* for the first person plural. The verb agrees with the subject *si*; as a result, it always displays third person singular morphology, although it is interpreted as a first person plural verb. For this reason, the gloss in 26(b) indicates that the verb is a first person plural rather than a third person singular.

features and *preparare* has past tense features, and both sentences are grammatical in this order.

- 27) a. Che fai prepari una torta?
che do-PRES.2.Sg make-PRES.2.Sg a cake
 ‘Are you making a cake?’
- b. Che fai? Preparasti una torta?
 what do-PRES.2.Sg make-PAST.2.Sg a cake
 ‘What are you doing? Did you make a cake?’
- c. *Che fai preparasti una torta?
che do-PRES.3.Sg make-PAST.2.Sg a cake
 ‘Did you make a cake?’

[Sieneſe]

- **Mood sharing:** Another restriction that affects Sieneſe yes/no questions is provided by mood feature sharing. Indeed, *fare* and the lower predicate must always share the same mood features.

- 28) a. Che avresti fatto avresti
che have-COND.PRES.2.Sg do-PP have-COND.PRES.2.Sg
 parlato?
 talk-PP
 ‘Would you have talked?’
- b. Che fai? Parleresti?
 what do-IND.PRES.2.Sg talk-COND.PRES.2.Sg
 ‘What are you doing? Would you talk?’
- c. *Che fai parleresti?
che do-IND.PRES.2.Sg talk-COND.PRES.2.Sg
 ‘Would you talk?’

[Sieneſe]

In (28.a), both *fare* and *parlare* ‘talk’ have a conditional mood feature. Again, this restriction does not apply to a biclausal discourse involving two questions, as shown by the grammaticality of (28.b), where *fare* is an indicative present and *parlare* is a conditional present. Such a mismatch cannot be maintained in *che fare* questions, as shown by the ungrammaticality of (28.c).

- **Aspect sharing:** As with Phi-, Tense and Mood features, *fare* and the lower predicate need to share the same Aspect features:

- 29) a. Che facevi dormivi?
che do-IMPF.PRES.2.Sg sleep-IMPF.PRES.2.Sg
 ‘Were you sleeping?’

- b. Che facevi? Hai dormito?
 what do-IMPF.PRES.2.Sg have-IND.PRES.2.Sg sleep-PP
 ‘What were you doing? Have you slept?’
- c. *Che facevi hai dormito?
what do-IMPF.PRES.2.Sg have-IND.PRES.2.Sg sleep-PP
 ‘What were you doing? Have you slept?’

[Sieneese]

In (29.a), both *fare* and *dormire* ‘sleep’ occur in the present imperfective form. This requirement would not hold for a biclausal discourse made of two questions, as shown in (29.b). Indeed, *fare* is a present imperfective while *dormire* is an indicative perfect tense, and yet the sentence is grammatical. This is not allowed in *che fare* questions, as shown by the ungrammaticality of (29.c).

3.1.2 Negation

Another reason to distinguish Sieneese yes/no questions from a biclausal discourse involving two questions is provided by their different behavior with respect to negation. Only one negation can occur in Sieneese yes/no questions, as expected in a monoclausal structure. Negation can only precede the lower predicate, as shown in (30.a). No such restriction applies to biclausal discourse, as shown in (30.b), where one negation occurs before *fare* and one before *mangiare* ‘eat’. This is not allowed in *che fare* questions, as shown by the ungrammaticality of (30.c).

- 30) a. Che fai un mangi la carne stasera?
che do-PRES.2.Sg neg eat-PRES.2.Sg the meat tonight
 ‘Aren’t you eating meat tonight?’
- b. Che un fai? Un mangi la carne
 what neg do-PRES.2.Sg neg eat-PRES.2.Sg the meat
 stasera?
 tonight?
 ‘What aren’t you doing? Aren’t you eating meat tonight?’
- c. *Che un fai un mangi la carne stasera?
che neg do-PRES.2.Sg neg eat-PRES.2.Sg the meat tonight
 ‘Aren’t you eating meat tonight?’

[Sieneese]

That only one negation can occur in Sieneese yes/no questions strongly suggests that their underlying structure is indeed monoclausal.

3.1.3 Subject position

A further argument in favor of a monoclausal analysis for Sienese yes/no questions is represented by the position of the subject. As shown in (31.a), subjects can only occur either before *che* or after the lower predicate. Crucially, they can never occur between *fare* and the lower predicate, as shown by the ungrammaticality of (31.c). This requirement does not apply to the biclausal discourse, where subjects can occur after *fare* (see 31.b).

- 31) a. (La tu mamma) che fa dorme (la tu
the your mother *che* do-3.PRES.Sg sleep-PRES.3.Sg (the your
mamma)?
mother)
'Is your mother sleeping?'
- b. Che fa la tu mamma? Dorme?
what do-PRES.3.Sg the your mother sleep-PRES.3.Sg
'What is your mother doing? Is she sleeping?'
- c. Che fa (*la tu mamma) dorme?
che do-3.PRES.Sg the your mother sleep-PRES.3.Sg
'Is your mother sleeping?'

[Sieneſe]

Similar considerations can be made with respect to any kind of adverbs; as shown in (32.a-b), adverbs can only occur either before *che* or after the lower predicate, but not between *fare* and the lower predicate.

- 32) a. (Oggi) che fai esci (oggi)?
today *che* do-PRES.2.Sg go.out-PRES.2.Sg today
'Are you going out today?'
- b. *Che fai oggi esci?
che do-PRES.2.Sg today go.out-PRES.2.Sg
'Are you going out today?'

[Sieneſe]

Only clitics are allowed to occur between *fare* and the lower predicate are clitics, as shown in (33.a-b) below.

- 33) a. Che facesti ci parlasti?
che do-PAST.2.Sg with.him.CL talk-PAST.2.Sg
'Did you talk with him?'
- b. Che fai lo compri?
che do-PRES.2.Sg it.Obj.CL buy-PRES.2.Sg
'Are you buying it?'

[Sieneſe]

3.1.4 Theta-roles

The last piece of evidence in support of a monoclausal analysis of *che fare* questions comes from some considerations regarding theta-roles.

In *che fare* questions, *fare* appears to be deprived of its core lexical meaning and agentive theta-role. It can combine with verbs that assign a non-agentive theta role to their subjects and also with verbs that do not assign a theta role to their subject at all (see 34.a and 35.a, respectively). This is not possible in the biclausal discourse, as shown by the ungrammaticality of (34.b) and (35.b).

- 34) a. Che fai c' hai freddo?
che do-PRES.2.Sg there.CL have-PRES.2.Sg cold
 'Are you cold?'
 b. *Che fai? C' hai freddo?
 what do-PRES2.Sg there.CL have-PRES2.Sg cold
 'What are you doing? Are you cold?'
- 35) a. Che fa piove?
che do-PRES.3.Sg rain-PRES.3.Sg
 'Is it raining?'
 b. *Che fa? Piove?
che do-PRES.3.Sg rain-PRES.3.Sg
 'Is it raining?'

[Sienese]

3.2 The syntactic structure of *che fare* questions

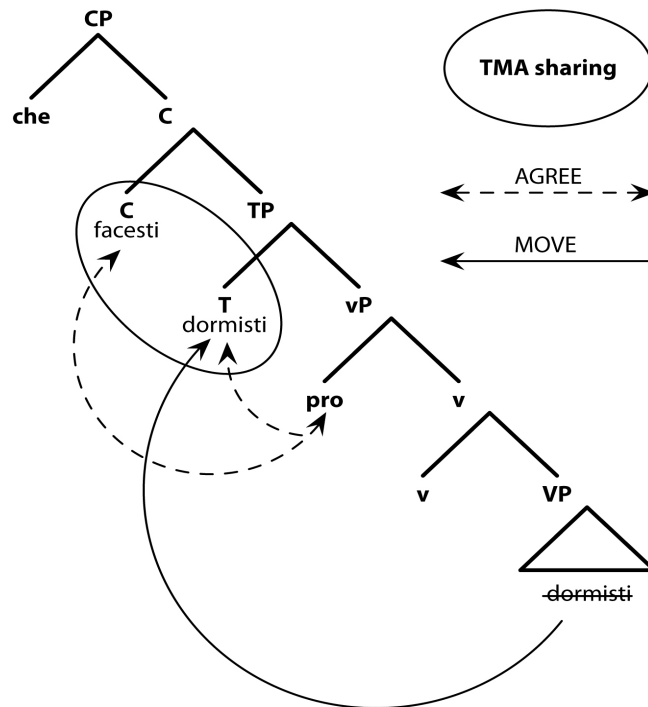
In the previous section, the underlying syntactic structure of *che fare* questions has been shown to be monoclausal. As opposed to what it might look like at first sight, Sienese *che fare* questions turn out not to share the same syntactic behavior of a biclausal discourse made of two questions. More specifically, it has been shown that there are some specific syntactic restrictions which do not apply to biclausal discourse but which do apply to Sienese yes/no questions. In fact, the differences between *che fare* questions and their corresponding biclausal discourses are not only of a syntactic nature. In addition to different syntactic restrictions, they are also marked by a number of different phonetic cues. A detailed discussion of the phonetic realization of these two constructions will be provided in chapter 4.

The aim of the present section is to illustrate how the derivation *che fare* questions proceeds and to analyze the agreement relations that characterize this configuration. The structure of the present section is as follows: a possible derivation is proposed in subsection 3.2.1, where each step is discussed in detail. Subsection 3.2.2 includes some notes on AGREE and multiple feature-checking, while subsection 3.2.3 deals with Tense, Mood and Aspect feature-sharing between *fare* and the lower predicate.

3.2.1 The derivation of Siense *che fare* questions

I assume the derivation of a *che fare* question like (36), to proceed as follows:

- 36) *Che* *facesti* *dormisti?*
che do-PAST.2.Sg sleep-PAST.2.Sg
 'Did you sleep?'



- the verb *dormire* is merged with *v* → label: *v*
- *v* is merged with *pro*, which enters the derivation with interpretable phi-features and uninterpretable and unvalued case-features → label: *vP*
- the *vP* is merged with *T*, which enters the derivation with uninterpretable and unvalued phi-features and valued case-features → label: *TP*
- the verb *dormire* moves to *T*
- *TP* is merged with the light verb *fare*, a head which enters the derivation with uninterpretable phi-, Tense, Aspect and Mood features and no case-assigning potential → label: *C*

- once the phase head *fare* is merged, the phase is completed and everything is sent to PF for Spell-out
- AGREE takes place simultaneously as soon as the phase is completed: *dormire* in T and *fare* in C are probes that look down for a goal to enter an AGREE relation with. *Pro* is the first goal with the appropriate phi-features in their c-command domain; *fare* and *dormire* enter an AGREE relation with *pro*: the uninterpretable phi-features of the probes T and C are valued by the goal *pro* and then deleted; the unvalued case-features of *pro* is valued by *dormire* and then deleted. *Fare* does not assign case to *pro*, which has already received its case from *dormire*. The AGREE relation is not strictly reciprocal here because *pro* values *fare*'s phi-features but *fare* does not assign its case to *pro* in exchange.
- *fare* and *dormire* entertain a relation that results in Tense, Mood and Aspect feature-sharing.
- C is merged with *che* → label: CP

At least two problems arise in the derivation proposed above, where two probes agree with same goal at the same time. Firstly, it is necessary to explain why the verb *dormire* in T does not intervene in the AGREE relation between the verb *fare* in C and the subject in SpecvP. If the phi-features of *dormire* have been valued by the subject, then *dormire* should be the first element with the appropriate features that the probe *fare* encounters in its c-command domain. Therefore, *fare* would be expected to agree with *dormire* rather than with the subject. Nevertheless, *dormire* is not a potential goal for *fare* because it does not have an uninterpretable case feature. Hence, it is predicted to be inactive as it does not satisfy the Activity Condition (Chomsky, 2001). However, it could still intervene according to the Defective Intervention Constraint (cf. Chomsky 2000:123), which prohibits the establishment of an AGREE relation when a closer but inactive goal intervenes between a probe and another goal.

In addition, the subject *pro* is predicted to be inactive by the Activity Condition because its case feature has already been valued by *dormire*. This would prevent it from entering another AGREE relation with *fare*.

In order to overcome these problems, I assume that AGREE is delayed until the next phase head is merged, as proposed by Chomsky (2001) in his revision of the PIC. When the phase is complete, everything is sent to PF for Spell-out and AGREE takes place. The two AGREE relations between the probes *fare* and *dormire* and the goal *pro* are established simultaneously, which prevents *dormire* from intervening in the AGREE relation between *fare* and the subject *pro*. This means that the subject's unvalued case feature is also checked by *dormire* at the same time, hence the subject still has an uninterpretable case feature when the AGREE relation with *fare* is established. As a consequence, it is predicted to be an active goal by the Activity Condition.

Further, it is necessary to spell out another assumption that I make in order to derive *che fare* questions. I assume that the subject does not move to SpecTP because T does not have an EPP feature in Siense *che fare* questions. From an empirical point of view, this assumption seems to be able to capture the pattern observed in Siense yes/no questions: the subject can never appear between *fare* and the lexical verb. Rather, it must appear after the lexical verb, which suggests that it stays in its base-generated position in SpecvP. Alternatively, it can move to TopP (i.e. to some projection to the

left of *che* in the left periphery) if it is topicalized. Without postulating a similar restriction on the lexical nature of T, it would be very problematic to derive *che fare* questions without getting the word order wrong or assuming additional reasons for the subject to move out of SpecTP and move downwards once the EPP feature is checked. Another issue which needs to be discussed is TMA sharing, which takes place between *fare* and the lexical verb. Usually, complementizers in C have a [+/- D] features and select a [+/- finite] verb in T (see section 3.2.3)⁷. However, the element in C is a verb in this case, so it does not only select the feature [+/- finite], but also the other core features that characterize a verbal head, namely Tense, Aspect and Mood. This mechanism can predict the kind of TMA sharing found in Sienese without overgenerating unwanted agreement patterns between C and T. It predicts that whenever the element in C is of a verbal nature, it will not only select [+/- finiteness] but also Tense, Mood and Aspect. On the contrary, when the element in C is of a [+/- D] feature it will only select [+/- finiteness]⁸. In fact, the TMA-identity requirement that characterizes *che fare* questions should not be considered an additional assumption in the analysis. Rather, it should be understood as a corollary of the more general C-T identity requirement described in Chomsky's (2005, 2006) feature-inheritance model.

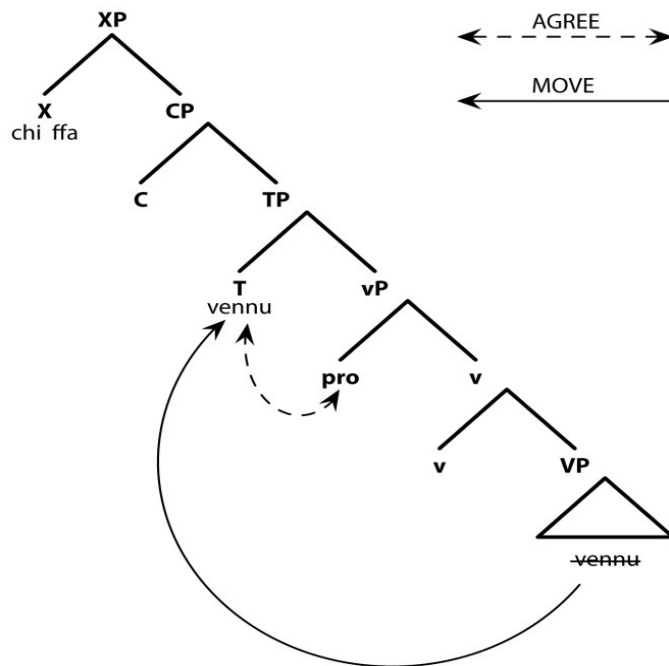
3.2.2 The derivation of Sicilian *chiffà* questions

Sicilian *chiffà* questions are less problematic to derive than Sienese *che fare* questions. As already mentioned in section 3, I argue that *chiffà* should be analyzed as a high, complex adverbial element in the Left Periphery of the clause. I assume the derivation of a Sicilian *chiffà* question like (37) to proceed as follows:

- 37) Chiffà vennu?
 QP come-PRES.3.Pl
 'Are they coming?'

⁷ See a.o. Aboh (2004) and Haegeman (2004) for a discussion of the parallelism between definiteness (in the nominal domain) and finiteness (in the clausal domain).

⁸ A potential counterexample to this generalization would be a language where a complementizer that has a [D] feature agrees for TMA with the verb in T, or where a verbal element in C agrees with the verb in T for phi-features but not for TMA features. I am not aware of any such cases.



- the verb *venire* is merged with *v* → label *v*
- *v* is merged with *pro*, which enters the derivation with interpretable and valued phi-features and uninterpretable and unvalued case features → label *vP*
- *vP* is merged with *T* which enters the derivation with uninterpretable and unvalued phi-features and valued case-features → label: *TP*
- the verb *venire* moves to *T*
- the verb *venire* enters an AGREE relation with *pro*; *pro*'s case feature is valued by *venire* and then deleted, and the uninterpretable phi-features of *venire* are valued by *pro* and then deleted.
- *TP* is merged with *C*
- *CP* is merged with a higher projection whose head is *chiffà*.

Only one AGREE relation is established in Sicilian *chiffà* questions, i.e. between the lexical verb and its subject. *Fare* is located in a high projection in the Left Periphery rather than in *C*. Therefore, it cannot interact with *T* because it is in a different phase and does not have access to the previous phase, as opposed to Siense.

As for Sienese, I still assume that T does not have an EPP feature and therefore the subject does not move to SpecTP⁹. Rather, it stays in its base-generated position in SpecvP. Again, this assumption allows us to derive *che fare* questions without getting the word order wrong, or assuming additional reasons for the subject to get out of SpecTP and move downwards once the EPP feature is checked.

3.2.3 A note on AGREE and multiple feature-checking

The structure of Sienese *che fare* questions provides additional evidence for AGREE not to be necessarily limited to one-probe-one-goal relations, as widely attested in recent literature (cf. Hiraiwa, 2001; Adger & Harbour, 2008; Béjar, 2003; Béjar & Rezac, 2009, Carstens, 2001; Carstens & Kinyalolo, 1989; van Koppen, 2005; Nevins 2007, 2011; Rezac, 2007, 2008).

One of the most discussed and well known case of multiple feature-checking is provided by Japanese raising constructions:

- 40) John-ga/ni [mada Mary-ga kodomo-ni amaku]
 John-NOM/DAT still Mary-NOM children-DAT lenient-INF
 kanji -ta.
 feel -PAST

‘Mary seems to John to be still lenient to children.’ (Hiraiwa, 2001:76)

[Japanese]

The sentence in (40) is an example of Raising-to-Subject construction. Since infinitives in Japanese cannot check structural case, the nominative Case of the embedded subject DP in (40) is checked via AGREE with the matrix T (Hiraiwa, 2001). As a consequence, the matrix T agrees with the matrix subject and with the embedded subject at the same time. For this reason, Japanese raising constructions are taken to show an AGREE relation where two goals agree with the same probe at the same time. Other examples of similar AGREE relations involving one probe and two goals are instantiated by the Cyclic Agree cases discussed in Béjar & Rezac (2009) and Rezac (2007, 2008), and by the Multiple Agree cases discussed in Nevins (2007, 2011).

As opposed to these constructions, however, Sienese *che fare* questions display a case of AGREE which involves two probes and one goal rather than two goals and one probe. In fact, this configuration is not uncommon in the world’s languages. Another example of two probes agreeing with a single goal at the same time is provided by the so-called Bantu Compound Tense (CT) structures, where the subject agrees with two verbal heads at the same time:

- 38) Juma a- li- kuwa a- me- pika chakula
 Juma 3.Sg- PAST- be 3.Sg- PFV- cook food
 ‘Juma had cooked food.’ (Carstens, 2001: 3)

[Swahili]

⁹ Sienese *che fare* questions and Sicilian *chiffà* questions behave the same with respect to the position of the subject, i.e. the subject can only occur either before *chiffà* or after the lexical verb. It cannot occur between *fare* and the lexical verb.

Carstens & Kinyalolo (1989) and Carstens (2001) analyze CT constructions as raising structures. They argue that the subject moves through the specifier of the lower verbs before reaching its final landing site in the specifier of the higher verb. In this kind of constructions both verbs carry full agreement with the subject, i. e. both agreement relations are spelled out as agreement morphology on the verbs.

