# Linguistik Aktuell Linguistics Today 266 

# Romance Interrogative Syntax <br> Formal and typological dimensions of variation 

Caterina Bonan

John Benjamins Publishing Company

# Romance Interrogative Syntax 

## Linguistik Aktuell/Linguistics Today (LA)

ISSN 0166-0829
Linguistik Aktuell/Linguistics Today (LA) provides a platform for original monograph studies into synchronic and diachronic linguistics. Studies in LA confront empirical and theoretical problems as these are currently discussed in syntax, semantics, morphology, phonology, and systematic pragmatics with the aim to establish robust empirical generalizations within a universalistic perspective.

For an overview of all books published in this series, please see benjamins.com/catalog/la

## Founding Editor

Werner Abraham
Groningen University / Universität Wien

## General Editors

Werner Abraham
Groningen University / Universität Wien

Elly van Gelderen
Arizona State University

## Advisory Editorial Board

| Josef Bayer | Terje Lohndal | Lisa deMena Travis |
| :--- | :--- | :--- |
| University of Konstanz | Norwegian University of Science | McGill University |
| and Technology | Sten Vikner |  |
| Cedric Boeckx | Christer Platzack | University of Aarhus |
| ICREA/UB | University of Lund | C. Jan-Wouter Zwart |
| Guglielmo Cinque | Ian Roberts | University of Groningen |
| University of Venice | Cambridge University |  |
| Liliane Haegeman |  |  |

Volume 266
Romance Interrogative Syntax. Formal and typological dimensions of variation by Caterina Bonan

# Romance Interrogative Syntax 

Formal and typological dimensions of variation

Caterina Bonan<br>University of Cambridge

John Benjamins Publishing Company
Amsterdam / Philadelphia

The paper used in this publication meets the minimum requirements of the American National Standard for Information Sciences - Permanence of Paper for Printed Library Materials, ANSI z39.48-1984.

DOI 10.1075/la. 266
Cataloging-in-Publication Data available from Library of Congress: LCCN 2020055024 (PRINT) / 2020055025 (E-BOOK)

ISBN 9789027208453 (нB)
ISBN 9789027260123 (е-вОок)
© 2021 - John Benjamins B.V.
No part of this book may be reproduced in any form, by print, photoprint, microfilm, or any other means, without written permission from the publisher.