A further example of two probes agreeing with one goal comes from Complementizer Agreement in West Germanic (cf. Bayer, 1984; Law, 1991; Haegeman, 1992; Zwart, 1993, 1997; van Craenenbroeck & van Koppen, 2002b; van Koppen, 2005), which is also taken to instantiate a case of two probes (the complementizer and the verb) agreeing with the same goal (the subject). An example of a sentence displaying Complementizer Agreement is provided in (39) below:

- 39) a. ...datt-e we naar Leie gaan.
 that-Pl we to Leiden go-PRES.3.Pl
 ‘...that we are going to Leiden.’ (van Koppen, 2005: 33)

- b. [CP datt-e(u φ) [TP we(i φ) [VP naar Leie [VP ~~we~~ [v gaan(u φ)]]]]

[Katwijk Dutch]

A similar analysis was developed for Long Distance Agreement (Bhatt, 2005) in Hindi-Urdu, in order to account for the phenomenon of a verb agreeing with an argument that is not its own. The subject of the embedded clause agrees both with the embedded and the main verb in Hindi-Urdu. An example is given in (40) below:

- 40) a. Vivek-ne kitaab par:h-nii chaah-ii
 Vivek-ERG book.F read-INF.F want-PFV.F.Sg
 ‘Vivek wanted to read the book.’ (Bhatt, 2005: 760)

- b. [TP Vivek-ne [VP kitaab(i φ) par:h-nii(u φ)] chaah-ii(u φ)]]

[Hindi-Urdu]

To summarize, the analysis proposed in section 3.2.1 accounts for the fact that the subject of the lower predicate agrees with two different heads within the same clausal domain. Two different agreement relations are established. Namely, one between the subject of the lower predicate and the lower predicate itself and one between the subject of the lower predicate and *fare*. Both relations happen under the syntactic mechanism of AGREE (Chomsky, 2000; 2001a, b). Potential problems caused by the Activity Condition and the Defective Intervention Constraint are ruled out by assuming that AGREE is delayed until the next phase head is merged (*fare* in C, in this case).

As briefly discussed in the present section, this configuration is in line with what has been previously observed for other constructions where an AGREE relation is established between more than one goal and one probe. The proposed analysis shows how a surprising case of variation in yes/no questions is in fact amenable to general principles of the grammar.

3.2.4 Tense, Mood and Aspect features

As discussed in Chomsky's (2005, 2006) feature-inheritance model, there is a strong connection between C and T. More specifically, T is considered to inherit all of its features from C so that it only acts as a Probe derivatively, by virtue of its relationship with C. This relationship results in a number of different correlations which provide evidence for C and T having a strong connection. As already discussed in section 3.2.1, I consider the TMA-identity requirement that characterizes *che fare* questions to be a corollary of the more general C-T identity requirement.

In fact, the presence of multiple tensed verbs in the same clausal domain which share the same Tense, Mood and Aspect features is very pervasive across various languages. I will first discuss some data which provide evidence in favor of the C-T connection (Chomsky, 2005, 2006). Then I will present some data from West African, Swedish (Wiklund, 2007), English (de Vos, 2005), Afrikaans (de Vos, 2005) and Sicilian (Cardinaletti & Giusti, 2000), which involve a similar spreading of inflectional morphology. However, a detailed analysis of the syntactic mechanism through which Tense, Mood and Aspect features actually spread on different verbal heads is beyond the scope of this paper.

3.2.4.1 The C-T connection

A strong piece of evidence in favor of the C-T connection is complement clause selection. As widely described in the literature (cf. Grimshaw, 1979; Philippaki-Warbuton, 1992; Manzini, 2000; Rizzi, 2001; Adger & Quer, 2001; Roussou, 2010), complementizers select specific types of complement clauses. This selection operation has some direct consequences for the morphology of the verb in the complement clause. More specifically, it affects the verb with respect to finiteness (finite vs. non-finite forms) or mood choices (e.g. indicative vs. subjunctive), as widely discussed by a number of scholars (cf. Rizzi 1997). Some examples from Catalan and Sienese are provided respectively in (41.a-d) and (42.a-d) below:

- 41) a. Han confessat que s' hagin
 have-PRES.3.PL confessed that REFL.CL have.PRES.SUBJ.3.PL
 endut diners?
 take-PP money
 'Did they confess if they took the money?'
 b. *Han confessat que s' han
 have-PRES.3.PL confessed that REFL.CL have-PRES.IND.3.PL
 endut diners
 take-PP money?
 'Did they confess if they took the money?'

- c. Han confessat si s' han
 have-PRES.3.Pl confessed if REFL.CL have.PRES.IND-3.Pl
 endut diners?
 take-PP money
 'Did they confess if they took the money?'
- d. *Han confessat si s' hagin endut
 have-PRES.3p confessed if REFL.CL have.SUBJ-3.Pl take-PP
 diners?
 money
 'Did they confess if they took the money?' (Adger & Quer, 2001:111)
- [Catalan]

The Catalan examples in (41.a-d) show a Mood alternation, determined by the selection operated by the complementizer. The complementizer *que* selects the subjunctive, as in (41.a). The indicative yields ungrammaticality, as shown in (41.b). Instead, the complementizer *si* selects the indicative, as in (41.c). A subjunctive form would be ungrammatical in this context, as shown in (41.d).

- 42) a. M' hanno consigliato d' andà a Murlo.
 to-me.CL have-PRES.3.Pl suggested to go-INF to Murlo
 'They suggested me to go to Murlo.'
- b. *M' hanno consigliato di vo a
 to-me.CL have-PRES.3.Pl suggested to go-PRES.IND.1.Sg to
 Murlo
 Murlo.
 'They suggested me to go to Murlo.'
- c. Mi sa che vo a Murlo.
 to-me.CL taste-PRES.3.Pl that go-PRES.IND.1.Sg to Murlo
 'I think I will go to Murlo.'
- d. *Mi sa che andà a Murlo.
 to-me.CL taste-PRES.3.Pl that go-INF to Murlo
 'I think I will go to Murlo.'

[Sieneese]

As opposed to the Catalan examples in (41.a-d), the Sieneese examples in (42.a-d) show a finiteness alternation. The complementizer *di* selects a non-finite verb, as shown in (42.a). A finite verb would be ungrammatical in this position, as shown in (42.b). Similar story for the complementizer *che*: it selects a finite verb, as in (42.c). A non-finite verb yields ungrammaticality, as shown in (42.d).

3.2.4.2 TMA-spreading

One of the most prototypical examples of TMA-spreading is provided by pseudo-coordinative constructions. Pseudo-coordinative constructions are found in many variants of spoken Swedish (cf. Anward, 1988; Josefsson, 1991; Wiklund, 1996, 2007; Julien, 2003), as well as in some spoken varieties of Danish, Faroese and Norwegian. An example from Swedish is provided in (43) below:

- 43) a. Han börjar o skriver dikter
 he start-PRES.3.Sg and write-PRES.3.Sg poems
 'He starts writing poems.' (Wiklund, 2007:3)
- b. Han började o skrev dikter
 he start-PAST.3.Sg and write-PAST.3.Sg poems
 'He started writing poems.' (Wiklund, 2007:3)
- c. Börja o skriv dikter!
 start-IMP and write-IMP poems
 'Start writing poems!' (Wiklund, 2007:4)
- d. Han hade börjat o skrivit dikter.
 he have-PRES.3.Sg start-PP and write-PP poems
 'He had started writing poems.' (Wiklund, 2007:4)
- [spoken Swedish]

The examples in (43.a-d) are characterized by what looks like a coordination of two tensed verbs which share the same morphology. This construction type is possible with any kind of Tense, Mood and Aspect. The sentences in (43.a-d) show it respectively with present tense, past tense, imperative mood and past participle. Of course, this configuration differs very much from *che fare* questions, where no conjunction-like element is present. Beside, this construction is only possible with a restricted class of verbs, which includes control verbs and aspectual verbs like *börja* 'start', *sluta* 'stop' and *fortsätta* 'continue'.

Despite the obvious differences, it somehow still remind us of Sienese *che fare* questions because both constructions are characterized by the presence of two tensed verb in the same clausal domain, which share the same Tense, Mood and Aspect features.

Another example of a pseudo-coordinative structure comes from English (Shopen, 1971; Carden & Pesetsky, 1977; Cardinaletti and Giusti, 2000; de Vos, 2005):

- 44) a. John goes and looks busy every time his boss arrives. (de Vos, 2005:26)
- b. John went and read the constitution. (de Vos, 2005:32)
- c. It could go and rain today. (de Vos, 2005:33)
- 45) a. John and Mary try and eat apples.

- b. John will try and eat an apple.
- c. *John has tried and eaten an apple. (de Vos, 2005:57)

In English it is possible to have a pseudo-coordination of tensed verbs, which reminds us of the Swedish examples in (43). As in Swedish, this phenomenon is restricted to the class of aspectual verbs, such as *go* (see 44.a-c) and *try* (see 45.a-c). In addition, not all Tenses, Moods and Aspects can occur in this construction type. For instance, *go* licenses all Tenses, Moods and Aspects while *try* only allows present and future Tense. Interestingly, American English displays a similar construction that lacks a conjunction-like element:

- 46) a. I go buy bread.
- b. John will go visit Harry tomorrow.

A slightly different case of pseudo-coordination is found in Afrikaans (de Vos, 2005). An example is provided in (47.a). In Afrikaans pseudo-coordinative structures, however, the verbal string may be interrupted by certain XPs (see 47.b) Also, it can occur in the second position of the clause, which is usually meant for single verbs (see 47.c).

- 47) a. Jan sal die boeke sit en lees.
Jan will the books sit-INF and read-INF
'Jan will sit reading the books.'
- b. Jan sit die boeke en lees.
Jan sit-PRES.3.Sg the books and read-PRES.3.Sg
'Jan sits reading the books.'
- c. Jan sit en lees die boeke.
Jan sit-PRES.3.Sg and read-PRES.3.Sg the books
'Jan sits reading the books.' (de Vos, 2005:2)

[Afrikaans]

A further construction type where two inflected verbs occur within the same clausal domain is provided by Sicilian¹⁰ (Cardinaletti & Giusti, 2000):

- 48) a. Vaju a pigghiu u pani.
go-1.PRES.Sg to fetch-1.PRES.Sg the bread
'I'm going to fetch bread.'
- b. Va pigghia u pani!
go-IMP.2.Sg fetch-IMP.2.SG the bread
'Go to fetch bread!' (Cardinaletti & Giusti, 2000:12)

¹⁰ The Sicilian variety described by Cardinaletti and Giusti (2000) is *Marsalese*.

- 49) a. *Ii a pigghiai u pani.
 go-PAST.1.Sg to fetch-PAST.1.Sg the bread
 'I went to buy bread.'
- b. *Emu a pigghiamu u pani.
 go-PRES.1.Pl to fetch-PRES.1.Pl the bread
 'We went to buy bread.' (Cardinaletti & Giusti, 2000:12)

[Sicilian]

As pointed out by Cardinaletti & Giusti (2000), there are some restrictions on the class of verbs that can participate in this construction, which in fact is limited to motion verbs. In addition, not all Tense, Mood and Aspect are allowed: only present tense (see 48.a) and imperative mood (see 48.b) can in fact occur in this configuration. Past indicative (see 49.a), Imperfect indicative and Subjunctive Mood are all ungrammatical. Besides, there are also some restrictions on the person feature of the subject, which can only be 1st, 2nd and 3rd person singular and 3rd person plural. No 1st and 2nd person plural subjects are allowed, as shown by the ungrammaticality of (49.b).

There are certainly many differences between the Marsalese constructions discussed in Cardinaletti and Giusti (2000) and Sienese *che fare* questions. Still, the Sicilian examples in (48) provide evidence for a further construction where two tensed verbs occur in the same clausal domain.

A different example is provided by Serial Verb Constructions, which are very common in many West African languages. They are characterized by the presence of two or more verbs which share subject, object, aspect and tense markers, and are not connected by any kind of conjunction.

As pointed out by many scholars (Baker, 1989; Lee, 1992; Jaeggli & Hyams, 1993; Pollock, 1994; Collins, 1997), the Swedish, English and Afrikaans construction types presented so far are not parallel to Serial Verb Constructions because they lack object sharing.

Let us consider the following examples from Logba (Dorvlo, 2007), a Kwa language spoken in south-eastern Ghana:

- 50) a. A- bobi- e o- tò- klé fɛ a- táwalibiwo
 CM- moon- the Subj.CL- HAB- shines exceed CM- stars
 'The moon shines brighter than stars.' (Dorvlo, 2007:6)
- b. Owusu ɔ- lɔ- nɛ a- fúta tá o- gà
 Owusu Subj.CL- PRES.PROG- buy CM- cloth give CM- wife
 'Owusu is buying cloth for his wife.' (Dorvlo, 2007:7)

[Logba]

There are two verbs in the examples in (50.a-b): *klé* 'shine' and *fɛ* 'exceed' in the former, *nɛ* 'buy' and *tá* 'give' in the latter. The TMA-markers appear only once; they attach as a prefix to the first verb. However, the second verb receives the same interpretation as the first one. The verb *klé* 'shine' is preceded by a habitual marker in (50.a), while the verb *nɛ* 'buy' is preceded by a progressive-aspect marker. Although this

construction type is certainly different from Sieneese *che fare* questions, it still instantiates a case of a monoclausal structure with two tensed verb.

A different case of Tense feature spreading is provided by the so-called Sequence of tenses, known in Latin as *Consecutio Temporum*. *Consecutio Temporum* is a phenomenon which requires tense feature identity between the verb of the main clause and the verb of the subordinate clause. Although it does not concern monoclausal domains, it is still relevant because it provides evidence for a mechanism for spreading features other than phi.

It is found in many languages, among which classical Greek, modern standard Italian and, to a certain extent, English too. A couple of examples are provided in (51) and (52):

- 51) a. *Iam faciam quodcumque voles.*
 by.now do-FUT.1.Sg everything want-FUT.2.Sg
 ‘By now I will do everything you want.’ (Tibullus, *Liber 4*, Carmen 13:3)
- b. **Iam faciam quodcumque vis.*
 by.now do-FUT.1.Sg everything want-PRES.2.Sg
 ‘By now I will do everything you want.’
- [Latin]
- 52) a. *Volevano che parlassi.*
 want-PAST.3.Pl that talk-PAST.3.Pl
 ‘They wanted me to talk.’
- b. **Volevano che parli.*
 want-PAST.3.Pl that talk-PRES.3.Pl
 ‘They wanted me to talk.’
- [Italian]

In (51.a), the verb of the main clause, *facere* ‘do’ has a future tense feature, which must be present on the verb of the subordinate clause in order for the sentence to be grammatical. The sentence in (51.b) is ungrammatical because the verb of the subordinate clause, *velle* ‘want’ has a present tense feature.

Same story for the examples in (52.a-b): the verb of the main clause, *volere* ‘want’, has a past tense feature in both sentences. The verb of the subordinate clause, *parlare* ‘talk’ has a past tense feature in (52.a), while in (52.b) it has a present tense feature. Therefore, (52.a) is grammatical while (52.b) is not.

Finally, I would like to mention another piece of evidence in favor of the idea that feature-spreading is not limited to phi-features. Tortora (2009) proposes a mechanism for feature spreading in order to account for the different adjunction sites of object clitics in Piedmontese dialects. Namely, she proposes a mechanism for spreading the feature [+finite] from the T-head in the Infl-domain to the next lower head, say F1, which then provides the same feature to the next lower functional head, say F2, an so on. By doing so, the feature [+finite] spreads all the way down into the lower functional field. If a functional heads acquires the feature [+finite], then it cannot host object clitics.

To account for the different object clitic adjunction sites in different Piedmontese dialects, she suggests that the left periphery of the lower functional field acts as a barrier to feature spreading in those dialects where object clitics can be adjointed to a functional head in the lower functional field. Instead, it does not act as a barrier in those dialects where object clitics cannot occur in the lower functional field.

The examples in (53.a-b) show the different adjunction sites for object clitics. In Borgomanerese the object clitics adjuncts to a functional heads in the lower functional field, which means the lower functional field functions as a barrier for spreading of the feature [+finite]. The reverse is true in Turinese, where object clitics can only adjunct to functional heads in the higher functional field.

- 53) a. I vònghi piö- *lla*.
 I.Subj.CL-1.Sg see-PRES.1.Sg anymore- her.Obj.CL
 ‘I don’t see her anymore.’ (Tortora, 2009:5)
[Borgomanerese]
- b. I *lo* presento a Giors.
 I.Subj.CL him.Obj.CL introduce-PRES.1.Sg to Giorgio
 ‘I’ll introduce him to Giorgio.’ (Tortora, 2009:5)
[Turinese]

Although Tortora’s (2009) proposal is meant to account for a different set of phenomena, it still provides evidence for a mechanism for spreading features other than phi-features.

4. The diachronic development of yes/no questions

Hitherto, an analysis has been proposed which can account for the syntax of *che fare* questions from a synchronic point of view. However, it is also necessary to investigate the diachrony of this construction in order to have a better grasp on its syntax and semantics. Therefore, I will now put forth a working hypothesis concerning the diachronic development of *che fare* questions over time. First, I will briefly discuss some preliminary evidence in favor of my hypothesis. Then, I will provide some examples of similar diachronic processes which are attested in other languages.

4.1 A working hypothesis

As amply discussed in the previous sections, the syntactic structure of Sienese *che fare* questions is very peculiar for at least two reasons:

- although they are yes/no questions, they are introduced by a *mb*-element;
- there are two tensed verbs in the same clausal domain, which share the same phi-, Tense, Mood and Aspect features.

For these reasons, I believe that the complex structure of yes/no questions in Sienese might find its origin in a biclausal discourse, which was eventually reanalyzed

monoclausally over time. More specifically, *che fare* questions might be the result of a process of reanalysis which merged a wh-question with a yes/no question proper. If this explanation is on the right track, then the apparently biclausal nature of *che fare* questions would be automatically accounted for. As already mentioned in section 3, *che fare* questions might look like two questions rather than one single question at first sight:

- 54) a. Che *fai* *vai* al *mare?*
 che do-PRES.2.Sg go-PRES.2.Sg to-the sea
 ‘Are you going to the sea?’
- b. Che *fai?* *Vai* al *mare?*
 what do-PRES.2.Sg go-PRES.2.Sg to-the sea
 ‘What are you doing? Are you going to the sea?’

[Sieneese]

The example in (54.a) shows a *che fare* yes/no questions, while the example in (52.b) shows the interpretation that it might receive at first sight. Although I showed extensively in section 3.1 that this is not correct, I still believe that it cannot be entirely coincidental. If my hypothesis concerning the diachronic development of yes/no questions in Sieneese proves correct, then any trace of accidentality disappears. Another piece of evidence in favor of a diachronical analysis comes from the incompatibility of *che fare* questions with *essere* ‘be’ when individual-level predicates (see section 2.1) are involved.

- 55) **Che fa* è *intelligente?*
 che do-PRES.3.Sg be-PRES.3.Sg intelligent
 ‘Is (s)he intelligent?’

[Sieneese]

The ungrammaticality of (55) shows that *fare* probably still retains some of its original lexical, agentive meaning. This suggests that *fare* is likely to have started out as a lexical verb proper, and not as a light, auxiliary-like verb as it is today. Therefore, a diachronical analysis seems to be a promising approach for capturing this meaning shift.

After all, the idea of a biclausal structure being reanalyzed as a monoclausal structure *per se* is not new. As a matter of fact, there is plenty of such cases which have been very well described in the literature. One example is provided by focalization/topicalization structures in languages such as Breton, Japanese, Migrelian, Somali and Xopian (Harris & Campbell, 1995). In the next two subsections, I will briefly explore two cases of reanalysis through which a biclausal structure developed into a monoclausal structure.

4.1.1 Somali

In Somali and other Cushitic languages, the morphology of the verb changes according to the information structure of the sentence. Namely, it is sensitive to the subject and the object being a focus. Therefore, these morphological alternations have been labeled as ‘subject focus conjugation’ and ‘object focus conjugation’. However, the verb displays 3rd person singular masculine agreement (i.e. default agreement) with 2nd person singular and 2nd and 3rd person plural. Let us take a look at the following examples from Somali:

56) a. Anigu muuska baan cunayaa.
 I banana FOC eat
 ‘I am eating a banana.’ (Antinucci & Puglielli, 1984:19)

b. Aniga baa muuska cunaya
 I FOC banana eat
 ‘I am eating a banana.’ (Antinucci & Puglielli, 1984:19)

[Somali]

57) a. Adigu muuska baad cunaysaa
 you banana FOC eat
 ‘You are eating a banana.’ (Antinucci & Puglielli, 1984:19)

b. Adiga baa muuska cunaya.
 you FOC banana eat
 ‘You are eating a banana.’ (Antinucci & Puglielli, 1984:19)

[Somali]

The examples in (56.a-b) show an example of subject and object focus conjugation with 1st person singular. Those in (57.a-b) illustrate subject and object focus conjugation with 2nd person singular. The verb occurring in (57.a) is a default form of the verb *eat*, which does not agree with the subject.

According to, among others, Hetzron (1974) and Harris & Campbell (1995), the pattern illustrated by the subject focus conjugation in Somali and other East-Cushitic languages derives from a process of reanalysis, through which a biclausal cleft structure developed into a monoclausal construction. The apparent lack of agreement with some persons follows from this assumption. Indeed, if the subject originated as the subject of the embedded copular clause in the cleft construction, then the verb of the main clause is not expected to agree with it. As for the agreeing persons, they are considered to be an innovation in this construction.

4.1.2 Laz

Another example of reanalysis which transformed a biclausal structure into a monoclausal one comes from a Xopian dialect of Laz, a Kartvelian language spoken in the Southern Caucasian region.

In some dialects of Laz, there is a cleft-like structure which marks Topic rather than Focus. Unlike regular cleft structures, the subordinate clause contains the topicalized element and the copula. An example from the Vic'Arkab dialect is shown in (58) below:

- 58) Mažura- pe- na en, va uc'mess.
 second- Pl- NOM.COMP it.be neg he.speak.to.them
 Lit. translation: 'The others that are, he does not speak to (them).'
 'As for the others, he does not speak to them.' (Čikobava, 1936b:19, 32)
 [Vic'Arkab dialect of Laz]

In the Xopian dialect, this biclausal construction has been reanalyzed as a single clause. An example is given in (59):

- 59) Ia k'ulani- muši- nay patišais komeču.
 that daughter- his- TOP ruler he.gave.her.to.him
 'As for his daughter he gave her to the ruler.' (Asatiani, 1974:4, 12)
 [Xopian dialect of Laz]

The topic is marked by the particle *nay*, which is the contraction of the relative particle *na* and the verb *be*.

4.2 Stages of reanalysis

The process of reanalysis is of course a very long and gradual one. It is always composed of different stages, through which a construction gradually loses its features to acquire new ones, until it reaches its final stage.

Harris & Campbell (1995) proposed a grammaticalization cline for cases of reanalysis of biclausal structure into monoclausal structures:

Stage 1: The structure has all of the superficial characteristics of a biclausal structure and none of the characteristics of a monoclausal one.

Stage 2: The structure gradually acquires some characteristics of a monoclausal structure and retains some characteristics of a biclausal one.

Stage 3: The structure has all the characteristics of a monoclausal structure and no characteristics of a biclausal one. (Harris & Campbell, 1995: 166)

Although the constructions discussed by Harris & Campbell (1995) are different from Siense *che fare* questions, they still involve reanalysis of a biclausal construction into a monoclausal one. Therefore, I will try and see whether their generalizations concerning the stages of reanalysis can possibly apply to my data.

- **Stage 1:** *The structure has all of the superficial characteristics of a biclausal structure and none of the characteristics of a monoclausal one.*

I assume the initial stage of the reanalysis of *che fare* questions from monoclausal to biclausal constructions to be as in (60):

- 60) Che facesti? Andasti al mare?
 what do-PAST.2.Sg go-PAST.2.Sg to-the sea
 ‘What did you do? Did you go to the sea?’

At this stage, the construction doesn't have any characteristics of a monoclausal structure. It is a biclausal discourse composed of two questions: a *wh*-question and a yes/no question proper. *Fare* is a fully lexical verb, which assigns theta-roles and case to its arguments. Therefore, it complies with Harris & Campbell's (1995) generalization concerning the first stage of reanalysis of biclausal constructions into monoclausal ones.

- **Stage 2:** *The structure gradually acquires some characteristics of a monoclausal structure and retains some characteristics of a biclausal one.*

I assume the second stage of reanalysis of *che fare* questions from monoclausal to biclausal constructions to be instantiated by Sienese. Indeed, Sienese *che fare* questions have some characteristics of a monoclausal structure but at the same time still retain some features of a biclausal one. As discussed in subsections (3.1.1-3.1.4), Sienese *che fare* questions are monoclausal because of the following reasons:

- *Fare* and the lower lexical verb must share the same phi-, Tense, Mood and Aspect features;
- only one negation can occur;
- the subject cannot occur between *fare* and the lower verb;
- *fare* is compatible with verbs which do not assign an agentive theta-role to their subject.

In addition, *fare* cannot assign case and theta-roles to its argument anymore. However, Sienese *che fare* questions still retain a property of a biclausal structure; namely, there are two tensed verbs. As shown in subsection 3.2.3.2, this is not uncommon in many languages of the world. However, it is quite uncommon in Indo-European languages, unless a conjunction-like element is present, which is not the case in Sienese.

For these reasons, it is possible to conclude that Sienese *che fare* questions fall under the requirements of the second stage.

- **Stage 3:** *The structure has all the characteristics of a monoclausal structure and no characteristics of a monoclausal one.*

I assume the third stage of reanalysis of *che fare* questions from monoclausal to biclausal constructions to be instantiated by Sicilian. Indeed, the *wh*-word *chi* and the verb *fare* have clearly undergone a process of grammaticalization, through which they developed into some kind of complex, adverb-like element in the Left Periphery of the clause. Evidence for this is provided by three facts:

- As opposed to Sienese, *fare* does not agree with the subject of the lower lexical verb in Sicilian; it always occurs in the 3rd person singular present form, disregarding of the phi-features of the subject and of the Tense, Mood and Aspect features of the lower lexical verb;

type in *che fare* questions, disregarding of the theta-roles assigned by the lexical verb. On the basis of these arguments, I showed that *che fare* questions are in fact monoclausal constructions.

As far as the syntactic structure of Sienese *che fare* questions is concerned, I argued that the agreement morphology showing up on *fare* and the lexical verb is the result of two AGREE relations. Following Chomsky (2001), I assumed that AGREE is delayed until phase completion. Once the phase head *fare* is merged in C, AGREE takes place: both *fare* and the lexical verb simultaneously establish an AGREE relation with the subject, as it is the only element with the appropriate features in their c-command domain. As a consequence, potential problems related to the Activity Condition and the Defective Intervention Constraint do not come into play. I assumed that the subject does not move out of SpecvP because T lacks an EPP feature in Sienese *che fare* questions. This was done in order to account for the word order of *che fare* questions without postulating additional reasons for the subject to move out of SpecTP. A final assumption concerns the nature of *fare*, which is argued not to be able to assign case to the subject because it is a light verb. As a result, the subject is prevented from receiving case from both the lexical verb and *fare*.

Finally, a tentative hypothesis concerning the diachronic development of *che fare* questions was proposed. Despite their different syntactic behavior, *che fare* questions seem likely to have originated from biclausal discourses, which were reanalyzed as monoclausal constructions over time. Cases of reanalysis of biclausal constructions into monoclausal ones are in fact widely attested in the literature. Sienese is taken to display an intermediate stage between biclausal discourses and Sicilian *chiffà* questions, as *fare* has become a light verb but still retains some of its original verb features.

The loss of agreement morphology on *fare* in Sicilian *chiffà* questions suggests that Sicilian might instantiate a further stage in the reanalysis process, where *fare* has lost all the features of a verb to become a high adverbial element in the Left Periphery.

To summarize, I have argued in this chapter that *che fare* questions are distinct from biclausal discourses, as they are subject to different syntactic restrictions. However, this argument raises another issue that needs to be addressed in order to unambiguously establish the syntactic status of *che fare* questions. Namely, it is necessary to find out how *che fare* questions can be distinguished from their corresponding biclausal discourses in the absence of any morphosyntactic cue. If they are two distinct constructions, we would expect them to systematically correlate with different distinctive prosodic properties. This would provide empirical evidence to support the theoretical claims made in this chapter about their underlying structure. Chapter 4 will tackle this issue.

1.1 The problem

Distinguishing a *che fare* question from the corresponding biclausal discourse containing two questions is relatively straightforward. When there are phi-, tense, mood or aspect feature mismatches, or two negations, or the subject occurs between *fare* and the lower verb, we know for sure that we are dealing with a biclausal discourse.

However, the reverse is not always true. In fact, the absence of one of these characteristics does not necessarily mean that we are dealing with a *che fare* question. Therefore, it is important to develop tests that can unambiguously establish the syntactic status of these constructions. More specifically, it is necessary to address the questions given in (3).

- 3) a. Do speakers use grammatical cues, other than morphosyntactic ones, to distinguish between *che fare* questions and biclausal discourses?
- b. How can the distinction between *che fare* questions and biclausal discourses be established when they form a minimal pair, such as (1.a-b)?

In order to answer these questions, it is necessary to look at the prosody of *che fare* questions and of the corresponding biclausal discourses. If they exhibit distinctive prosodic properties, then we have a further argument in favor of a sharp distinction between these constructions.

2. Production experiment

To tackle the questions in (3), a production experiment was designed and carried out. The aim of the experiment is to investigate whether speakers make a prosodic distinction between *che fare* questions and the corresponding biclausal discourses containing two questions.

If my hypothesis concerning the monoclausality of *che fare* questions is on the right track, I would expect the subjects to use different prosodic cues to distinguish the two constructions. In contrast to this, the absence of any prosodic differences would show that they are in fact the same.

2.1 Methods

2.1.1 Stimuli

A PowerPoint presentation consisting of 35 slides was developed, containing 14 yes/no questions, 15 biclausal discourses containing two questions, and 6 control sentences.

The slides contained 5 minimal pairs of yes/no questions and biclausal discourses. The lexical items and the morphosyntactic information in the minimal pairs were identical, so as to allow for potential ambiguity. However, the presentation of the sentences did signal a difference between the structures by using a different punctuation. More precisely, the yes/no questions were written on a single line, followed by a single final question mark. The biclausal discourses were presented on two separate lines and were

each signaled by their own question mark. An example of the minimal pair stimuli that were included in the PowerPoint presentation is provided in (4) below. Figure 1 shows a sample of the slides that were used in the presentation.

- 4) a. Che fai vai al mare?
che do-PRES.2.Sg go-PRES.2.Sg. to-the sea
'Are you going to the sea?'
[yes/no question]
- b. Che fai?
what do-PRES.2.Sg.
Vai al mare?
go.PRES.2.Sg. to-the sea
'What are you doing? Are you going to the sea?'
[biclausal discourse]



Figure 1.a: Sample of slides used in the PowerPoint presentation¹.

¹ One may argue that writing the biclausal discourses on two lines rather than on one line could in principle affect the way the speakers pronounced the sentences. However, I exclude that the speakers were encouraged to produce a larger pause by the disposition of the sentences in the screen. The two sentences clearly cohere textually, with the second question being a follow up on the first one. A new paragraph would have required a break in textual cohesion. For this reason, I strongly doubt that the speakers produced an end-of-a-discourse prosody rather than an end-of-a-sentence one.



Figure 1.b: Sample of slides used in the PowerPoint presentation

In addition, there were 3 quasi-minimal pairs of yes/no questions and biclausal discourses. The lexical items in the yes/no question and in the biclausal discourse were not exactly the same in these cases. *Fare* was replaced by a different verb in the first question of the biclausal discourse because of its incompatibility with the theta-role assigned to the subject by the verb in the second question. A sample is given in (5).

- 5) a. Che fa assomiglia al su
che do-PRES.3.Sg resemble-PRES.3.Sg to-the his/her
 babbo?
 father
 ‘Does (s)he look like his/her father?’
 [yes/no question]
- b. Com’ è?
 how be-PRES.3.Sg.
 Assomiglia al su babbo?
 resemble-PRES.3.Sg. to-the his/her father
 ‘How is (s)he? Does (s)he look like his/her father?’
 [biclausal discourse]
- c. # Che fa?
 what do-PRES.3.Sg.
 Assomiglia al su babbo?
 resemble-PRES.3.Sg. to-the his/her father
 ‘What does (s)he do? Does (s)he look like his/her father?’
 [biclausal discourse]

A quasi-minimal pair is illustrated in (5.a-b). *Fare* ‘do’ was replaced with *essere* ‘be’ in the biclausal discourse in (5.b) because *fare* ‘do’ assigns an agentive theta-role to its subject,

while the verb *assomigliare* ‘resemble’ does not. The discourse in (5c) is infelicitous (as indicated by the # sign), because the question with *fare* concerns a request with respect to an agentive event, while the second question that specifies this first question refers to a state (*assomigliare* ‘resemble’). The status of the sentences in (5.a) and (5.b) is unambiguous. On the one hand, the sentence in (5.a) could never be interpreted as a biclausal discourse, as shown by the ungrammaticality of (5.c). On the other hand, (5.b) is clearly not a monoclausal yes/no question because it lacks *fare*.

There were 6 yes/no question slides and 6 biclausal discourse slides that did not form minimal pairs. Out of these 6 biclausal discourse slides, 2 were potentially ambiguous and 4 were not. These 4 biclausal discourses were characterized by the following properties:

- phi-feature mismatch between *fare* and the lower verb;
- tense mismatch between *fare* and the lower verb;
- aspect mismatch between *fare* and the lower verb;
- the subject occurring after *fare* and before the lower verb.

A sample of unambiguous biclausal discourse is given in (6).

- 6) a. Che fate?
 what do-PRES.2.Pl
 S' esce o no?
 we.Subj.CL go.out-PRES.1.Pl or not
 ‘What are you doing? Are we going out or not?’
 [phi-feature mismatch]
- b. Che fece la tu mamma?
 what do-PAST.3.Sg the your mother
 La comprò la macchina?
 it.Obj.CL buy-PAST.3.Sg the car
 ‘What did your mother do? Did she buy the car?’
 [subject position]

As for the 6 yes/no question slides, I used a wide variety of lexical items in order to make sure that prosodic patterns were not conditioned by the presence of specific lexical items. I also included stimuli of different lengths, again to make sure that the length of the stimuli was not affecting the results. A sample is given in (7).

- 7) Che fanno moiano se un gli
che do-PRES.3.Pl die-PRES.3.Pl if not to-them.CL
 dai l' acqua tutti i giorni?
 give- PRES.2.Sg the water every the days
 ‘Do they die if they aren’t watered every day?’

Finally, I included 7 control slides. Two of them contained two declaratives, two a single declarative and two a question/answer pair. A sample is given in (8).

- 8) a. Ieri si mangiò la panzanella.
 yesterday we.Subj.CL eat-PAST.3.Pl the panzanella
 ‘We ate panzanella yesterday.’
 [single declarative]
- b. Vai al mare? Noi sì.
 go-PRES.2.Sg to-the sea we yes
 ‘Are you going to the sea? We are.’
 [question/answer pair]

This experiment was specifically designed for Sieneese speakers. Therefore, its lexicon is often dialectal and refers to typical Sieneese food and names. This choice was made to ensure that speakers would give judgments of the relevant dialect and not be influenced by their knowledge of Standard Italian. An example is provided in (8.a), where a typical Sieneese/Tuscan dish is mentioned (*panzanella*). Another example is given in (9).

- 9) Che fai ti garba la figliola
che do-PRES.2.Sg to-you.CL please-PRES.3.Sg the daughter
 del Brogi?
 of Brogi
 ‘Do you like Brogi’s daughter?’

In the sentence in (9) the Standard Italian word *figlia* ‘daughter’ was replaced by the Sieneese word *figliola* ‘daughter’ in order to make it more Sieneese. In addition, a very typical Sieneese surname (*Brogi*) was chosen.

Two different slide shows were created, with one the opposite of the other. Six speakers were shown the slides in one order and 5 speakers in the reverse order. This was done to make sure that possible order and learning effects would be balanced.

In addition, both slide shows were designed in such a way as to avoid two slides from a minimal pair occurring next to each other. This was done to make sure that the participants would not start comparing them and get a grasp of what was being tested.

2.1.2 Procedure

The experiment was conducted in a quiet room. Participants were recorded individually, using a head-mounted close-talking microphone (Audio Technica PRO8HE). They were seated at a table with a computer screen in front of them. The distance between the subjects’ eyes and the screen was about 70 centimeters. The sentences were written in a large font (Minion 54), to make sure that they could be read easily by all subjects.

The participants were given specific instructions before the experiment started as to how they should read the sentences. More precisely, I told them that they should read them as if they were in a very informal situation, such as in the headquarters of their *contrada*². I told them that I was interested in Sieneese and encouraged them to

² Siena has seventeen districts, which are called *contrada* in the local dialect. They participate in a horse race called *Palio*, held twice each year on July 2nd and August 16th in the main square of the town. This ritual started in the Middle Ages and is now more alive than ever. *Contradas* compete

pronounce the sentences on the screen without repressing their Sienese accent. This was not always easy as people tended to feel that they were somehow under examination. As a result, some speakers were using a more standard pronunciation at the beginning of the recordings. When this happened, I would stop and convince them once again that I was interested in Sienese as they would speak it in their *contrada*, not in standard Italian.

Subjects were presented with a slide show. They had to press the space bar to start the show. This was done in order to respect each person's individual reaction time. An automatic slide show with a preset on-screen time might alter the results in this case, as the subjects might feel pressured to read the sentences faster than they would normally do.

The recordings were first saved as sound files on the flash disk memory of the recorder (Marantz PMD620). They were eventually transferred to computer disk and stored in a database.

2.1.3 Participants

Eleven Sienese speakers took part in the experiment. Among them were 7 women and 4 men, aged between 26 and 70 years. The participants were all Siena residents, who were born and raised in Siena. They were all linguistically naive and unaware of the specific purpose of my study. All they knew was that I was generally interested in Sienese as a dialectal variety. Their educational level was medium to medium-high. An overview is given in table 1 below:

Table 1. Overview of the participants.

Participant	Gender	Age	Educational level
CL	male	70	High school diploma
GG	female	26	MA degree
MB	female	26	MA degree
ES	female	26	MA degree
PM.	female	44	High school diploma
PT	male	53	High school diploma
FG	male	39	High school diploma
DL	male	37	High school diploma
CM	female	49	High school diploma
SN	female	53	BA degree
SL	female	26	MA degree

All speakers participated voluntarily and were not remunerated for their service.

against one another in the *Palio*. Rivalry and competition are an integral part not only of the months preceding the event, but of the whole year. This tradition is extremely important for the Sienese people and represents without any doubt the heart and soul of Siena. Therefore, I decided to emphasize the participants' personal commitment to their *contrada*.

2.2 Analysis

The recordings comprised eleven sound files (one for each speaker), the durations of which varied between 1.17 and 2.13 minutes. Each file contained 35 utterances.

Since I am interested in the contrast between minimal pairs of monoclausal yes/no questions and their corresponding biclausal discourses, only the members of such minimal pairs were digitally analyzed with the *Praat* speech processing software (Boersma & Weenink, 2005). The productions of all speakers were analyzed. They consisted of 110 utterances in total (5 minimal pairs \times 11 speakers).

The sound files were first manually segmented and labeled. For each utterance, a *Praat* annotation file (called TextGrid) was set up which includes four annotation tiers.

The first annotation tier was labeled *clause*. It contains a point in time corresponding to the potential clause boundary, i.e. right after *fare*. The point was placed at the beginning of the pause in those utterances where a pause occurs between *fare* and the following word.

The second tier was labeled *word*, as it was dedicated to a segmentation of the utterance into words. This was done in order to be able to extract duration and intensity measurements for some of the words included in the utterances. As already anticipated, some utterances contain a prosodic break after *fare*. The prosodic break was labeled *P*, when present.

In the third tier, a portion of the utterance was segmented that was characterized by a pitch fall. Namely, the pitch fall occurring at the left of the potential clause boundary was segmented, corresponding to the word *fare*. This was done in order to be able to extract measurements relative to the size, duration and steepness of the fall. The relevant tier was labeled *F*.

The fourth tier was labeled *V*, and was dedicated to the labeling of the segment where pre-boundary vowel lengthening (henceforth PBL) could potentially take place. Since the aim of this study is to compare a monoclausal and a biclausal construction, it was hypothesized that one of the differences should lie in the presence of PBL (or the absence thereof). However, not only the vowel that could potentially lengthen was segmented and labeled. Rather, the inter-stress interval between *fare* and the following word (henceforth ISI) was identified as the portion of utterance where PBL could take place. This was done to check for potential spill-over effects of PBL outside the word boundaries of *fare*.

The second step in the acoustic analysis was extracting the sounds' pitch information. A *Praat* PitchTier file was created for each utterance, which represents a time-stamped pitch contour. It includes the time-frequency coordinates of selected pitch points, without voicing information. An example of TextGrid and PitchTier file is given in figure 2 below.

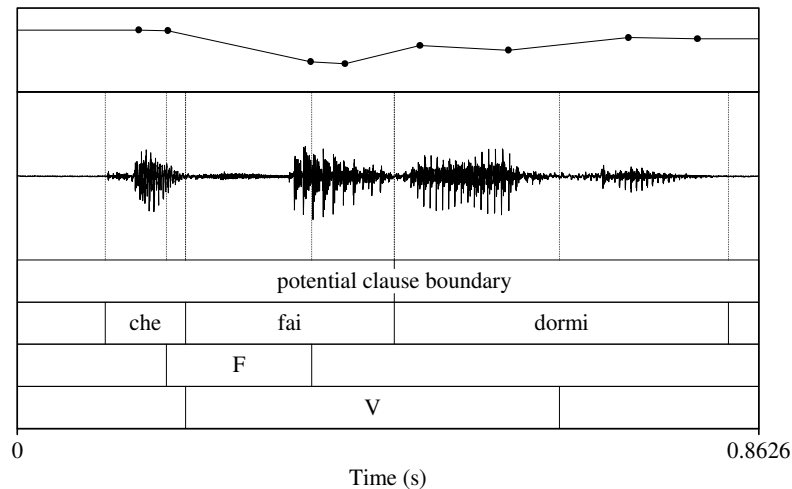


Figure 2: Example of a Praat TextGrid and PitchTier file. The top panel shows the PitchTier, the second panel contains the waveform. The four annotation tiers (bottom part of figure) are explained in the text.

A fourth step in the analysis was to obtain duration, intensity and pitch curve measurements. The duration and intensity of the first two segments was automatically extracted with the help of a *Praat* script.³ The duration of the pause P, which can occur between *fai* and the following word, was also extracted, together with the duration of all segments occurring after the pause. This was done in order to be able to compute the total duration of the utterance with and without the pause. Measurements relative to the size, duration and steepness of the pitch fall were also extracted with the same script.