John Benjamins Publishing Company • https://benjamins.com

To my mother, my most enthusiastic supporter from day one

## Table of contents

Acknowledgements ..... XI
Conventions ..... XIII
Abbreviations ..... XIII
Projections (and X'-related notations) XIV
Introduction ..... 1
0. 1 Interrogative wh-movement ..... 4
0.2 Venetan and novel data from Trevisan ..... 9
o.2.1 The interrogative syntax of Trevisan ..... 10
o.2.2 Problems, questions, and preliminary answers ..... 16
0.3 Central claims of the book ..... 18
CHAPTER 1
Wh-in situ in Northern Italian dialects ..... 23
Organisation of this chapter ..... 28
1.1 Single wh-in situ ..... 28
1.1.1 Wh-in situ in matrix questions ..... 29
1.1.2 Wh-in situ in embedded questions ..... 30
1.1.2.1 Long-distance construals ..... 30
1.1.2.2 Wh-in situ in indirect questions ..... 32
1.2 Different patterns of wh-doubling ..... 34
1.2.1 Configuration A: Fronted clitic wh-pronoun ..... 35
1.2.1.1 Matrix wh-questions ..... 35
1.2.1.2 Embedded wh-questions ..... 36
1.2.2 Configuration B: Fronted non-clitic wh-pronoun ..... 37
1.2.2.1 Matrix wh-questions ..... 37
1.2.2.2 Embedded wh-questions ..... 38
1.2.3 Configuration C: Fronted invariable wh-operator ..... 39
1.2.3.1 Matrix wh-questions ..... 39
1.2.4 Regularities in the distribution of wh-doubling ..... 40
1.3 Wh-in situ-related patterns in Northern Italian dialects ..... 44
1.3.1 Distribution of subject-clitic inversion ..... 44
1.3.2 Distribution of Wh-phrases ..... 46
1.3.2.1 Wh-in situ: The Bellunese type ..... 47
1.3.2.2 Wh-in situ: The Trevisan and Lombard types ..... 50
1.4 Intermediate remarks ..... 51
CHAPTER 2
On short movement of clause-internal wh-elements: Wh-to-Foc ..... 55
Organisation of this chapter ..... 61
2.1 Characterising Wh-to-Foc ..... 62
2.1.1 Free subject inversion and the pro-drop parameter ..... 62
2.1.2 Are clause-internal wh-elements moved? ..... 65
2.1.3 Which spec is targeted by clause-internally moved wh-elements? ..... 69
2.2 Checking C in the presence of Wh-to-Foc: Preliminary investigation ..... 72
2.2.1 On [wh]- and [q]-features ..... 73
2.2.2 On bipartite wh-words ..... 75
2.2.2.1 On the illegitimacy of an extension of interrogative ClPs to all Northern Italian dialects ..... 77
2.2.3 The grammar of Q and consequences for optional wh-in situ ..... 79
2.2.3.1 Cable's (2010) 'Grammar of Q' ..... 80
2.2.3.2 Extending the theory of Q to Trevisan wh-fronting ..... 83
2.2.3.3 Legitimacy of sub-extraction out of frozen wh-elements ..... 86
2.3 Intermediate remarks ..... 88
CHAPTER 3
Wh-to-Foc is focus-driven91
Organisation of this chapter ..... 93
3.1 A typologically interesting type between full moving and in situ languages ..... 93
3.1.1 Malayalam ..... 93
3.1.2 Bangla and Hindi-Urdu ..... 95
3.1.3 Bantu languages ..... 97
3.1.4 Greek (multiple wh-questions) ..... 102
3.1.5 Persian ..... 106
3.2 The short movement of clause-internal wh-elements is focus-movement ..... 108
3.2.1 Kahnemuyipour's (2001) work on Persian focus-movement ..... 108
3.2.1.1 Arguments in favour of focus movement ..... 111
3.2.1.2 Arguments in favour of movement to specvp ..... 112
3.2.2 The role of [foc] in Trevisan fake wh-in situ ..... 1153.2.2.1 The parallelism between contrastive focusand clause-internally moved wh-elements115
3.2.2.2 Trevisan wh-in situ and the roles of [foc], [q], and [wh] ..... 121
3.3 Intermediate conclusions ..... 126
CHAPTER 4
More on Trevisan wh-in situ ..... 131
Organisation of this chapter ..... 133
4.1 On wh-in situ in indirect wh-questions ..... 134
4.1.1 Thoughts on the syntax of $\mathrm{se}_{\mathrm{wH}}$ and wh-doubling ..... 136
4.1.2 Functional elements in the lower Left Periphery ..... 139
4.1.3 $\mathrm{Se}_{\mathrm{wH}}$ licenses an interrogative operator in SpecIntP ..... 142
4.1.4 Concluding remarks ..... 145
4.2 On wh-in situ within islands ..... 147
4.2.1 Trevisan strong islands and the puzzling optionality of subject-clitic inversion ..... 147
4.2.2 Massive pied-piping of strong islands ..... 149
4.2.2.1 Application to Trevisan strong islands ..... 150
4.2.3 Wh-phrases are bare within strong islands, but not within weak islands ..... 153
4.2.4 English limited pied-piping vs Trevisan tlingit-like syntax ..... 156
4.2.5 Concluding remarks ..... 161
CHAPTER 5
On the theory of Romance wh-in situ ..... 163
Organisation of this chapter ..... 165
5.1 Type-specific analyses: Moving further! ..... 165
5.1.1 Left-peripheral fake wh-in situ ..... 166
5.1.1.1 Why wh-movement? ..... 168
5.1.1.2 When the whole IP moves to the Left Periphery ..... 170
5.1.2 IP-internal real wh-in situ ..... 175
5.1.2.1 Evidence against wh-movement ..... 175
5.1.2.2 Northern italian wh-in situ is real wh-in situ ..... 177
5.1.3 The Trevisan data in the theory of Northern Italian wh-in situ ..... 178
5.2 Beyond Northern Italian dialects ..... 183
5.2.1 Sentence final (requirement). Or not? ..... 183
5.2.2 (Optional) тр-internal wh-movement ..... 185
5.2.3 Embedded wh-in situ ..... 187
5.2.3.1 Long-distance questions ..... 187
5.2.3.2 Indirect questions ..... 188
5.2.4 Sensitivity to islands ..... 189
5.2.4.1 Contemporary Spoken French ..... 190
5.2.4.2 Spanish and Portuguese ..... 192
5.3 Features responsible for Northern Italian wh-in situ(s) ..... 195
5.3.1 Pure wh-in situ ..... 195
5.3.2 Three types of wh-in situ ..... 197
5.3.2.1 Mixed pictures of wh-movement and wh-scoping ..... 198
5.3.2.2 Variables and types of Northern Italian in situ/ex situ alternation ..... 202
5.3.3 Wh-to-Foc and the theory of Northern Italian wh-in situ ..... 204
5.3.3.1 Trevisan and similar varieties (type I): $Q P$ and Q -adjunction, plus focus movement ..... 204
5.3.3.2 Lombard-like varieties (type II): Mixed languages with different availability of EPP in $\mathrm{Foc}_{\text {Low }}$ ..... 207
5.3.3.3 Bellunese (type III): A mixed language with a [wh]-feature in QembP... or something else? ..... 208
5.4 Concluding remarks ..... 212
Conclusions ..... 221
References ..... 237
Index ..... 251

## Acknowledgements

This monograph is based on work carried out at the Université de Genève (Switzerland), first supported by the Encouragement de projets (Div. I-III) funds (Swiss National Science Foundation project n ${ }^{\circ} 156160$, 'Optional wh-in situ in French interrogatives: Syntax and prosody') and then completed during my time at the University of Cambridge, supported by an Early PostDoc.Mobility grant (SNSF project $\mathrm{n}^{\circ} 184384$, 'The fine structure of Romance interrogative $i t$-clefts').

First and foremost, I wish to gratefully acknowledge the financial support of the Swiss National Science Foundation, without which none of this would have been possible. Likewise, I wish to thank my research team in Geneva, namely my doctoral advisors Professor Ur Shlonsky and Professor Giuliano Bocci, and my dear colleague Lucas Tual. I also wish to thank my post-doctoral advisor at Cambridge, Professor Adam Ledgeway, who has enthusiastically encouraged and assisted me in the development of my doctoral dissertation into this book. Although this book is the outcome of work carried out in collaboration with all the members of these research groups, it is completely my own, and I take full responsibility for the ideas defended here.

I then wish to thank all of my informants, for taking the time to answer my questions and to discuss the trickiest phenomena with me...over and over again. Most of the Trevisan data presented and discussed in this book were gathered during the first and second year of my PhD, first in the form of my personal native judgements, and then through two likert-scale questionnaires and multiple old-fashioned sessions of one-to-one grammaticality judgements. Without these fine people, many fascinating phenomena related to Northern Italian wh-in situ would have gone unnoticed.

The content of this work has also been greatly influenced by comments and criticisms from a number of outstanding linguists. First are the other members of my doctoral scientific committee: Professors Guglielmo Cinque, Cecilia Poletto, Adam Ledgeway, and Adriana Belletti. The comments and suggestions you made during and after my defence were very valuable, and contributed substantially to the development of this work. I also wish to acknowledge the phenomenal influence that work by some other brilliant linguists has had on my own work over the years: that of Professors Giuliana Giusti, Anna Cardinaletti, Alessandra Giorgi, Nicola

Munaro and Luigi Rizzi, all of whom were my mentors during my years in Venice and Geneva. I owe you almost everything I know about linguistics.

The most crucial support, however, has come from my daughter, Isadora, and from my partner in crime, Vincent. Without them, none of this would have been possible.

## Conventions

## Abbreviations

| iff | if and only if |
| :--- | :--- |
| SCII | subject-clitic inversion |
| ACC | accusative |
| Adj | adjective |
| ADV | adverbial |
| Aux | auxiliary |
| Bl | Bellunese |
| Ch | Chinese |
| cl | clitic |
| COMP | complementiser |
| DAT | dative |
| DO | direct object |
| ECP | Empty Category Principle |
| EPP | Extended Projection Principle |
| ERG | ergative |
| EXPL | expletive |
| F | feminine |
| Fr | French |
| FUT | future |
| IO | indirect object |
| Spec | specifier |
| Tv | Trevisan |
| V | verb |
| V2 | verb-second |
| Var | variable |
| IAV | Immediately After the Verb |
| COP | copula |
| (1/2/3)Pp | 1 st/2nd/3rd person plural |
| (1/2/3)Ps | 1 st/2nd/3rd person singular |
|  |  |