All these measurements were eventually stored in a database for off-line statistical processing with IBM SPSS Statistics 19.⁴

2.2.1 Variables considered

The experiment described in this chapter aims at comparing the phonetic realization of two groups of utterances that differ with respect to their underlying structure. One group includes biclausal discourses containing two questions (i.e. a *wh*-question and a yes/no question), while the other group includes the monoclausal interrogative constructions that were analyzed as *che fai* questions in chapter 1.

The *PowerPoint* presentation that was shown to the speakers contains a wide variety of stimuli, as discussed in section 2.1. However, I decided to concentrate on minimal pairs of biclausal discourses and *che fai* questions because I am interested in the phonetic realization of these constructions in the absence of any morphosyntactic cues.

³ I would like to acknowledge the help of Jos Pacilly, engineer of the LUCI Phonetics Laboratory.

⁴ For ease of discussion, IBM SPSS Statistics 19 will be referred to as SPSS from now onwards.

As shown in chapter 1, *che fare* questions have a monoclausal structure and display a different syntactic behavior than their corresponding biclausal discourses (see ex. 2). The question now is whether different syntactic structures systematically correlate with different prosodic and phonetic properties. In order to address this question, a number of variables were taken into consideration, as discussed in section 2.3.

2.3 Results

For ease of discussion, I will first present all the variables that were taken into consideration in the analysis. Then, I will discuss the results of the statistical processing that was eventually performed with SPSS.

2.3.1 Variables included in the analysis

As described in the preceding sections, the experiment reported in the present chapter involved a comparison of two constructions characterized by a different syntactic structure. By hypothesis, I expected them to be marked by a variety of distinctive acoustic cues. Among these cues, I expected to find an increased segmental duration in biclausal discourses, as they by definition contain a boundary. In fact, PBL is one of the most widespread strategies to segment speech into linguistically meaningful units and mark the right edge of prosodic domains (cf. Hayes, 1997; Vaissière, 1983).

In particular, I expected the accented vowel of *fare* to lengthen, since *fare* is the word that occurs right before the boundary between the *wh*-question and the yes/no question. Conversely, I expected *che fare* questions to have a shorter duration. This follows from the assumption that there is no clause boundary between *fare* and the rest of the sentence, as *che fare* questions are strictly monoclausal constructions. Hence, no PBL should take place.

As anticipated in section 2.2, the ISI was labeled as the safest segment where PBL can potentially take place. This was done in order to check for potential spillover effects of PBL to the immediate environment of the vowel whose duration is supposed to increase.

Furthermore, I expected the biclausal constructions to be able to host a pause, as opposed to *che fare* questions. In fact, the presence of PBL and of a pause (or absence thereof) represent two sides of the same coin. Namely, both variables relate to the hypothesis that there is no boundary in *che fare* questions, as opposed to biclausal discourses containing two separate questions.

After a first informal inspection of a sample of TextGrid files, some recurrent properties of the two different interrogative constructions were observed. One of these properties is related to the duration and intensity of the first two words of every sentence, namely *che* and *fare*. Both *che* and *fare* showed a consistent tendency to have a higher intensity in biclausal discourses than in their monoclausal counterparts.

From a theoretical perspective, it seems reasonable to assume that functional material is marked as less prominent than lexical material by e.g. intensity (a.o. Van Bergem, 1993). This observation fits in with the pattern characterizing the sample taken into consideration. Indeed, *che* and *fare* have a lower intensity in monoclausal yes/no questions, where they do not convey any lexical meaning. In contrast to this, they are

characterized by a higher intensity when they retain their full lexical meaning, as in biclausal discourses. For this reason, I decided to check for the mean intensity and peak intensity of *che* and *fare*. Their duration was also controlled for, as consistent evidence emerged that *che* and *fare* have a longer duration in biclausal discourses than in their monoclausal counterparts.

Duration was measured in seconds, while intensity was measured in dB. An example of the intensity curve of a *che fare* question and its corresponding biclausal discourse is provided in figures 3 and 4 below. The intensity curves reported in figures 3 and 4 correspond to the sentences provided at the beginning of the chapter in examples (1.a) and (1.b), respectively, reported below as (10.a) and (10.b).

- 10) a. Che fai dormi?
 che do-PRES.2.Sg sleep-PRES.2.Sg
 ‘Are you sleeping?’

[*che fare* question]

- b. Che fai?
 what do-PRES.2.Sg
 ‘What are you doing?’
 Dormi?
 sleep-PRES.2.Sg
 Are you sleeping?’

[biclausal discourse]

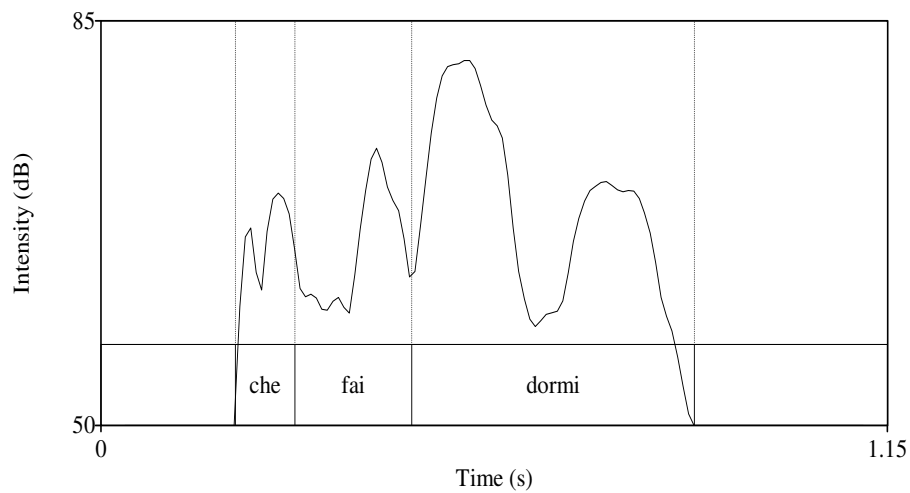


Figure 3: Intensity curve of the *che fare* question reported in (10.a).

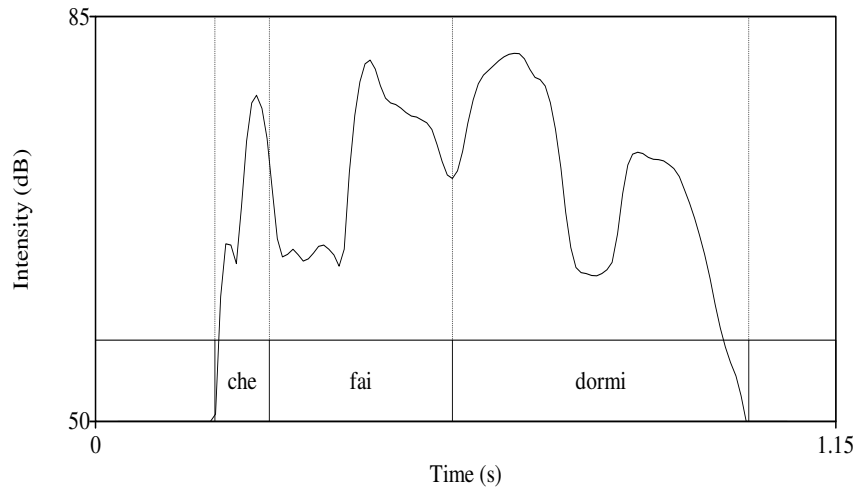


Figure 4: Intensity curve of the biclausal discourse reported in (10.b)

From a brief comparison between the intensity curves shown in figures 3 and 4, it is possible to observe that the intensity of *che* and *fare* is higher in the curve of the biclausal discourse. In addition, it can be noticed that the duration of the segment including *che* and *fare* is longer in the intensity curve of the biclausal discourse in figure 4.

Another recurrent property characterizing the sentences included in the sample concerns their pitch curve. Both sentence types are characterized by a pitch fall in on the word *fare*. However, the fall occurring in *che fare* questions appeared to be longer, larger, and less steep than the fall occurring in the corresponding biclausal discourse.

An example of the pitch curve of a *che fare* question and its corresponding biclausal discourse is provided in figures 5 and 6 below. The pitch curves reported in figures 5 and 6 correspond to the sentences provided in examples (11.a) and (11.b) below.

- 11) a. Che facesti andasti a casa?
 che do-PAST.2.Sg go-PAST.2.Sg to home
 ‘Did you go home?’
- b. Che facesti? Andasti a casa?
 what do-PAST.2.Sg go-PAST.2.Sg to home
 ‘What did you do? Did you go home?’

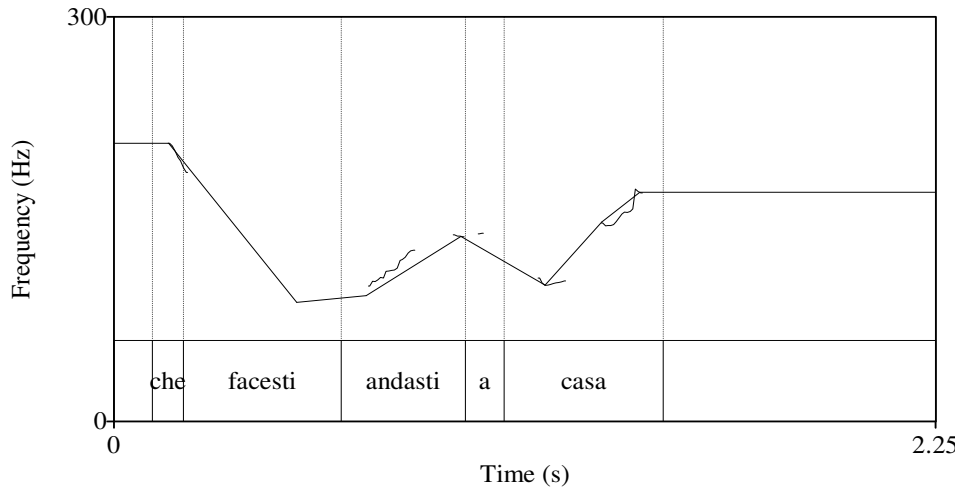


Figure 5: Pitch curve of the *che fare* question reported in (11.a).

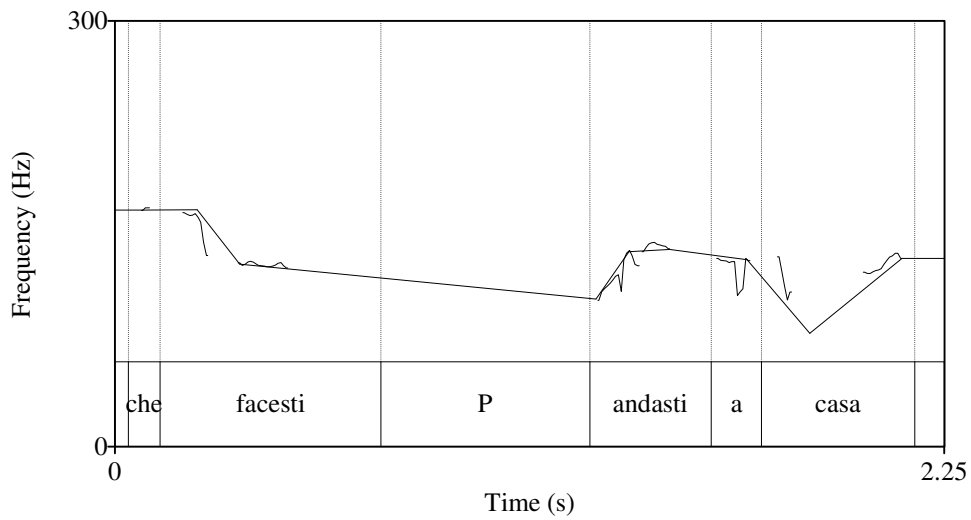


Figure 6: Pitch curve of the biclausal discourse reported in (11.b).

The pitch fall occurring on *facesti* in the *che fare* question in figure 5 is definitely longer and larger than its counterpart in the biclausal discourse in figure 6. This pattern recurred quite often in the data. Therefore, the values pertaining to the fall's duration (measured in seconds), excursion size (measured in semitones) and steepness (measured in semitones per second) were also extracted by the *Praat* script. They were eventually stored in a database for off-line statistical processing with SPSS.

The variables discussed so far in the present section are all dependent variables, such as duration and intensity of *che* and *fare*, duration of the ISI and duration, size and

steepness of the pitch fall realized on *fare*. Instead, sentence type (*che fare* questions vs. biclausal discourses) and the speakers' names are independent variables (or factors). An overview of all the variables that were included in the analysis is provided in table 2 below.

Table 2: Overview of the variables included in the analysis.

Variables	Nature of the variables
Speakers	independent
Sentence type	independent
Presence of a pause	independent
Duration of the ISI	dependent
Duration of <i>che</i>	dependent
Mean intensity of <i>che</i>	dependent
Peak intensity of <i>che</i>	dependent
Duration of <i>fare</i>	dependent
Mean intensity of <i>fare</i>	dependent
Peak intensity of <i>fare</i>	dependent
Size of the fall on <i>fare</i>	dependent
Duration of the fall on <i>fare</i>	dependent
Steepness of the fall on <i>fare</i>	dependent

2.4 Statistical processing of the data

As mentioned in section 2.2, all measurements that were automatically extracted from the recordings with the help of a *Praat* script, were stored in a database. They were analyzed using descriptive statistics and paired-samples t-tests. For some variables, a Linear Discriminant Analysis was eventually performed. In the following section, some basic statistical concepts will be presented which are relevant for my analysis. Then, the results of the analyses performed with SPSS will be reported and discussed.

2.4.1 Some basic statistical concepts and methods

In this study, I decided to use paired-samples t-tests as the data included in the two groups could not be treated as completely independent. As already introduced, the eleven speakers who participated in the experiment produced a total of 110 sentences. While speakers are independent of each other, the utterances spoken by each individual are not. Running an independent t-test on all individual data points would have violated the condition that all data in the samples should be independent of each other.

The last step in the statistical analysis was applying Linear Discriminant Analysis (LDA) to the data. LDA is often used to determine which variables discriminate between two (or more) groups. The main purpose of LDA is to predict group membership based on a linear combination of variables. The procedure begins with a set of observations

where both group membership and the values of the variables are known. The end result of the procedure is a model that allows prediction of group membership when only the values of the variables are known. A second purpose of LDA is gaining a better understanding of the data set itself. In fact, a careful examination of the prediction model that results from the procedure can give a better insight into the relationship between group membership and the variables used to predict group membership.

LDA can be run either in a stepwise or in a non-stepwise fashion. In stepwise LDA, a model of discrimination is built step-by-step. Specifically, at each step all remaining variables are reviewed and evaluated to determine which one contributes most to the discrimination between the groups. That variable is then included in the model, and the process starts again but includes the next best predictor variable only if it independently makes a significant contribution. In non-stepwise discriminant function analysis, the program is forced to include one or more variables in the analysis. As a consequence, the independent contribution made by each single predictor in determining group membership is not taken into consideration. Instead all the predictors are all included whether or not they make a significant independent contribution – typically yielding an unrealistically good discrimination rate.

In my analysis, I used LDA in order to check which variables contribute most to distinguishing between the groups of monoclausal *che fare* questions and their corresponding biclausal discourses. Both stepwise and non-stepwise analyses were used. The results are discussed in section 2.5.

2.4.2 Presence of a pause

As mentioned in section 2.3.1, one of the variables included in the analysis is the presence of a pause between *fare* and the rest of the utterance, or the absence thereof.

By hypothesis, I expected *che fare* questions not to be able to host a pause⁵ between *fare* and the following word, as opposed to biclausal discourses. If *che fare* questions are indeed monoclausal constructions, they should not allow the presence of any prosodic break within their clause boundaries. Conversely, their corresponding biclausal discourses contain two independent questions. Therefore, they should in principle be able to host a pause between the two questions. This follows from the fact that they are two different clauses, each with its own prosodic and syntactic boundaries.

My hypothesis concerning the role of a pause in determining the syntactic status of the utterances included in the data set was confirmed by the results of the statistical analysis. The speakers produced indeed 27 utterances containing a pause, out of a total of 110 utterances. Crucially, all utterances including a pause are biclausal discourses. This means that a pause occurs in 24.5% of the utterances, and 49% of the biclausal discourses. Still, it is interesting to notice that 100% of these prosodic breaks occur in biclausal discourses. This confirms the hypothesis that only biclausal discourses can

⁵ Only silent intervals longer than 200ms are labeled as pauses in the present work. Silent intervals shorter than 200 ms, such as those found before voiceless plosives, are therefore excluded.

host a pause. The presence of a pause therefore seems optional in biclausal discourses, but impossible in *che fare* questions.

An overview of the duration of the pause in the 27 biclausal discourses where it occurs is provided in figure 7 below. The vertical axis reports the number of cases in which a pause is found, while the horizontal axis reports its duration.

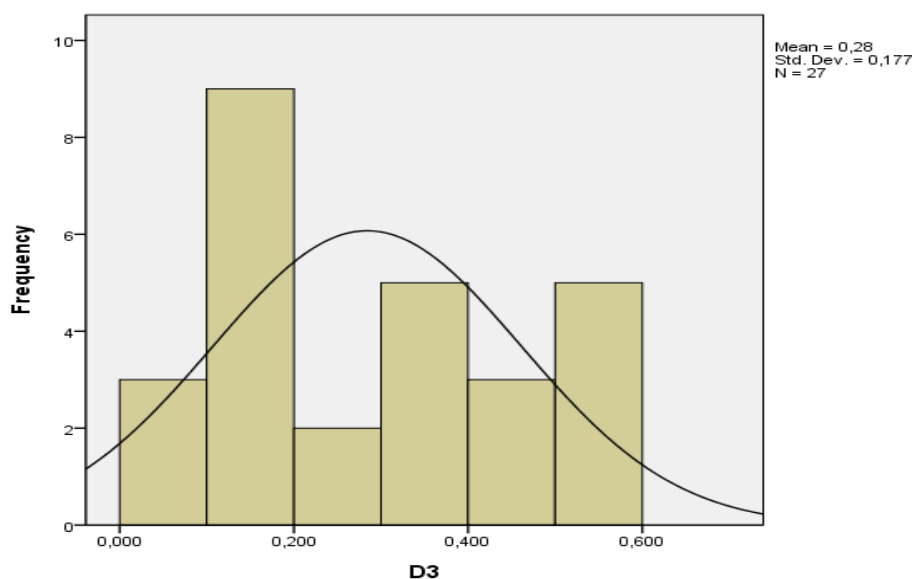


Figure 7: Overview of the duration of the 27 pauses realized in biclausal discourses.

From a quick observation of the overview reported in figure 7, it is possible to conclude that the duration of the pause occurring in the biclausal discourses does not have a normal distribution. This means that the data have more of a tendency to produce unusually extreme values. These results show that there is no overall pattern when it comes to the duration of the pause. Still, it is possible to conclude that in most utterances containing a pause, its duration is between 0.1 and 0.2 seconds.

Nevertheless, my investigation was not concerned with the duration of the pause *per se*. Rather, I wanted to check whether my initial hypothesis was on the right track in assuming that *che fare* questions should never be able to host a pause, as a consequence of their monoclausal status. The results reported in the present section confirm the hypothesis, as they show that only the *che fare* questions included in my data set contain a pause, as opposed to the biclausal discourses.

All in all, the data suggest that the presence of a pause is an infallible diagnostic criterion for the biclausal status of an utterance. Its absence, however, does not have any diagnostic value in this model. Hence, it is necessary to run some secondary measurements in order to establish the syntactic status of the utterances that do not contain a pause.

2.4.3 Duration of the ISI

Another variable was included in the statistical analysis prior to any (in)formal inspection of the data set. Namely, the duration of the inter-stress interval (ISI). The ISI corresponds to the segment comprised between the stressed syllable of *fare* and the stressed syllable of the following word. This means that the ISI also includes the pause, when present. This choice was made in order to check for potential spillover effects of PBL to the immediate environment of the vowel whose duration is supposed to increase as a consequence of PBL.

By hypothesis, the ISI was expected to have a shorter duration in *che fare* questions, as they do not contain a clause boundary. Conversely, biclausal discourses were expected to display a longer ISI, as a consequence of PBL and possibly of the presence of a pause.

All expectations were actually confirmed by the results of the statistical analysis, which establishes the duration of the ISI as a crucial parameter in determining the syntactic status of the utterances included in the data set.

The first step in the statistical analysis was to run descriptive statistics on the data set in order to obtain a simple summary, which includes the values of the means and of the standard deviation. I decided to opt for the mean values, rather than for the median or modal values, as they are the most commonly used method for describing central tendencies. The results are provided in table 3 below. Mean duration and its standard deviation are reported in milliseconds (ms).

Table 3: Mean duration (ms) of the inter-stress interval between *fare* and the following word.

Sentence	Mean	N	SD
<i>che fare</i> questions	511	55	117
biclausal discourses	773	55	259
Total	642	110	239

From a quick observation of the values reported in table 3, it is clear that the duration of the ISI is longer in biclausal discourses (773 ms) than in the *che fare* questions (511 ms). The difference (262 ms) is highly significant by a paired t-test on the mean durations per speaker ($p = .001$, one-tailed).

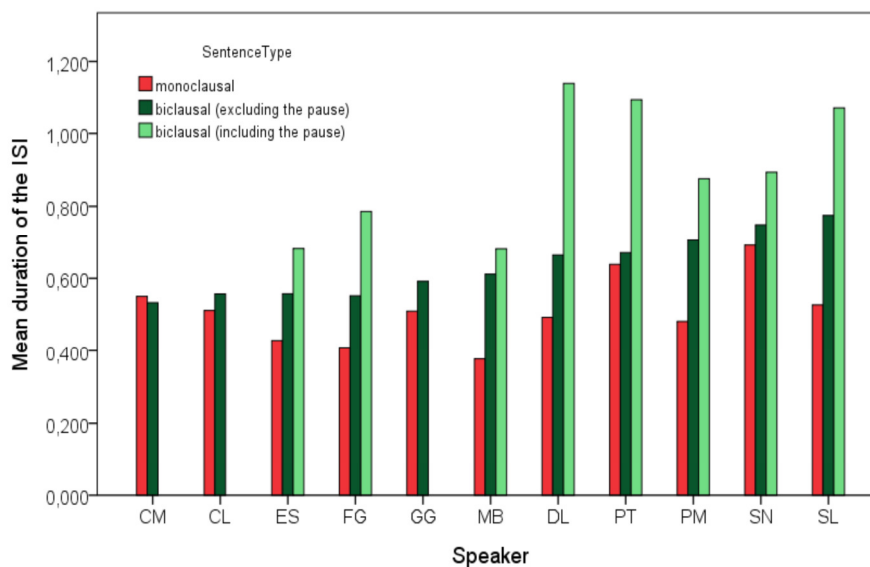
The presence or absence of a physical pause does not contribute substantially to the difference between the duration of the ISI in *che fare* questions and biclausal discourses. Even if the duration of the pause is excluded from the total duration of the ISI in biclausal discourses, the difference (190 ms) between the duration of the ISI in *che fare* questions and biclausal discourses is still highly significant by a paired t-test on the mean durations per speaker ($p = .002$, one-tailed). These results suggest a strong effect of preboundary vowel lengthening.

Table 4: Mean duration (ms) of the inter-stress interval between *fare* and the following word (excluding the duration of P).

Sentence Type	Mean	N
<i>che fare</i> questions	511	55
biclausal discourses	700	55
Total	605	110

The difference between the duration of *fare* in *che fare* questions and their corresponding biclausal discourses turned out to be statistically very significant (see section 2.4.4), too. This shows that a comparable result is obtained if the pause is subtracted from the ISI and that the difference in duration between the ISI in biclausal discourses and *che fare* questions cannot only be reduced to the presence or absence of a physical pause. Rather, it must also be attributed to some spillover effects of PBL in the immediate environment of the lengthened vowel. If this were not the case, the difference between the duration of *fare* in biclausal discourses and *che fare* questions would not be as significant as established by the results of t-tests.

A graphical representation of the duration of the ISI in the production of all speakers and broken by sentence type is shown in figure 8 below. For the biclausal discourses, the duration of the ISI is shown both including and excluding the pause. The three speakers (C.M., C.L. and G.G.) for whom only two bars are shown did not produce any pause.

Figure 8: Duration of inter-stress interval between *fare* and the following word broken down by speaker and sentence type.

The overview provided in figure 8 shows that all speakers but one (CM) exploited PBL to distinguish *che fare* questions from their corresponding biclausal discourses. In fact, the duration of the ISI is slightly longer only in the *che fare* questions produced by CM. As expected, the difference between the duration of the ISI in monoclausal and biclausal constructions is larger when the pause is included. Still, the duration of the ISI remains longer in biclausal constructions even if the pause is excluded.

It is possible to notice that for some speakers (D.L., P.T. and S.L.) the duration of the ISI is strongly affected by the presence of a pause, so the difference between *che fare* questions and biclausal discourses is not as spectacular anymore if the pause is excluded. In particular, P.T. produced a difference of more than 500 ms, which cuts down to about 40 ms if the pause is excluded. These data show that P.T. used pause insertion as a more prominent cue than PBL to mark biclausal discourses, as opposed to *che fare* questions.

This pattern contrasts with the production of M.B., where the difference between the duration of the ISI in biclausal discourses with and without the pause is less than 100 ms. As opposed to P.T., M.B. used PBL as a more prominent cue to distinguish *che fare* questions from their corresponding biclausal discourses.

The speakers with the largest difference between the duration of the ISI in *che fare* questions and biclausal discourses (excluding the pause) are M.B., P.M. and S.L. They produced a difference equal to or larger than 200 ms. In the production of the four remaining speakers (C.L., E.S., F.G and G.G.), this difference is comprised between 40 and 150 ms.

Despite the presence of between-speaker variation in the data, it is possible to conclude that the initial hypothesis concerning the duration of the ISI (and hence of the role of PBL) in discriminating between *che fare* questions and their corresponding biclausal discourses was confirmed. *Che fare* questions display less PBL than their corresponding biclausal discourses, both in the ISI and in *fare*.

2.4.4 Duration, mean intensity and peak intensity of *che* and *fare*

As discussed in section 2.3.1, the duration and intensity of the first two words seemed to make a consistent difference between *che fare* questions and their corresponding biclausal discourses. Therefore, I decided to include the duration, mean intensity and peak intensity of *che* and *fare* in the statistical analysis.

Again, the first step in the analysis was running descriptive statistics on the data in order to obtain a simple summary of the means and standard deviation. The results are provided in tables 5.a and 5.b below. Duration is reported in milliseconds (ms), while intensity is reported in decibels (dB).

Table 5.a: Means and standard deviations of duration (ms), mean intensity (dB) and peak intensity (dB) of *che*.

Sentence Type		che		
		Duration	Mean intensity	Peak intensity
Che fare questions	Mean	94	67.61	71.77
	SD	26	4.87	4.90
	N	55	55	55
Biclausal discourses	Mean	95	67.44	71.52
	SD	33	5.79	5.95
	N	55	55	55
Total	Mean	95	67.53	71.64
	SD	30	5.33	5.43
	N	110	110	110

Table 5.b: Means and standard deviations of duration (ms), mean intensity (dB) and peak intensity (dB) of *fare*.

Sentence Type		fare		
		Duration	Mean intensity	Peak intensity
Che fare questions	Mean	327	68.06	74.46
	SD	135	5.63	5.74
	N	55	55	55
Biclausal discourses	Mean	464	69.96	76.68
	SD	126	5.77	5.50
	N	55	55	55
Total	Mean	396	69.01	75.57
	SD	147	5.75	5.70
	N	110	110	110

From a quick observation of the data reported in table 5, it is possible to see that the means do not differ much in the monoclausal and biclausal cases. In addition, the high value of the standard deviation suggests that data points are spread out over a large range of values.

Table 6: Results of paired-samples t-tests on the duration, mean intensity and peak intensity of *che* and *fare*.

Variables	Paired Difference	t	df	Sig. (2-tailed)
Duration of <i>che</i>	9.44	-.291	9	.777
Mean intensity of <i>che</i>	1.78	.245	9	.812
Peak intensity of <i>che</i>	1.91	.326	9	.751
Duration of <i>fare</i>	-89.01	-6.429	9	.000
Mean intensity of <i>fare</i>	.46	-1.793	9	.103
Peak intensity of <i>fare</i>	13.74	-2.214	9	.051

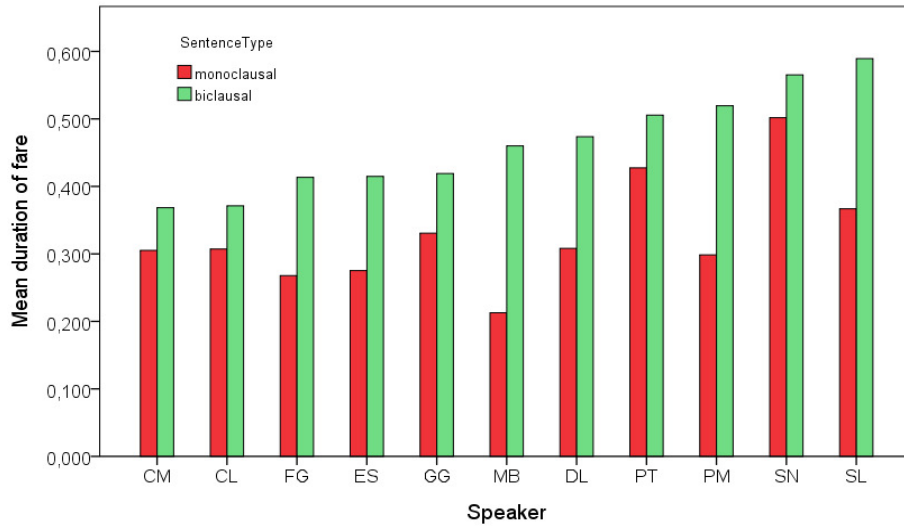
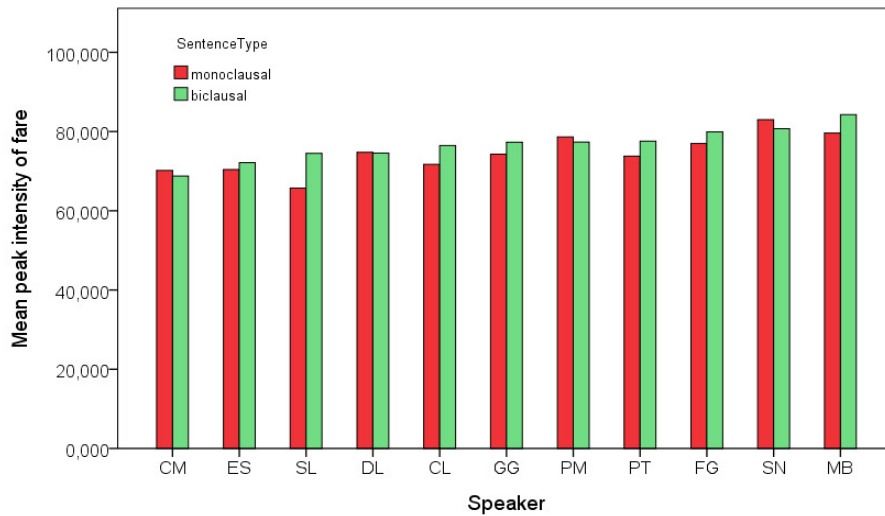
As shown in table 6, only the duration of *fare* turned out to be statistically significant across the monoclausal and biclausal constructions included in the data set. It is the only variable whose *sig.* value is below the threshold chosen for statistical significance (i.e. <0.05). According to the results of the paired-samples t-tests, the duration of *fare* plays in fact a very significant role in distinguishing between *che fare* questions and biclausal discourses ($p < .001$).

As opposed to the duration of *fare*, the peak intensity of *fare* did not turn out to correlate with the syntactic status of the utterances in the data set. However, its significance is just slightly below the alpha level. Thus, it is possible to conclude that the peak intensity of *fare* is not the most relevant factor in distinguishing between *che fare* questions and their corresponding biclausal discourses. Still, its effect seems to be significantly different from chance, which might suggest that it makes a contribution to the interpretation of the utterances as monoclausal or biclausal, as opposed to the other variables.

In general, all variables related to *fare* score better in the t-tests than the variables related to *che*. While the *sig.* scores of the duration and intensity of *che* are all way above the alpha limit, the *sig.* scores relative to *fare*'s duration and intensity are either below or slightly above it.

In fact, the *sig.* score of the mean intensity of *fare* is less close to the alpha limit than the *sig.* scores of the duration and peak intensity of *fare*. Still, it is much closer to it than the *sig.* scores of any variables relative to *che*. This is certainly a strong indication that the phonetic realization of *fare* is more sensitive than *che* to the syntactic status of the utterance that contains it. Thus, it can be used as more reliable diagnostics than *che* in distinguishing between *che fare* questions and their corresponding biclausal discourses.

A graphical representation of the duration and peak intensity of *fare* in *che fare* questions and biclausal discourses is provided in figures 9 and 10 below.

Figure 9: Duration of *fare* broken down by speaker and sentence type.Figure 10: Peak intensity of *fare* broken down by speaker and sentence type.

The duration of *fare* turned out to be very significant, an expected result. It follows from PBL, which deeply affects the duration of *fare*. Still, this result is interesting because the target segment is different from the segment analyzed in section 2.4.3, which included the ISI. This was done in order to check for side effects of pre-boundary vowel lengthening in the first syllable of the word occurring after *fare*. When *fare* contained more than two syllables (ex.: fa-cé-sti), however, the first syllable was excluded from the ISI because it did not carry an accent.

As far as the peak intensity of *fare* is concerned, it seems reasonable to assume that *fare* is marked by intensity as more prominent when it has a lexical meaning. Conversely, it is uttered with a lower intensity when it serves as semantically depleted functional material, as in the case of *che fare* questions.

To sum up, only one of the variables discussed in the present section turned out to be extremely relevant in determining the syntactic status of the utterances included in the data set, more specifically, the duration of *fare*. The peak intensity of *fare* turned out to have some relevance as well, although its score on the t-test is slightly below the alpha level. The duration of *che*, the mean intensity of *che* and *fare*, and the peak intensity of *che* turned out not to have any diagnostic role in distinguishing *che fare* questions from their corresponding biclausal discourses.

2.4.5 Duration, size and steepness of the fall

The last group of variables that were included in the analysis relates to pitch movement. As introduced in section 2.3.1, the duration, size, and steepness of the fall occurring on *fare* were extracted and analyzed. According to the results of the paired-samples t-tests, none of these variables makes a significant contribution in distinguishing *che fare* questions and their corresponding biclausal discourses.

Before running a statistical analysis on the data, it was necessary to exclude three cases that displayed a pitch raise on *fare* rather than a fall. An example is provided below in figure 11.

The portion of pitch contour included between the two dotted lines is the segment where a fall was expected to occur. As shown in figure 11, it is characterized by a large pitch rise instead.

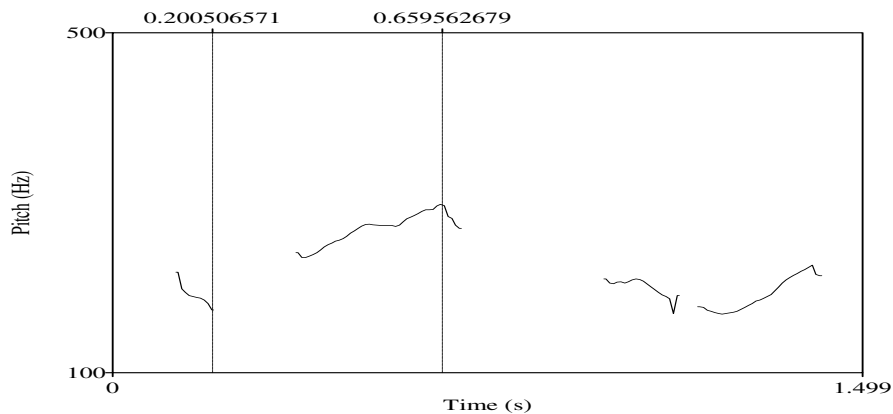


Figure 11: Pitch contour of biclausal discourse pronounced with surprise intonation.

The three excluded examples were all biclausal discourses, which displayed a prosodic break between the *wh*-question and the yes/no question. The *wh*-question was characterized by a final rise because the speakers pronounced it with surprise intonation. This pattern conforms to the general pattern of standard Italian. In standard Italian, *wh*-questions are usually characterized by a final fall (cf. Chapallaz, 1964). When

they display a falling-rising tune, they have been claimed to express doubt or surprise (cf. Lepschy & Lepschy, 1977).

However, this interpretation was not required, nor triggered in any way by the context. Thus, I decided to exclude the three cases with a pitch rise. The values relative to the means and standard deviation of the fall duration, size and steepness are reported in table 7 below.

Table 7: Means of the size (semitones), duration (ms) and steepness (semitones/second) of the pitch fall on *fare*.

Variables	Sentence Type	N	Mean	Std. Deviation	Std. Error Mean
Fall duration	<i>Che fare</i> questions	55	256	97.60	13.16
	Biclausal discourses	55	208	120.91	16.3
Fall size	<i>Che fare</i> questions	55	9.78	3.85	.51
	Biclausal discourses	52	8.69	3.94	.54
Fall steepness	<i>Che fare</i> questions	55	41.73	19.74	2.66
	Biclausal discourses	52	49.37	42.34	5.87

As shown in table 7, the mean value of the fall duration in *che fare* questions is higher than its counterpart in biclausal discourses. The mean value of the fall size shows a similar tendency, although the difference between its realization in *che fare* questions and biclausal discourses is not as large. Instead, the mean value of the fall steepness is higher in biclausal discourses than in *che fare* questions.

A paired-samples t-test was run on the effects in order to test their statistical significance. As anticipated, the results show that none of the variables relative to the fall plays a relevant role, as their effects turn out to be insignificant. The results of the paired-samples t-test run on the z-normalized values of the fall duration, size and steepness are reported in table 8 below.

Table 8: Results of paired-samples t-test on duration, size and steepness of the pitch fall on *fare*.

	Paired Differences	t	df	Sig. (2-tailed)
Z-normalized fall duration	1.0	1.45	9	.17
Z-normalized fall size	.87	1.6	9	.14
Z-normalized fall steepness	.52	-.11	9	.90

From a quick observation of the values reported in table 8, it emerges that the effects of duration and size of the fall are larger than that of steepness. Nevertheless, they are far from significant.

2.5 Discriminant Function Analysis

The last step in the statistical analysis was to create a model for predicting group membership, based on a linear combination of variables.

As mentioned in section 2.2, linear discriminant analysis (LDA) was used in order to obtain such model. Several LDAs were run, in order to find out which variables are the best predictors of group membership in my data.

First, the predictive power of all variables was tested, using both stepwise and non-stepwise methods. Then, a non-stepwise analysis was run on the two variables with statistical significance according to the results of the t-tests. These are the duration of the inter-stress interval between *fare* and the following word, and the duration of *fare*⁶.

Finally, another non-stepwise discriminant function analysis was run which included fall size in addition to these variables. This was done to check the contribution of pitch movement to the interpretation of the utterances as monoclausal or biclausal.

All discriminant analyses described in this section resulted in functions that are significant and accurately classify at least 78% of the cases. This outcome shows that even if only a few variables turned out to be statistically significant, they still have a very strong predictive power. The results of the discriminant function analyses will be presented and discussed in the following four subsections.

2.5.1 Discriminant Function Analysis 1

As a first step, a non-stepwise discriminant function analysis was run which included all the variables described in the previous sections. This was done in order to check which level of accuracy could be reached in determining group membership if those variables that turned out not to be statistically significant were also included.

Since this analysis was conducted in a non-stepwise ('simultaneous entry') fashion, the program was forced to include all variables. Two filters were applied. Namely, the slope of the fall had to be positive, and the duration of the pause had to be equal to zero. The first filter was applied in order to exclude the three cases where a pitch rise is found on *fare* rather than a pitch fall. The second filter was applied in order to exclude the 27 biclausal discourses where a pause occurs between the *wh*-question and the yes/no question. This was done because the presence of a pause correctly classifies 100% of the utterances as biclausal discourses. Thus, it was decided to exclude those utterances, as it is not necessary to run secondary measurements in order to establish their nature. As discussed in section 2.3.2.3, the reverse is not true for the utterances without a pause. In fact, the absence of a pause does not automatically classify them as *cbe fare* questions.

In total, 82 utterances were included in the analysis as a result of the filters applied. The LDA returned one significant function, which accurately classified 89% of the cases. The results are shown in table 9 below.

⁶ Of course, these two parameters are interrelated as (part of) the duration of *fare* is included in the ISI. Still, it is interesting to check their contribution to the prediction of group membership.

Table 9: Classification results of non-stepwise discriminant function analysis of all variables.

Original Sentence Type	Predicted		Total
	monoclausal	biclausal	
monoclausal	50 (90.9%)	5 (9.1%)	55 (100%)
biclausal	4 (14.8%)	23 (85.2%)	27 (100%)

The percentage of correctly classified cases reached with this analysis is very high, as shown in table 11. This percentage becomes even higher if the 27 cases are added which had already been correctly classified by the mere presence of a pause. By adding them to the number of correct decisions, and eventually dividing it by the total number of decisions made, this percentage increases up to 91.7%. This result is very positive, as it strongly suggests that the initial choice of the variables was in fact on the right track.

2.5.2 Discriminant Function Analysis 2

It is necessary to keep in mind that the LDA described in section 2.5.1 was conducted in a non-stepwise fashion. As already discussed, this means that SPSS was forced to include all variables in the analysis. Therefore, the result does not tell us anything about the contribution of the single variables in determining group membership.

In order to find out more about it, a similar LDA was run in a stepwise fashion. This means that SPSS had to review and evaluate all variables at each step to determine which one contributes most to the discrimination between groups. The same filters were applied, in order to exclude the utterances with a pause and those without a fall. Again, 82 utterances were included in the analysis.

The only variable selected by the LDA is the duration of the ISI. All other variables were excluded from the analysis, which only consisted of one single step. The discriminant analysis resulted in one function that was significant and correctly predicts group membership in 78% of cases. This percentage increases if those 27 cases are added whose biclausality is predicted by the presence of a pause. By adding them to the number of correct decisions, and eventually dividing the resulting number by the total number of decisions made, a percentage of 83.4% is reached. The classification results are provided in table 10 below.

Table 10: Classification results of stepwise discriminant function analysis of all variables.