## Projections (and X'-related notations)

AgrOP Object Agreement Projection
AP Adjective Phrase
AspP Aspectual Projection
ClP Clitic Phrase
CP Complementiser Phrase
DP Determiner Phrase
FinP Finiteness Phrase
$\mathrm{Foc}_{\text {Low }} \quad$ Focus Projection (low periphery)
Focus $_{\text {HIGH }} \quad$ Focus Projection (left periphery)
ForceP Force Projection
IntP Interrogative Phrase
IP Inflection Phrase
ModP Modifier Phrase
OpP Operator Phrase
PP Preposition Phrase
QembP Question embedded Phrase
QP Question-particle Projection
SubjP Subject Projection
TopP Topic Projection
TP Tense Phrase
VP Verb Phrase
$\nu \mathrm{P} \quad$ little VP
WhP Wh-Projection
$\mathrm{X}^{\prime} \quad$ intermediate node
$\mathrm{X}^{\circ}$ head
XP maximal projection

## Introduction

Forty-four years after the publication of Chomsky's On wh-movement, many aspects of the grammar of questions remain a challenge. While the cross-linguistic distribution of total wh-fronting and the theoretical mechanisms behind it are on the whole widely understood, the phenomenon of wh-in situ, i.e. wh-elements in clause-internal position, still poses theoretical questions. Are clause-internal wh-elements really in their first-merge position? Can the choice between wh-fronting and wh-in situ be reduced to an alternation between movement and non-movement?

The study of wh-in situ was initiated by Huang (1982) using data from Mandarin Chinese, a language that displays wh-in situ of the 'pure' type, i.e. where the option of wh-fronting is simply not available. Several subsequent investigations supported his idea that the choice between wh-ex situ and wh-in situ is parametrised, and crucially linked to a language-specific choice between overt and covert wh-fronting, respectively. There are however three broad problems with Huang's influential proposal. First, despite being subject to the same interpretative scope as their moved counterparts, clause-internal wh-elements and overtly fronted wh-elements have different constraints in terms of sensitivity to islands and intervention effects. Despite various explanations within the Principles and Parameters approach, the difficulty of dealing with these challenges in the framework of a simple 'Logical Form vs surface structure' phrasal-movement parameter led researchers to pursue alternative means to capture the differences between wh-in situ and overt wh-movement (see Cheng 2003 for a survey). A second problem posed by Huang's generalisation is that there is an asymmetry between wh-movement languages such as English and wh-in situ languages like Chinese: while the latter lack any trace of overt wh-movement, the former do make use of the wh-in situ strategy. English cannot be said to manifest the negative setting of the Logical Form vs surface structure movement parameter, since wh-in situ is not only possible but in limited cases also compulsory, notably in multiple wh-questions. A third problem with Huang's parametric approach to wh-in situ is the simple existence of so-called 'optional wh-in situ languages', i.e. languages in which wh-elements are able to surface either clause-initially or clause-internally, rather freely and with equivalent semantics. The wh-in situ found in Northern Italian dialects and other Romance languages, which as I shall claim is of the optional type, therefore seems directly relevant to the general characterisation of wh-in situ phenomena and to the theoretical models constructed to explain it.