Original Sentence Type	Predicted		Total
	monoclausal	biclausal	
monoclausal	44 (80%)	11 (20%)	55 (100%)
biclausal	7 (25.9%)	20 (74.1%)	27 (100%)

On the one hand, it is not surprising that the program picked up the ISI. According to the results of the paired-samples t-tests, this is indeed the variable that can best discriminate between the groups of *che fare* questions and their corresponding biclausal discourses.

On the other hand, it is quite impressive to find such a small difference between the results obtained including the ISI only, and those obtained including all variables in the analysis. From a comparison with the results of the discriminant analysis described in 2.5.1, it is possible to see that the contribution of all other variables together amounts to 8.3% only. Thus, their contribution appears to be minimal with respect to the contribution of the ISI, which alone amounts to 83.4%. These results strongly confirm PBL as the most significant phonetic cue for distinguishing minimal pairs of *che fare* questions from their corresponding biclausal discourses.

2.5.3 Discriminant Function Analysis 3

As discussed in section 2.4.4, the duration of *fare* establishes a statistically significant difference between *che fare* questions and their corresponding biclausal discourses. Nevertheless, it was not picked up by SPSS in the stepwise analysis described in the previous section. This seems to show that the correlation of *fare* and the ISI is so high that *fare* does not make an independent significant contribution anymore, once the ISI has been picked up by SPSS.

In fact, both the duration of *fare* and that of the ISI were initially selected as possible indicators of the presence or absence of PBL. However, only the duration of the ISI was picked up by SPSS in the stepwise analysis. Therefore, I found it necessary to further investigate the difference between the results yielded by the ISI and those yielded by the duration of *fare*. For this reason, a non-stepwise discriminant analysis was run which included both the duration of *fare* and of the ISI. Again, the same filters were applied in order to exclude the utterances with a pause and those without a fall. As a result, 82 utterances were included in the analysis.

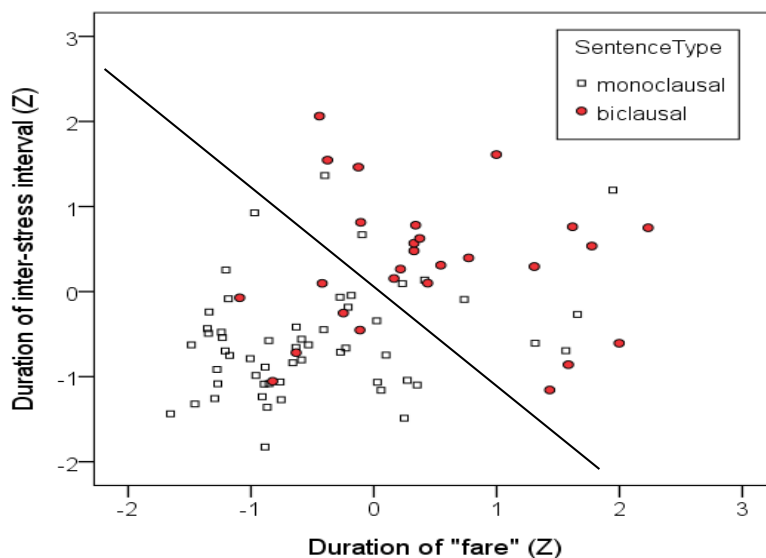
The discriminant analysis resulted in one significant function, which correctly classified 79.3% of cases. This percentage increases up to 84.4% if the 27 utterances with a pause are taken into account. The classification results are provided in table 11 below.

Table 11: Classification results of discriminant function analysis of the duration of *fare* and of the inter-stress interval between *fare* and the following word.

Original Sentence Type	Predicted		Total
	monoclausal	biclausal	
monoclausal	45 (81.8%)	10 (18.2%)	55 (100%)
biclausal	7 (25.9%)	20 (74.1%)	27 (100%)

If these values are compared to the results yielded by the duration of ISI (see section 2.5.2), it emerges that the contribution of the duration of *fare* alone amounts to 1% only. This outcome suggests that the effects of (the absence of) pre-boundary vowel lengthening are more visible in the ISI than within the word boundaries of *fare*.

Indeed, the duration of *fare* turned out to be less relevant than the ISI according to the results of the t-tests. Still, it was designated as statistically significant by the results of the paired-samples t-tests. In order to illustrate the degree of correlation between the two variables, a scatter plot was created. This is reported in figure 12 below.

Figure 12: Scatter plot representing the correlation between the duration of *fare* and the duration of the inter-stress interval between *fare* and the following word.

As shown in figure 12, the scatter tends to concentrate in two separate clouds which can be divided by a category boundary. As reported in table 16, 7 biclausal discourses are wrongly predicted to be *che fare* questions when the grouping is conducted according to the duration of *fare* and of the ISI. Conversely, 10 *che fare* questions are wrongly predicted to be biclausal discourses. In fact, it is possible to obtain an even better

separation of the two clouds. This is shown in figure 12, where only 6 biclausal discourses are wrongly predicted to be *che fare* questions, and 9 *che fare* questions are wrongly predicted to be biclausal discourses.

All in all, this pattern appears to be very neat, as it yields a high percentage of correctly grouped cases. This confirms once again the statistical significance of these two variables in distinguishing between minimal pairs of *che fare* questions and their corresponding biclausal discourses.

2.5.4 Discriminant Function Analysis 4

The LDA described in the previous sections included the two variables that turned out to be statistically significant according to the results of the paired samples t-tests. As already pointed out, some variables yielded a significance that was just slightly above the threshold level. In order to find out what their actual contribution is to the interpretation of the utterances as monoclausal or biclausal, I decided to include them in an LDA.

The non-stepwise analysis described in the present section includes the values relative to the size of the fall realized on *fare*, in addition to the duration of *fare* and of the inter-stress interval between *fare* and the following word. The same filters were applied in order to exclude the utterances without a fall and those with a pause, which narrowed down the initial data set to 82 utterances.

This LDA yielded one significant function, which correctly classified 85.4% of cases. This percentage increases up to 88.9% if the 27 utterances with a pause are taken into account. The classification results are provided in table 12 below.

Table 12: Classification results of discriminant function analysis of the fall's size, the duration of *fare* and the duration of the inter-stress interval between *fare* and the following word.

Original Sentence Type	Predicted		Total
	monoclausal	biclausal	
monoclausal	48 (87.3%)	7 (12.7%)	55 (100%)
biclausal	5 (18.5%)	22 (81.5%)	27 (100%)

If the results obtained with this LDA are compared with those described in the previous section, it emerges that the contribution of the fall size amounts to 4.5 %.

From the LDA discussed in section 2.5.2, we know that the contribution of all variables but the duration of the inter-stress interval is equal to 8.3%. Thus, it possible to conclude that the contribution of the fall size in determining group membership is very high with respect to the other variables. This is especially interesting because the fall size did not pass the significance tests (see section 2.4.4).

3. Conclusions

The aim of this chapter was to provide experimental evidence for the claim that *che fare* questions are in fact monoclausal constructions. This was done by investigating whether Sieneese speakers produce a difference between *che fare* questions and their corresponding biclausal discourses.

As discussed in chapter 3, there is consistent syntactic evidence to argue in favor of a monoclausal analysis of *che fare* questions. Namely, it was shown that *che fare* questions and their corresponding biclausal discourses are subject to a number of different syntactic constraints.

Nevertheless, it is not always possible to nail down the differences between these two constructions to the presence of certain morphosyntactic cues, or to the absence thereof. In order to unambiguously establish the syntactic status of Sieneese *che fare* questions, it is necessary to address the questions in (3), and in particular, to establish whether Sieneese speakers use any non-morphosyntactic cues to distinguish between *che fare* questions and biclausal discourses.

The results of the production experiment described in this chapter provide evidence in favor of a sharp distinction between *che fare* questions and their corresponding biclausal discourses even in the absence of any morphosyntactic cues. Specifically, it was shown that Sieneese speakers produce a significant difference between minimal pairs of *che fare* questions and biclausal discourses when it comes to duration.

Biclausal discourses containing two questions are indeed subject to pre-boundary vowel lengthening, which affects the inter-stress interval between *fare* and the following word. As a result, the mean duration of this segment is significantly shorter in *che fare* questions than in their corresponding biclausal discourses. These results strongly suggest that *che fare* questions do not contain a clause boundary and hence that they are monoclausal constructions. Further evidence for the absence of a clause boundary in *che fare* questions is provided by the complete absence of prosodic breaks. No speaker inserted a pause that corresponded to the potential clause boundary in *che fare* questions. On the contrary, 49% of the biclausal discourses contain a pause between the *mb-*question and the yes/no question.

This outcome confirms the initial hypothesis that *che fare* questions should not allow the presence of any prosodic break within their clause boundaries if they are monoclausal constructions.

In addition to pre-boundary vowel lengthening and pausing, the duration and intensity of *che* and *fare* were analyzed in order to check whether they make a significant contribution in discriminating between *che fare* questions and their corresponding biclausal discourses. The intensity of *che* and *fare* turned out not to be statistically significant. However, their duration was highly statistically significant. This was an expected result, since it follows from the effects of pre-boundary vowel lengthening (or the absence thereof).

A study of pitch movement was also included in the analysis. In particular, the size, duration and steepness of the fall occurring on *fare* were taken into consideration as potential diagnostics of mono- or biclausality. However, the discriminating power of these parameters turns out to be statistically insignificant. In fact, the fall size is more significant than its duration and steepness, but it still did not pass the relevant statistical tests.

All in all, it is possible to conclude that timing is a more reliable cue than melody for distinguishing *che fare* questions from their corresponding biclausal discourses in Sienese. Pre-boundary vowel lengthening is indeed the most important phonetic cue differentiating between these two constructions.

By contrast, melody does not make a significant contribution to the interpretation of the utterances as monoclausal or biclausal. The results of the production experiment discussed in this chapter strongly suggest that timing rather than melody is often the overriding cue when it comes to clause boundaries in Sienese *che fare* questions. This is in line with other experimental findings that confirm the leading role of timing as the most salient phonetic cue (cf. Nootboom, Brokx & De Rooij, 1978; Van Dommelen, 1980; Nootboom & Doodeman, 1980; Elsendoorn, 1984a; Flege & Hillenbrand, 1986). It would be interesting to check whether similar results can be reached with a perception experiment.

In this dissertation, the syntax of yes/no question-marking in the Italian dialects was explored from a typological, theoretical and experimental perspective. The aim of this final chapter is to provide an outline of the core findings of the present work. First, I will summarize the research questions tackled in the previous chapters. Then, I will discuss some remaining questions and issues for further research.

A typological overview of the yes/no question-marking strategies attested in the Italian dialects was provided in chapter 2. The data available in the literature were complemented by new fieldwork data. It was shown that a wide number of typologically diverse strategies may be employed in the Italian dialects, whereas only interrogative intonation is available in Standard Italian. A summary of the strategies found in the Italian dialects is provided below:

- QP;
- Interrogative word order;
- Interrogative intonation;
- Interrogative verb morphology;
- Interrogative verb morphology + QP;

Furthermore, it was investigated whether the yes/no question-marking strategies attested in the Italian dialects may fit into a broader typology of polar questions as proposed by Ultan (1978), Sadock & Zwicky (1985) and Dryer (2005).

I showed that a strategy attested in all Central and Southern Italian dialects poses a challenge for such standard typological classifications. This strategy involves the use of a QP, followed by a finite form of the verb *fare* 'do'. *Fare* may or may not share the features of the lexical verb in different dialects. An example contrasting an agreeing form of *fare* with an invariable one is provided in (1) below:

- 1) a. Chi faciti nisciti?
 QP do-PRES.3.Pl go.out-PRES.3.Pl
 'Are you going out?'

[Cosenza]

- b. Che fa sciate?
 QP do-PRES.3.Sg go.out-PRES.3.Pl
 'Are you going out?'

[Castro dei Volsci, FR]

Sentences including an invariable form of *fare*, like (1.b), can be easily classified as polar questions headed by a single, sentence-initial QP. It is not possible to extend the same reasoning to sentences including an agreeing form of *fare*, as they display a more complex structure.

In addition, the possible correlations between the distribution of the strategies available in the Italian dialects and other parameters were explored. It was shown that a further isogloss should be added to the Massa-Senigallia line, namely one that separates the dialects that have a sentence-initial QP homophonous with the *wh*-word corresponding to *what*, and those that don't.

Despite the wide availability of morphosyntactic devices, it was shown that Interrogative Intonation seems to be the only strategy that is specifically dedicated to yes/no question-marking in the Italian dialects. Most morphosyntactic devices employed to mark polar questions are actually employed in a number of different contexts, such as optative, concessive, hypothetical and imperative clauses. This suggests that a specific type of morphological marking may in fact correlate with veridicality (or the absence thereof) rather than with sentence type.

In chapter 3, the focus of the discussion was narrowed down to the syntax of *che fare* questions in Sienese. As discussed in chapter 2, this construction is problematic because it doesn't seem to align with any other yes/no question-marking device attested in the world's languages. In addition, *che fare* questions may look like biclausal discourses containing two questions at first sight. More specifically, a biclausal discourse containing a *wh*-question and a yes/no question. A minimal pair is given in (2) below:

- 2) a. Che fai esci?
 QP do-PRES.2.Sg go.out-PRES.2.Sg
 'Are you going out?'
 b. Che fai?
 what do-PRES.2.Sg
 Esci?
 go.out-PRES.2.Sg
 'What are you doing? Are you going out?'

[Sienese]

In order to unambiguously establish the syntactic status of *che fare* questions, I provided an in-depth analysis of their syntactic properties and underlying structure. It was shown that there are several restrictions that apply to *che fare* questions, which do not apply to biclausal discourses. These constraints are summarized in (3) below:

- 3) a. *Fare* and the lower verb must share phi-, tense, mood and aspect features.
 b. Only a single negation is allowed.
 c. The subject cannot occur between *fare* and the lexical verb.

A further difference between *che fare* questions and the corresponding biclausal discourses is provided by theta-role assignment. *Fare* may combine with verbs that do not assign an agentive role to the subject in *che fare* questions. On the contrary, only verbs that assign an agentive theta-role to their subject may combine with *fare* in biclausal discourses of the type illustrated in (2.b)

For these reasons, I argued that *che fare* constructions are monoclausal yes/no questions in Sienese. I proposed an analysis to account for their underlying structure and syntactic behavior from a theoretical perspective. A schematic representation of the syntactic structure of *che fare* questions in Sienese is provided in (4) below:

- 4) a. Che facesti dormisti?
 QP do-PAST.2.Sg sleep-PAST.2.Sg
 ‘Did you sleep?’
- b. CP[che C[facesti TP[dormisti VP[*pro* VP[~~dormisti~~]]]]]

It was argued that *che fare* questions instantiate an AGREE relation involving two probes and one goal. *Fare* and the lexical verb are probes, and they both AGREE with the subject in SpecvP. Following Chomsky (2001), I assumed that AGREE is delayed until phase completion. Once the phase head *fare* is merged in C, the two AGREE relations are established simultaneously. This means that the subject is active when it enters both AGREE relations, as they take place at the same time. In addition, it rules out any potential problems related to the Activity Condition and the Defective Intervention Constraint (Chomsky, 2001).

If this approach is on the right track, the structure of Sieneese *che fare* questions provides additional evidence for AGREE not to be necessarily limited to one-probe-one-goal relations (cf. Hiraiwa, 2001; Béjar & Rezac, 2009; van Koppen, 2005; Nevins 2007, 2011; Rezac, 2008).

In order to find some empirical evidence and check the data against the theoretical claims made in chapter 3, a production experiment was conducted. This was the topic of chapter 4, where the prosodic properties of *che fare* questions and the corresponding biclausal discourses in Sieneese were investigated. The main question addressed in this chapter is whether Sieneese speakers use any prosodic cues to distinguish between *che fare* questions and the corresponding biclausal discourses when they form a minimal pair. Since I argued that *che fare* questions are distinct from biclausal discourses, I expected them to systematically correlate with different prosodic patterns. In addition, I expected *che fare* questions not to be able to host of any prosodic break within their clause boundaries, if they are monoclausal constructions.

The results of the experiment showed that this is indeed the case. Sieneese speakers produce a significant difference between minimal pairs of *che fare* questions and biclausal discourses when it comes to duration. This difference is well above chance level (84,4%). It was shown that the duration of *fare* and of the inter-stress interval between *fare* and the following word are significantly longer in biclausal discourses. This was expected, as a result of the Vowel Lengthening that takes place before clause boundaries. At the same time, the difference between the duration of *fare* and of the inter-stress interval between *fare* and the following word in biclausal discourses and *che fare* questions strongly suggests that there is no boundary in *che fare* questions. Hence, it supports the idea that they are monoclausal constructions.

Furthermore, the results show that 49% of the biclausal discourses contain a pause between the *wh*-question and the yes/no question. On the contrary, no speaker produced a pause that corresponded to the potential clause boundary in *che fare* questions. This provides additional evidence for the monoclausal status of *che fare* questions in Sieneese, as monoclausal constructions should not allow the presence of any prosodic break within their clause boundaries.

As opposed to duration, melody turned out not to be a reliable prosodic cue to distinguish *che fare* questions from the corresponding biclausal discourses. The study of

pitch movement included in chapter 4 showed that the size, duration and steepness of the fall occurring on *fare* do not make a significant contribution. These results show that timing is often the overriding cue when it comes to clause boundaries in Sienese *che fare* questions, as opposed to melody.

Summarizing the findings of this dissertation, it was shown that a rich variety of typologically diverse yes/no question-marking strategies are employed in the Italian dialects, as opposed to Romance and Standard Italian. Not all these morphosyntactic devices can be easily classified into one of the main categories proposed in standard typological classifications of polar questions in the world's languages (cf. Dryer, 2005). One of these devices involves the use of a QP in combination with a dummy verb that shares the features of the lexical verb of the question (labeled *che fare* questions in the present work). Although these constructions may look like biclausal discourses including two questions at first sight, theoretical and empirical evidence show that this is not the case.

On the theoretical side, the results of four syntactic tests show that *che fare* questions display a different syntactic behavior from the corresponding biclausal discourses, and hence that they should be analyzed as monoclausal yes/no questions. The agreement morphology showing up on the dummy verb and the lexical verb is the result of two AGREE relations that take place simultaneously. These AGREE relations involve two probes (the dummy verb in C and the lexical verb in T) and one goal (the subject in SpecvP).

On the empirical side, the results of a production experiment provide additional evidence for the monoclausal status of *che fare* questions. Speakers produce a significant difference between *che fare* questions and the corresponding biclausal discourses when it comes to duration.

The results of this dissertation provide promising new insights into the syntax of polar questions. At the same time, however, they raise a number of issues that require further research. First of all, it is necessary to find out whether a thorough investigation of dialectal data from languages other than Italian may provide additional evidence for implementing the existing typological classifications. The variation attested in Italian dialects shows indeed that the architecture of the existing typologies might have to be reorganized in order to accommodate the data. More extensive typological research on cross-dialectal syntactic variation is needed in order to show whether this is the case.

A second issue raised in the present discussion concerns the morphological marking of non-veridicality. Data from Northern, Central and Southern Italian dialects show that the same morphosyntactic devices employed in yes/no questions are frequently employed in many other non-veridical contexts. A parallelism was drawn between interrogative inversion in Northern dialects, and the placement of sentence-initial QPs in Central and Southern dialects. This parallelism suggests that these dialects may mark veridicality (or the absence thereof) rather than clause type. It would be worth to look at more dialectal data from both Italian dialects and other languages to check whether any similar pattern is found. If this approach is on the right track, we might have to rethink the morphological marking of yes/no question in terms of non-veridicality marking. I leave it to future research to establish whether the morphological encoding of non-veridicality is actually a property of the Italian dialects or of language in general.

A further issue that could potentially shed more light on the syntax of polar questions in the Italian dialects concerns some diachronic aspects of yes/no question-marking. A

working hypothesis was proposed in chapter 3 in order to account for the syntactic and semantic differences between Siennese and Sicilian *che fare* questions. It was argued that *che fare* questions might be the result of a process of reanalysis involving a biclausal discourse, as suggested by their morphological shape. Siennese *che fare* questions are monoclausal polar questions, but in fact they still retain some of the original features of biclausal discourses. Although *fare* has lost its semantic features, it still acts as a main verb in that it needs to establish an AGREE relation. Sicilian *che fare* questions instantiate a further stage of this process, where *fare* has lost all of its verbal features to become an invariable particle in the Left Periphery. A thorough diachronic investigation is needed to find empirical evidence to support this hypothesis.

A final issue that emerged from the present discussion regards the contribution of a perception experiment to our understanding of the prosodic differences between *che fare* questions and biclausal discourses in Siennese. The results of the experiment discussed in chapter 4 show that speakers associate distinctive prosodic cues to *che fare* questions and the corresponding biclausal discourses when it comes to production. It would be interesting to check whether the same sharp distinction is maintained when it comes to perception.

In this dissertation, I have shown that exploring the syntax of yes/no question-marking from a typological, theoretical and experimental perspective provides a fresh view on cross-dialectal syntactic variation. Further research will contribute to the exploration of this fertile area of research in the future.

Appendix 1 (Chapter 2)

In chapter 2, a typology of yes/no question-marking in the Italian dialects was proposed. Most data discussed in the chapter were collected through a questionnaire, which was mailed to 35 speakers. The questionnaire included 15 questions. The speakers were presented with sentences from different dialects and asked to translate them into their own dialects (for a detailed discussion of the questionnaire see chapter 1).

Appendix (1.a) includes the original set of the materials that were used in the questionnaire. An English translation is provided in Appendix (1.b).

Appendix 1.a: Questionnaire (Italian version)

- 1) Indichi per favore l'area in cui viene parlato il suo dialetto, includendo il comune e la provincia.
- 2) Indichi per favore la sua età e il suo titolo di studio.
- 3) In molti dialetti toscani e siciliani è possibile introdurre le domande sì/no con un elemento tipo *che*, opzionalmente seguito dal verbo *fare*. Nel suo dialetto è possibile? Come tradurrebbe le seguenti frasi nel suo dialetto? Se non è possibile vada direttamente alla domanda (7):
 - a. Che (fa), piove?
 - b. Che (fai), piangi?
 - c. Che (fate), uscite?
- 4) Nei dialetti toscani il verbo *fare* deve sempre condividere gli stessi tratti di tempo, modo, aspetto persona genere e numero del verbo lessicale vero e proprio. Invece nei dialetti siciliani *fare* appare sempre nella forma invariabile della 3a persona singolare:
 - a. Che fanno, vengano?
che fare-PRES.3.Pl venire-PRES.3.Pl
'Vengono?'
[dialetti toscani]
 - b. Chi ffa, vinniru?
che fare-PRES.3.Sg venire-PASS.3.Pl
'Sono venuti?'
[dialetti siciliani]

Nel suo dialetto, come si comporta *fare*? Deve accordarsi con l'altro verbo come nei dialetti toscani oppure occorre sempre nella forma invariabile, come nei dialetti siciliani?

5) In alcuni dialetti siciliani e pugliesi si può usare *essere* oltre *a*/invece di *fare* in questo tipo di domande sì/no.

a. Ci (è), a piove steve?
'Stava piovendo/pioveva?'

[dialetti pugliesi]

b. Chi (è), ci fusti?
'Ci sei andato?'

[dialetti siciliani]

Nel suo dialetto è possibile utilizzare *essere* in questo tipo di costruzione interrogativa?

6) Nei dialetti siciliani e abruzzesi c'è una differenza semantica tra le domande sì/no con e senza *fare*. Quando *fare* è presente, la domanda implica che il parlante abbia delle aspettative rispetto alla risposta perché il tema della domanda è stato precedentemente introdotto. Invece, le domande senza *fare* hanno la semantica standard delle interrogative sì/no, e possono essere usate quando non c'è nessuna aspettativa sulla risposta.

a. chi vennu? = 'Vengono?' (domanda che non implica niente e che può essere usata in qualsiasi contesto)

b. chi ffa, vennu? = 'Vengono?' (possibile esempio di presupposizione: 'avevamo parlato con loro e avevano detto che sarebbero venuti')

[dialetti siciliani]

Nei dialetti toscani, invece, l'uso di *fare* non implica una presupposizione di nessun genere. Non c'è nessuna differenza semantica tra le domande con *fare* e quelle senza. Entrambe possono essere usate in qualsiasi situazione. E nel suo dialetto c'è una differenza semantica tra le domande con *fare* e quelle senza? Può sempre usare entrambi tipi di domanda in ogni contesto, come in toscano, o li usa in contesti diversi, come in siciliano?

7) Traduca le frasi seguenti nel suo dialetto:

a. So che parli inglese.
b. Che vuoi?

8) Traduca le frasi seguenti nel suo dialetto:

a. Che camicia ti metti?
b. Che cantante ti piace?

9) Traduca le frasi seguenti nel suo dialetto:

- a. So che ti piace la cioccolata.
- b. È meglio che tu vada.
- c. Voglio che lo faccia.
- d. Il pane che hai comprato ieri è buono.
- e. Sua madre, che vive da sola, è molto anziana.
- f. Che hai comprato?
- g. Chi viene?
- h. Voglio uscire.

10) In alcuni dialetti veneti e piemontesi si possono formare domande sì/no introdotte da *che*, con il verbo principale al congiuntivo:

- a. Che dorma?
'Che dorma?/Dorme?'

[dialetti veneti]

- b. Che a drome?
'Che dorma?/Dorme?'

[dialetti piemontesi]

È possibile anche nel suo dialetto? Se sì, cosa significano queste domande? In che contesti le userebbe?

11) In alcuni dialetti, come per esempio in abruzzese e in sardo, alcuni tipi di frasi principali (esortative, concessive, ipotetiche o con qualche presupposizione particolare) vengono introdotti da un elemento tipo *che/chi*.

- a. *Chi* ba peri Giorgio, jamusu a esse a ppostu.
'Se andasse anche Giorgio, saremmo a posto.'

[dialetti sardi]

- b. *Chi* fudi stettiu plusu attentu, non fudi stéttiu ai custi pu.
'Se fosse stato più attento, non sarebbe arrivato a questo punto.'

[dialetti sardi]

- c. *Ca* n' gi venghe a la casa te!
'Che non ci vengo a casa tua' (= 'Non ti preoccupare, non ci vengo a casa tua!').

[dialetti abruzzesi]

- d. *Ca* nin chische!
'Che non cadi!' (= 'Non ti preoccupare, non cadi!')

[dialetti abruzzesi]

- e. *Chi nin chische!*
 ‘Che non cadi!’ (=‘Stai attento a non cadere!’)

[dialetti abruzzesi]

È possibile nel suo dialetto introdurre con un elemento tipo *che/chi/ca* una frase come quelle riportate negli esempi sopra? Se sì, traduca per favore alcuni degli esempi nel suo dialetto (o ne fornisca altri a suo piacimento, se preferisce).

- 12) In alcuni dialetti sardi, lombardi e piemontesi le domande *sì/no* contengono una particella interrogativa, che si può trovare sia all’inizio della frase (come *a* in sardo) che alla fine (come *po* in lombardo), come anche in posizione centrale (come *pa* in trentino):

- a. *A l’ achene issozo?*
 ‘(A) l’hanno fatto?’

[dialetti sardi]

- b. *En-ei po?*
 ‘Vengono (po)?’

[dialetti lombardi]

- c. *N e-l pa nut?*
 ‘Non è (pa) venuto?’

[dialetti trentini]

Vengono usate particelle simili nel suo dialetto nelle domande *sì/no*? Se sì, traduca per favore alcuni degli esempi nel suo dialetto (o ne fornisca altri a suo piacimento, se preferisce).

- 13) In molti dialetti settentrionali sono presenti dei clitici soggetto, come mostrato negli esempi qua sotto:

- | | |
|-----------------------|-------------------------------|
| a. frase dichiarativa | b. Interrogativa <i>sì/no</i> |
| a dorem | dorm-ja? |
| at dorem | dorm-et? |
| al/la dorem | dorm-el/-la? |
| a durmam | durmam-ja? |
| a durmi | durmi-v? |
| i/al 'dormen | dormn-i? |

[dialetto di Modena]

- | | |
|-----------------------|-------------------------------|
| a. frase dichiarativa | b. Interrogativa <i>sì/no</i> |
| t 'dorme | t 'dorme? |

[dialetto di S. Agata Feltria (RN)]

Ci sono clitici soggetto nel suo dialetto? Se sì, vengono invertiti con il verbo nelle domande *sì/no*, come nel dialetto emiliano di Modena, o rimangono nella stesso ordine della dichiarativa, come nel dialetto romagnolo di S. Agata Feltria (Rimini)? Riporti per

favore il paradigma del verbo dormire al presente, come esemplificato per il dialetto di Modena.

14) In italiano standard si può trasformare una frase dichiarativa in una domanda sì/no aggiungendo la negazione *no* o *vero* alla fine della frase.

- a. Viene anche Maria, *no?*
- b. Lavori in banca, *vero?*

Questo tipo di domanda suggerisce che il parlante abbia delle aspettative rispetto alla risposta e cerchi una conferma nella risposta dell'interlocutore. Nel suo dialetto si usano particelle o strutture diverse?

15) In alcuni dialetti settentrionali, le domande aperte vengono introdotte dall'elemento interrogativo (*chi, cosa, come, quando, dove, perché, quale, quanto*), seguito da un elemento tipo *che, chi, ca*:

- a. *Cni ca ven?*
'Chi (che) viene?'

[dialetti friulani]

- b. *Ce che dorma?*
'Chi (che) dorme?'

[dialetti lombardi]

- c. *Indo che a nemm?*
'Dove che andiamo?'

[dialetti ticinesi]

È possibile nel suo dialetto avere una costruzione simile? Se sì, traduca per favore gli esempi nel suo dialetto (o ne fornisca altri a suo piacimento, se preferisce).

Appendix 1.b: Questionnaire (English version)

- 1) Please, indicate the geographical area where your dialect is spoken, including the name of the municipality and province.
- 2) Please, indicate your age and level of education.
- 3) In several Tuscan and Sicilian dialects, yes/no questions may be introduced by a *che*-like element, optionally followed by a form of the verb *fare* 'do'. Is this possible in your dialect? How would you translate the following questions in your dialect? If it isn't possible, jump to question (7).
 - a. Che (fa), piove?
che do-PRES.3.Sg rain-PRES.3.Sg
'Is it raining?'

- b. Che (fai), piangi?
 che do-PRES.2.Sg cry-PRES.2.Sg
 ‘Are you crying?’
- c. Che (fate), uscite?
 che do-PRES.2.Pl go.out-PRES.2.Sg
 ‘Are you going out?’

4) The verb *fare* ‘do’ always shares the same tense, person and number features of the lexical verb in Tuscan dialects. On the contrary, it always displays 3rd person singular and present tense features in Sicilian dialects:

- a. Che fanno, vengano?
 che do-PRES.3.Pl come-PRES.3.Pl
 ‘Are they coming?’

[Tuscan dialects]

- b. Chi ffa, vinniru?
 che do-PRES.3.Sg come-PAST.3.Pl
 ‘Did they come?’

[Sicilian dialects]

How does *fare* behave in your dialect? Does it always share the same features of the lexical verb, as in Tuscan dialects? Or is it invariable, as in Sicilian dialects?

5) In some Sicilian and Apulian dialects, *essere* ‘be’ can be employed alongside with *fare* in this type of yes/no questions.

- a. Ci (è), a piove steve?
 ci be-PRES.3.Sg to rain stay-PAST.3.Sg
 ‘Was it raining?’

[Apulian dialects]

- b. Chi (è), ci fusti?
 chi be-PRES.3.Sg there be-PAST.2.Sg
 ‘Did you go there?’

[Sicilian dialects]

Is it possible to use *essere* in this construction in your dialect?

6) In Sicilian dialects there is a semantic difference between the questions with and without *fare*. Questions with *fare* suggest that the speaker has some expectations/presuppositions with respect to the answer, whose topic has previously been introduced in the discourse. On the contrary, questions without *fare* may be used in any contexts.

- a. Chi vennu?
che come-PRES.3.Pl
'Are they coming?' (standard question that may be used in any context)
- b. Chi ffa, vennu?
che do-PRES.3.Sg come-PRES.3.Pl
'Are they coming?' (question that comes with presupposition; example: 'we talked to them and they said they would come')
[Sicilian dialects]

On the contrary, *fare* does not trigger any type of presupposition in Tuscan dialects. There is no semantic difference whatsoever between questions with and without *fare*. Both may be used in any context. What about your dialect? Is there any semantic difference between questions with and without *fare*? Can you use both constructions in any context, as in Tuscan dialects? Or do you use them in different contexts, as in Sicilian dialects?

7) Translate the following sentences into your dialect:

- a. So che parli inglese.
know-PRES.1.Sg that speak-PRES.2.Sg English
'I know you speak English.'
- b. Che vuoi?
what want-PRES.2.Sg
'What do you want?'

8) Translate the following sentences into your dialect:

- a. Che camicia ti metti?
which shirt to.you-CL wear-PRES.2.Sg
'Which shirt are you wearing?'
- b. Che cantante ti piace?
which singer to.you-CL please-PRES.3.Sg
'Which singer do you like?'

9) Translate the following sentences into your dialect:

- a. So che ti piace la cioccolata.
know-PRES.1.Sg that to.you-CL please-PRES.3.Sg the chocolate
'I know you like chocolate.'

- b. È meglio che tu vada.
 be-PRES.3.Sg better that you go-PRES.2.Sg
 ‘You better go’.
- c. Voglio che lo faccia.
 want-PRES.1.Sg that it-Obj.CL do-PRES.2.Sg
 ‘I want you to do it’.
- d. Il pane che hai comprato ieri è buono.
 the bread that have-PRES.2.Sg bought yesterday be-PRES.3.Sg
 good
 ‘The bread you bought yesterday is good’.
- e. Sua madre, che vive da sola, è molto anziana.
 his mother who live-PRES.3.Sg alone be-PRES.3.Sg very
 old
 ‘His mother, who lives alone, is very old’.
- f. Che hai comprato?
 what have-PRES.2.Sg bought
 ‘What did you buy?’
- g. Chi viene?
 who come-PRES.3.Sg
 ‘Who is coming?’
- h. Voglio uscire.
 want-PRES.1.Sg go.out
 ‘I want to go out’.

10) In some Venetian and Piedmontese dialects, it is possible to use an interrogative construction introduced by *che*, where the verb is a subjunctive:

- a. Che dorma?
 che sleep-PRES.SUBJ.3.Sg
 ‘Is he sleeping?’

[Venetian dialects]

- b. Che a drome?
 che Subj.CL sleep-PRES.SUBJ.3.Sg
 ‘Is he sleeping?’

[Piedmontese dialects]

Is this possible in your dialect? If it is, then what do these questions mean? In which contexts would you use them?

- 11) Several clause types, such as exhortative, concessive, hypothetical clauses (or clauses that come with some kind of presupposition), may be introduced by a *che/chi*-like element in some dialects. This is the case in Abruzzese and Sardinian dialects:

- a. *Chi* ba peri Giorgio, jamusu a esse a
 chi go-PRES.3.Sg also Giorgio be-PRES.1.Pl to be-INF to
 ppostu.
 place
 'If Giorgio goes, we will be ok'.
 [Sardinian dialects]
- b. *Chi* fudi stettiu plusu attentu, non fudi stéttiu ai custi
 chi be-PAST.3.Sg be-PP more careful neg be-PAST be-PP to this
 pu.
 point
 'If he had been more careful, he wouldn't have ended up in this situation'.
 [Sardinian dialects]
- c. *Ca* n' gi venghe a la casa te!
 ca neg there-CL come-PRES.1.Sg to the house yours
 'I am not coming to your house! '(= 'Don't worry, I am not coming to your house!').
 [Abruzzese dialects]
- d. *Ca* nin chische!
 ca neg fall-PRES.2.Sg
 'You are not falling! ' (= 'Don't worry, you are not falling!')
 [Abruzzese dialects]
- e. *Chi* nin chische!
 chi neg fall-PRES.2.Sg
 'You are not falling! ' (= 'Be careful that you don't fall!!!')
 [Abruzzese dialects]

Is it possible to use a *che/ca/chi*-like element in one of the clause types reported in the examples above in your dialect? If it is, please, translate the examples in a-e (or give some examples of your own, if you prefer).

- 12) In some Sardinian, Lombard and Piedmontese dialects, a question particle may be employed in yes/no questions. It may occur either in the sentence-initial position (as *a* in Sardinian dialects), or in the sentence-final position (as *po* in Lombard dialects), or in a central position (as *pa* in Trentino dialects).

- a. *A* P achene issozo?
 A it-Obj.CL have-PRES.3.Pl done
 'Did they do it?'
 [Sardinian dialects]

- b. En -ei *po?*
 come-PRES.3.Pl -they-Subj.CL po
 'Are they coming?'

[Lombard dialects]

- c. N e -l *pa nut?*
 neg be-PRES.3.Sg -he-Subj.CL pa come-PP
 'Didn't he come?'

[Trentino dialects]

Are there any such particles in your dialect? If there are, please, translate the examples in a-c (or give some examples of your own, if you prefer).

- 13) Many Northern Italian Dialects have subject clitics, as shown in the examples below:

- | | |
|---|---|
| <p>a. frase dichiarativa
 a dorem
 at dorem
 al/la dorem
 a durmam
 a durmi
 i/al 'dormen</p> | <p>b. Interrogativa sì/no
 dorm-ja?
 dorm-et?
 dorm-cl/-la?
 durmam-ja?
 durmi-v?
 dormn-i?</p> |
|---|---|

[Dialect of Modena]

- | | |
|--|--|
| <p>a. frase dichiarativa
 t 'dorme</p> | <p>b. Interrogativa sì/no
 t 'dorme?</p> |
|--|--|

[Dialect of S. Agata Feltria (RN)]

Are there subject clitics in your dialect? If there are, do they occur after the verb (as in the dialect of Modena), or do they stay in a preverbal position in yes/no questions (as in the dialects of S. Agata Feltria)? Please, give the paradigm of the verb *dormire* 'sleep' in the present tense in your dialect.

- 14) Declarative clauses can be turned into interrogatives by adding *no* or *vero* at the end in Standard Italian.

- a. Viene anche Maria, no?
 come-PRES.3.Sg also Maria neg
 'Maria is coming too, isn't she?'

- b. Lavori in banca, vero?
 work-PRES.2.Sg in bank right
 'You work down at the bank, right?'

This type of question suggests that the speaker has some expectations towards the answer, and is looking for a confirmation. Are there different constructions for confirmatory/tag questions in your dialect?

15) In some Northern Italian Dialects, wh-questions display a *che/chi/ca*-like element after the wh-word:

- a. *Cui ca ven?*
 who ca come-PRES.3.Sg
 'Who is coming?'

[Friulian dialects]

- b. *Ce che dorma?*
 who che sleep-PRES.3.Sg
 'Who is sleeping?'

[Lombard dialects]

- c. *Indo che a nemm?*
 where che we-Subj.CL go-PRES.3.Pl
 'Where are we going?'

[Ticinese dialects]

Is it possible to use a similar construction in your dialect? If it is, please, translate the examples in a-c into your dialect (or give examples of your own, if you prefer).

Appendix 2 (Chapter 4)

In chapter 4, I discussed a production experiment that was conducted in order to find out whether Sieneese speakers produce a significant difference between minimal pairs of *che fare* questions and biclausal discourses. Eleven Sieneese speakers had to read sentences that were shown on a computer screen through a PowerPoint presentation. The presentation included minimal pairs of yes/no questions and biclausal discourses, as well as some control sentences (for a detailed discussion see chapter 4). Appendix 2 includes the complete set of the materials that were used in the PowerPoint presentation.

Appendix 2: PowerPoint presentation

Che fai vai al mare?
che do-PRES.2.Sg go-PRES.2.Sg to-the sea
'Are you going to the sea?'

Che fai?
what do-PRES.2.Sg
Vai al mare?
go-PRES.2.Sg to-the sea
'What are you doing? Are you going to the sea?'

Che fai dormi?
che do-PRES.2.Sg sleep-PRES.2.Sg
'Are you sleeping?'

Che fai?
what do-PRES.2.Sg
Dormi?
sleep-PRES.2.Sg
'What are you doing? Are you sleeping?'

Che facesti andasti a casa?
che do-PRES.2.Sg go-PRES.2.Sg to home
'Did you go home?'

Che facesti?
 what do-PAST.2.Sg
 Andasti a casa?
 go-PRES.2.Sg to home
 'What did you do? Did you go home?'

Che fanno arrivanoo?
 che do-PRES.3.Pl arrive-PRES.3.Pl
 'Are they coming?'

Che fanno?
 what do-PRES.3.Pl
 Arrivano?
 arrive-PRES.3.Pl
 'What are they doing? Are they coming?'

Che fai piangi?
 che do-PRES.2.Sg cry-PRES.2.Sg
 'What are you doing? Are they crying?'

Che fai?
 what do-PRES.2.Sg
 Piangi?
 cry-PRES.2.Sg
 'What are you doing? Are you crying?'

Che fai lavori in comune?
 che do-PRES.2.Sg work-PRES.2.Sg at City Hall
 'Do you work at the City Hall?'

Che fai?
 what do-PRES.2.Sg
 Lavori in comune?
 work-PRES.2.Sg at City Hall
 'What do you do? Do you work at the City Hall?'

Che ha fatto ha piovuto?
 che have-PRES.3.Sg done have-PRES.3.Sg rained
 'Did it rain?'

Che è successo?
 what be-PRES.3.Sg happened
 Ha piovuto?
 have-PRES.3.Sg rained
 'What happened? Did it rain?'

Che fa assomiglia al su babbo?
 che do-PRES.3.Sg resemble to-the his father
 'Does he look like his father?'

Come' è?
 how be -PRES.3.Sg
 Assomiglia al su babbo?
 resemble-PRES.3.Sg to-the his father
 How is he? Does he look like his father?

 Che fai ti garba la figliola del Brogi?
 che do-PRES.3.Sg to.you-Cl please-PRES.3.Sg the daughter of-the Brogi
 'Do you like Brogi's daughter?'

Chi ti garba?
 whom to.you-Cl please-PRES.3.Sg
 Ti garba la figliola del Brogi?
 to.you-Cl please-PRES.3.Sg the daughter of-the Brogi
 'Whom do you like? Do you like Brogi's daughter?'

 Che fai vai a casa?
 che do-PRES.2.Sg go-RES.2.Sg to home
 'Are you going home?'

 Che fanno moiano se un gli dai l'
 che do-PRES.3.Pl die-PRES.3.Pl if neg to.them-Cl give-PRES.2.Sg the
 acqua tutti i giorni?
 water every the days
 'Are they going to die if you don't water them every day?'

 Che fate uscite?
 che do-PRES.2.Pl go.out-PRES.3.Pl
 'Are you going out?'

 Che fai scherzi?
 che do-PRES.2.Sg joke-PRES.2.Sg
 'Are you joking?'

 Che fanno vengano anche loro?
 che do-PRES.3.Pl come-PRES.3.Pl also they
 'Are they coming too?'

 Che fai ti senti male?
 che do-PRES.2.Sg you feel-PRES.2.Sg bad
 'Are you sick?'

O che fai?
 o what do-PRES.2.Sg
 Mangi la panzanella?
 eat-PRES.2.Sg the panzanella
 ‘What are you doing? Are you eating panzanella?’

Che fece la tu mamma?
 what do-PAST.3.Sg the your mother
 La comprò la macchina?
 it buy-PAST.3.Sg the car
 ‘What did your mother do? Did she buy the car?’

Che fate?
 what do-PRES.2.Pl
 S’ esce o no?
 we go.out-PRES.1.Pl or neg
 ‘What are you doing? Are we going out or not?’

O che fai?
 o what do-PRES.2.Sg
 Hai fatto una torta?
 have-PRES.2.Sg made a cake
 ‘What are you doing? Did you make a cake?’

O che facevi?
 o what do-PAST.2.Sg
 Hai dormito?
 have-PRES.2.Sg slept
 ‘What were you doing? Have you slept?’

Che fece la su figliola alla fine?
 what do-PAST.3.Sg the his daughter at-the end
 Venne o no?
 come-PAST.3.Sg or not
 ‘What did his daughter do in the end? Did she come or not?’

Vai al mare?
 go-PRES.2.Sg to-the sea
 Noi sì.
 we yes
 ‘Are you going to the sea? We are.’

Noi un s’ è dormito per niente.
 we neg we be-PRES.3.Sg slept at all
 Neanche loro.
 neither they
 ‘We didn’t sleep at all. Neither did they.’

Chissà se piove.
 maybe if rain-PRES.3.Sg
 Un si capisce.
 neg Subj.Cl understand-PRES.3.Sg
 ‘Who knows whether it will rain? It’s hard to tell.’

Ieri si mangiò la panzanella.
 yesterday we eat-PAST.1.Pl the panzanella
 ‘We had panzanella yesterday.’

Un gli assomiglia per niente.
 neg to.him-Cl resemble-PRES.3.Sg at all
 ‘He doesn’t look like him at all.’

Quando ci vai al mare?
 when there-Cl go-PRES.2.Sg to-the sea
 Noi si parte domani.
 we Subj.Cl leave-PRES.3.Sg tomorrow
 ‘When are you going to the sea? We are leaving tomorrow.’

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1. Cicero: *Divinatio in Caecilium*
2. Cicero: *In Catilinam*
3. Cicero: *In Verrem*
4. Corpus Inscriptionum Latinarum (CIL) 1
5. Plautus: *Amphitryon*
6. Plautus: *Aulularia*
7. Plautus: *Bacchides*
8. Plautus: *Rudens*
9. Quintilian: *Institutio Oratoria*
10. Tacitus: *Dialogus de Oratoribus*
11. Tibullus: *Liber*

Samenvatting

Het doel van dit proefschrift is een bijdrage te leveren aan ons inzicht in de typologische, syntactische en prosodische eigenschappen van polaire vraagzinnen in Italiaanse dialecten.

Polaire vraagzinnen (ook wel ja/nee-vragen genoemd) zijn vragen waarop óf een bevestigend óf een ontkennend antwoord wordt verwacht. Vanuit typologisch perspectief worden er in de talen van de wereld acht hoofdstrategieën geïdentificeerd, die gebruikt kunnen worden om polaire vraagzinnen aan te duiden (o.a. Ultan, 1978; Sadock & Zwicky, 1985; Dryer, 2005 and Miestamo, 2007). Hier beneden volgt een lijst van deze strategieën:

- (1) *Typologie van polaire vraagzinnen in de talen van de wereld*
 - a. Vraagpartikels;
 - b. Vraagintonatie;
 - c. Interrogatieve werkwoordsmorfologie;
 - d. Vraagpartikels + interrogatieve werkwoordsmorfologie;
 - e. Interrogatieve woordvolgorde;
 - f. Disjunctie(A-niet-A);
 - g. Afwezigheid van een declaratief morfeem;
 - h. Geen verschil tussen declaratieve zinnen en polaire vraagzinnen.

Hoewel er veel onderzoek wordt gedaan naar de syntaxis van vraagzinnen (o.a. Poletto, 1993, 2000; Poletto & Vanelli, 1995; Obenauer, 2004; Damonte & Garzonio, 2008, 2009; Garzonio, 2012; Cruschina, 2008, 2012), is er tot nu toe geen analyse voorgesteld voor een typologische classificatie van polaire vraagzinnen in de Italiaanse dialecten.

Dit proefschrift analyseert polaire vraagzinnen in Italiaanse dialecten vanuit het oogpunt van typologische variatie. Er wordt bekeken of de strategieën die sprekers in Italiaanse dialecten gebruiken geïdentificeerd kunnen worden volgens de acht bovengenoemde categorieën.

Zoals bekend, is de taalkundige variatie in Italiaanse dialecten zeer groot. Polaire vraagzinnen blijken in dit respect geen uitzondering te zijn. Ik laat zien dat Italiaanse dialecten een zeer grote typologische variatie vertonen op gebied van polaire vraagzinnen. Ook blijken enkele vraagconstructies problematisch. Een van die problematische constructies om polaire vraagzinnen aan te duiden wordt gebruikt in het Toscaanse dialect van Siena en andere centrale en zuidelijke dialecten. Voorbeelden van een declaratieve zin en de bijbehorende polaire vraagzin in het Sienees zijn respectievelijk geïllustreerd in (2.a) en (2.b):

(2) *Declaratieve zin*

- a. Dorme.
slapen-TT.3.EV
'Ze slaapt'.

Polaire vraagzin

- b. Che fa dorme?
vraagpartikel doen-TT.3.EV slapen-TT.3.EV
'Slaapt ze?'

[Sienees]

Ten eerste is deze constructie problematisch omdat hij niet tot een van de bovengenoemde categorieën kan worden gereduceerd. Ten tweede is het ook niet duidelijk of het eigenlijk om één enkele hoofdzin gaat, omdat de constructie in (2.b) twee non-infinitieve werkwoorden bevat. Op het eerste gezicht kan de vraag op twee opeenvolgende vragen lijken: *Che fa? Dorme?* 'Wat doet ze? Slaapt ze?'

In deze dissertatie wordt bewijs geleverd dat polaire vraagzinnen zoals die in (2) slecht één hoofdzin bevatten. Er wordt vanuit een theoretisch perspectief een analyse voorgesteld van de syntactisch eigenschappen van deze constructie in het Sienees en in andere centrale en zuidelijke Italiaanse dialecten. Meer bewijs voor deze analyse komt uit de resultaten van een experimenteel onderzoek naar de prosodische eigenschappen van polaire vraagzinnen in het dialect van Siena.

Deel een

Hoofdstuk twee. In hoofdstuk twee ligt de nadruk op de typologie van polaire vraagzinnen. Eerst wordt er een overzicht gegeven van polaire vraagzinnen in de talen van de wereld, zoals vermeld in (1). Vervolgens worden het Latijn en de standaard moderne Romaanse talen onder de loep gelegd. Ik laat zien dat moderne Romaanse talen geen opmerkelijke typologische variatie vertonen op het gebied van polaire vraagzinnen. Een belangrijke observatie in dit hoofdstuk is dat Romaanse talen erg van het Latijn verschillen met betrekking tot polaire vraagzinnen. Waarbij het Latijn veel verschillende polaire vraagconstructies vertoont, worden er alleen drie hoofdstrategieën gebruikt in moderne Romaanse talen. Deze strategieën zijn geïllustreerd in (3):

(3) *Polaire vraagzinnen in moderne Romaanse talen*

- a. Vraagintonatie (alle moderne Romaanse talen);
b. Vraagpartikel (Catalaans, Frans, Portugees, Spaans en Roemeens);
c. Interrogatieve woordvolgorde (Frans).

Daarna bespreek ik de polaire vraagzinnen in Italiaanse dialecten. Er worden zowel data van bestaande wetenschappelijke literatuur als nieuwe data van eigen veldwerk besproken. Ik laat zien dat de Italiaanse dialecten vanuit een typologisch oogpunt een zeer grote variatie vertonen. De hoofdstrategieën die gebruikt kunnen worden om polaire vraagzinnen aan te duiden in de Italiaanse dialecten zijn als volgt:

(4) *Polaire vraagzinnen in Italiaanse dialecten*

- a. Vraagpartikels;

- b. Vraagintonatie;
- c. Interrogatieve werkwoordsmorfologie;
- d. Vraagpartikels + interrogatieve werkwoordsmorfologie;
- e. Interrogatieve woordvolgorde;

Aangezien de Italiaanse dialecten sterk verwant zijn, is zulke typologische variatie erg verrassend.

De belangrijkste onderzoeksvragen die in dit hoofdstuk worden behandeld zijn geformuleerd in (5), (6) en (7).

- (5) Is het mogelijk om de syntactische variatie, die te vinden is in de Italiaanse dialecten, op het gebied van polaire vraagzinnen te analyseren volgens de typologische standaardclassificatie voorgesteld door o.a. Dryer (2005)?
- (6) Is er een verband tussen de polaire vraagconstructies in de Italiaanse dialecten en andere taalkundige parameters?
- (7) Wat kan de syntaxis van polaire vraagzinnen in Italiaanse dialecten bewijzen over de structuur van talen in het algemeen?

Een belangrijke conclusie in deze dissertatie is dat niet alle polaire vraagconstructies die worden gebruikt in Italiaanse dialecten kunnen worden geanalyseerd volgens de typologische standaardclassificaties, zoals de classificatie van Dryer (2005). Een voorbeeld van een constructie die niet geassocieerd kan worden is de bijzondere syntactische constructie in veel centrale en zuidelijke Italiaanse dialecten, die geïllustreerd is in voorbeeld (2).

Bovendien worden er verschillende verbanden geïdentificeerd tussen taalkundige parameters en polaire vraagconstructies. Er zijn namelijk verbanden tussen de beschikbaarheid van subject-clitica aan de ene kant, en vraagpartikels, vraagpartikels in combinatie met interrogatieve intonatie en interrogatieve intonatie aan de andere kant. Tenslotte wordt er aangetoond dat vele constructies, die in polaire vraagzinnen worden gebruikt, ook in verschillende andere non-veridicaliteits contexten gebruikt kunnen worden. Vraagpartikels en interrogatieve woordvolgorde worden bijvoorbeeld ook in hypothetische, concessieve en optatieve zinnen gebruikt in veel Italiaanse dialecten. Dit suggereert dat Italiaanse dialecten waarschijnlijk non-veridicaliteit moeten uitdrukken in plaats van het zinstype door een specifieke syntactische strategie te gebruiken. Hoewel de voorgestelde analyse in dit proefschrift bedoeld is om specifieke eigenschappen van polaire vraagzinnen in Italiaanse dialecten te beschrijven en niet van talen in het algemeen, rijst de vraag of deze analyse ook geschikt zou kunnen zijn voor data van andere talen. Verder onderzoek moet aantonen in hoeverre er een verband is tussen (non-) veridicaliteit en de morfologisch uitdrukking van polaire vraagzinnen.

Deel twee

Hoofdstuk drie. Hoofdstuk drie betreft de syntaxis van polaire vraagzinnen in het Sienees en andere centrale en zuidelijke dialecten. Polaire vraagzinnen in deze dialecten bevatten een vraagpartikel, dat een homofoon is van het vragend voornaamwoord *che*

‘wat’. Dit partikel wordt gevolgd door een persoonsvorm van het werkwoord *fare* ‘doen’.

In het Toscaanse dialect van Siena delen het lexicale werkwoord en *fare* ‘doen’ dezelfde *phi-* (persoon, geslacht en getal), *Aspect* (aspectualiteit) and *Mood* (wijs) *features*. In het Siciliaanse dialect van Mussomeli (CL) daarentegen wordt het werkwoord *fare* ‘doen’ altijd in de derde persoon enkelvoud tegenwoordige tijdsvorm gebruikt. Voorbeelden van polaire vraagzinnen in de dialecten van Siena en Mussomeli (CL) zijn respectievelijk geïllustreerd in (8.a) en (8.b):

- (8) a. Che fanno vengano?
 QP doen-TT.3.MV komen-TT.3.MV
 ‘Komen ze?’

[Sienees]

- b. Chi ffà vennu?
 QP doen-TT.3.EV komen-VT.3.MV
 ‘Kwamen ze?’

[dialect van Mussomeli (CL)]

Op het eerste gezicht kunnen de vraagzinnen in (8.a-b) op twee opeenvolgende vragen lijken, namelijk een vraagzin met vragend voornaamwoord en een polaire vraagzin: *Che fanno? Vengano?* ‘Wat doen ze? Komen ze?’. In deze dissertatie wordt het voorstel verdedigd dat polaire vraagzinnen zoals die in (8.a-b) slechts één enkele hoofdzin bevatten en niet twee opeenvolgende vragen.

De Siciliaanse polaire vraagzin in (8.b) is niet zo problematisch als de Sienees polaire vraagzin in (8.a). Omdat *fare* ‘doen’ altijd in dezelfde vorm verschijnt, kan deze werkwoordsvorm in combinatie met *chi* ‘wat’ eenvoudig geanalyseerd worden als vraagpartikel. Het tegenovergestelde geldt voor de Sienees vraagzin in (8.a): omdat *fare* ‘doen’ altijd dezelfde onderwerpsvorm heeft als het lexicale werkwoord, kan de werkwoordsvorm niet als vraagpartikel geanalyseerd worden.

De belangrijkste onderzoeksvraag die in dit hoofdstuk wordt behandeld is weergegeven in (9):

- (9) Wat is de onderliggende syntactische structuur van polaire vraagzinnen in het dialect van Siena en andere centrale en zuidelijke dialecten?

Om aan te tonen dat constructies zoals (8.a) standaard polaire vraagzinnen zijn, die een enkele hoofdzin bevatten, worden er vier syntactische testen ontwikkeld. Ik bepleit dat verschillende syntactische beperkingen gelden voor polaire vraagzinnen zoals (8.a) en de bijbehorende twee opeenvolgende vragen, namelijk een vraagzin met een vragendvoornaamwoord en een polaire vraagzin. Deze syntactische beperkingen zijn geïllustreerd in (10).

- (10) a. *Phi-, Tense, Mood en Aspect features*: in polaire vraagzinnen moet *fare* ‘doen’ altijd de *phi-* (persoon, geslacht en getal), *Aspect* (aspectualiteit) en *Mood* (wijs) *features* van het lexicale werkwoord delen, in tegenstelling tot de twee opeenvolgende vragen.

- b. *Negatie*: in polaire vraagzinnen kan maar één ontkenning voorkomen, terwijl er in twee opeenvolgende vraagzinnen wel twee negaties kunnen worden gebruikt.
- c. *Positie van het onderwerp*: in polaire vraagzinnen mag het onderwerp niet tussen *fare* ‘doen’ en het lexicale werkwoord verschijnen, in tegenstelling tot de twee opeenvolgende vragen.
- d. *Theta-rollen*: in polaire vraagzinnen kan *fare* ‘doen’ gecombineerd worden met werkwoorden die niet-agentieve theta-rollen uitdelen aan hun onderwerp. Dit is niet mogelijk in de twee opeenvolgende vragen.

Wat de syntactische structuur van polaire vraagzinnen in het Sienees betreft, onderbouw ik dat de congruentie affixen op *fare* ‘doen’ en het lexicale werkwoord beschreven kunnen worden met *Agree* (Chomsky, 2000, 2001). *Agree* is een congruentierelatie tussen een *Probe* en een *Goal* in een *c-commandrelatie*. De *Probe* heeft kenmerken zonder waarde en zoekt de eerste bijpassende *Goal* in zijn *c-commanddomein*. De waarden van de kenmerken van de *Goal* worden uitgespeld als een congruentieaffix op de *Probe*.

In het geval van Sieneese polaire vraagzinnen zijn zowel *fare* ‘doen’ als het lexicale werkwoord *Probes*. Ze moeten dus gekoppeld worden aan een bijpassende *Goal*. Het onderwerp van het lexicale werkwoord is de enige geschikte *Goal* in hun *c-commanddomein*. Als gevolg hiervan vinden er twee congruentierelaties plaats, namelijk tussen het onderwerp en *fare* ‘doen’ en tussen het onderwerp en het lexicale werkwoord. In deze analyse neem ik de theorie van fasen aan, die werd voorgesteld in Chomsky (2001). Ik neem aan dat congruentierelaties alleen plaatsvinden nadat het hoofd van de fase *merged* ‘samengevoegd’ wordt met *fare* ‘doen’. In polaire vraagzinnen in het Sienees fungeert het vraagpartikel *che* ‘wat’ als hoofd van de fase (C). Nadat *che* ‘wat’ met *fare* ‘doen’ (T) samengevoegd wordt, vinden de congruentierelaties tussen het onderwerp en *fare* ‘doen’ en tussen het onderwerp en het lexicale werkwoord gelijktijdig plaats. Het lexicale werkwoord is geen bijbehorende *Goal* voor *fare* ‘doen’, omdat hij niet-actief is volgens de Activity Condition (Chomsky, 2001). Dat deze congruentierelaties gelijktijdig plaatsvinden heeft twee hoofdgevolgen:

- het lexicale werkwoord komt niet tussen in de congruentierelatie tussen *fare* ‘doen’ en het onderwerp, dus wordt de Defective Intervention Constraint (o.a. Chomsky, 2000) niet overtreden;
- het onderwerp van het lexicale werkwoord is een actieve *Goal* in beide congruentierelaties, dus wordt de Activity Condition (Chomsky, 2001) niet overtreden.

Dit hoofdstuk eindigt met een voorstel voor een diachronische analyse van polaire vraagzinnen in de centrale en zuidelijke Italiaanse dialecten.

Hoofdstuk vier. Hoofdstuk vier behandelt de prosodische eigenschappen van polaire vraagzinnen in het Sienees. Het doel van dit hoofdstuk is om empirisch bewijs te

leveren voor het voorstel dat polaire vraagzinnen in het Sienees niet als twee opeenvolgende vragen geanalyseerd kunnen worden. Voorbeelden van een polaire vraagzin in het Sienees en de bijbehorende twee opeenvolgende vragen (namelijk een vraagzin met een vragend voornaamwoord en een polaire vraagzin) zijn respectievelijk geïllustreerd in (11.a) en (11.b):

- (11) a. Che fai parti?
 QP doen-TT.2.EV vertrekken-TT.2.EV
 ‘Vertrek je?’
- b. Che fai? Parti?
 wat doen-TT.2.EV vertrekken-TT.2.EV
 ‘Wat doe je? Vertrek je?’

[Sienees]

De belangrijkste onderzoeksvragen die hier worden behandeld zijn geformuleerd in (12) en (13).

- (12) Hoe kan men het verschil tussen polaire vraagzinnen en de twee opeenvolgende vragen maken als ze een minimaal paar vormen, als in (11.a-b)?
- (13) Gebruiken sprekers van het Sienees andere prosodische kenmerken om polaire vraagzinnen zoals (11.a) aan te duiden, dan in het geval van twee opeenvolgende vragen zoals in (11.b)?

Om de vragen in (12) en (13) te beantwoorden wordt de fonetische realisatie van polaire vraagzinnen in het Sienees onderzocht door middel van een productie experiment. De uitkomsten van het experiment laten zien dat polaire vraagzinnen en de bijbehorende twee opeenvolgende vragen statistiek gezien aanzienlijk van elkaar verschillen met betrekking tot hun duur. In het bijzonder is de duur van de beklemtoonde klinker in het werkwoord *fare* ‘doen’ langer in constructies die twee opeenvolgende vragen bevatten, zoals (11.b). Een soortgelijke klinkerverlenging wordt inderdaad verwacht als er sprake is van een grens tussen twee zinnen of zinsstukken. Dat de duur van dezelfde doelsegment significant korter is in polaire vraagzinnen zoals (11.a) suggereert dat deze vraagzinnen geen grens bevatten, en dus dat ze als één hoofdzin moeten worden geanalyseerd.

Curriculum Vitae

Sara Lusini was born on October 16, 1984 in Siena, Italy. She began studying general linguistics in 2003 at Ca' Foscari University in Venice, Italy. She obtained her Bachelor's degree with distinction in 2006. Right after that she started a Master's degree in theoretical linguistics. She obtained her Master's degree with distinction in 2008 at Ca' Foscari University with a dissertation entitled *The CP and IP layers in Siennese*. From 2008 till 2012 she carried out her PhD project at the Leiden University Center for Linguistics (LUCL) as a guest researcher. Her project was funded by the *Lingua* scholarship. During these years, she also provided administrative assistance to the executive editor of *Lingua*. The present dissertation is the result of the work she did for this PhD project.