The main focus of this book is the composite distributional properties and morphosyntax of optional wh-in situ in Northern Italian dialects and in Romance more generally. Research into the syntax of wh-movement in Romance was first undertaken by Kayne (1972), on the basis of French data. Later, Kayne's (1994) 'antisymmetry', with its emphasis on strict binary branching and the ban on rightward movement, provided a very productive framework for the study of simple and complex interrogative inversion. Following this influential work, Munaro et al. (2001) and Poletto and Pollock (2000) (and further related papers) have extended what I shall call the 'remnant-movement approach' to the syntax of interrogatives in French and Northern Italian dialects. According to these studies, wh-in situ in Northern Italian dialects is actually an instance of fake wh-in situ: clause-internal wh-words are assumed to undergo wh-movement to a left-peripheral Spec, which is masked in the phonetic string because further movements take place that displace the whole remnant-IP to the Left Periphery of the clause. This remnant-IP movement analysis was heavily criticised by Manzini and Savoia $(2005,2011)$, who claimed that Northern Italian clause-internal wh-elements are unmoved from their first-merge position, i.e. covertly fronted after Spell-Out, à la Huang. Moreover, as I shall argue extensively in Chapter 5, the complexity of derivations à la Poletto \& Pollock make them both inapplicable to numerous wh-in situ languages and also undesirable from a language acquisition perspective at the very least. A combined attempt to account for the syntax of Northern Italian wh-in situ was formulated in Munaro (1997), who claimed that the clause-internal wh-word was indeed in its first-merge position, while all intervention phenomena were the result of the presence of an interrogative Operator that moved from within IP into the layer that was called the Complementiser Phrase at the time, thereby determining the scope of the wh-word itself. I shall show that although Munaro's (1997) work is less well-known that the other studies described above, his analysis comes closest to the approach adopted in this book. I believe that the correct analysis of the different types of wh-in situ discussed in this monograph consists essentially in the implementation of Munaro's and Manzini \& Savoia's theories in the light of more recent and very influential work on wh-in situ in languages with phonetically-realised Q-particles, namely Cable's (2010) monograph.

The theory outlined in this book revolves around three theoretical concepts that I consider central to any investigation carried out within any framework of generative grammar: (i) Universality - the assumption that structures are not language-specific but rather fixed across languages, (ii) Uniformity - Chomsky's (2001) invitation to explain cross-linguistic variations as restricted to easily detectable properties of utterances, and (iii) Economy - the attempt to explain languages using structures that are as uncomplicated and learner-friendly as possible. As I will explain later, the theoretical concepts in (i)-(iii) will justify my decision
to approach the study of Romance wh-in situ in a way that differs substantially from that adopted in previous research. Specifically, they support an analysis that moves in the direction of an implementation of Cable's (2010) theory which, simply on the basis of different settings of microparameters, can provide a universal answer to the complex phenomenon of wh-in situ, be it of the pure or of the optional type.

This book is organised as follows. The next sections first provide an overview of the composite phenomenon of interrogative wh-movement, before presenting new data from Venetan Trevisan which will become central to the theory of wh-in situ that I develop in the rest of the book and summarise briefly at the end of this chapter. I shall claim that Trevisan displays a form of low movement of clause-internal wh-elements which has never previously been attested in Romance, and which crucially provides evidence in favour of the central role that the clause-internal $\nu \mathrm{P}$-periphery can play in the derivation of wh-in situ in some languages. Chapter 1 presents an overview of the morphology and distribution of wh-in situ in Northern Italian dialects of the Romance family, and provides evidence in favour of (at least) a two-way split in the way wh-in situ is derived in these varieties. Chapter 2 introduces the theoretical framework adopted in the book, namely the cartography of syntactic structures, and outlines the relevance of Cable's (2010) understanding of wh-questions for the study of Romance wh-in situ. Taking the alternation between wh-fronting and wh-in situ in Romance to be the by-product of an intermediate step in the evolution towards generalised unmoved wh-in situ, I argue that the position targeted by Trevisan clause-internal wh-elements lies in the periphery of $v$ P. Then, in Chapter 3, I argue that the low movement under consideration is driven by a focus-feature encoded within the clause-internal periphery. The characterisation of this peculiar low movement as focus-driven is supported by solid cross-linguistic data. In Chapter 4, I present and discuss Trevisan data on embedded wh-in situ and extraction out of syntactic islands which, despite being somewhat peripheral, constitute additional evidence for the need for Q-particles in the computation of Northern Italian wh-movement. To conclude, in Chapter 5 I provide an overview of a large amount of data relating to the alternation between wh-in situ and wh-fronting in Romance and non-Romance languages spoken outside of Northern Italy. This will provide an opportunity both to support my claim in favour of an additional two-way split in how varieties derive wh-in situ, and to refine Cable's original theory. Indeed, while Cable's original account attributes most differences between wh-in situ languages to different combinations of two variables, Q-projection vs Q-adjunction and overt vs covert movement, in this monograph I provide evidence of the need for two additional variables: presence of a [q;foc] featural bundle in C vs scattering of the features between C and $\nu \mathrm{P}$, plus presence or absence of an EPP-feature in the clause-internal domain.

This book offers a very innovative explanation for a composite phenomenon that has been studied for decades; despite the many previous theoretical proposals put forward, none have yet been able to account for the wide range of cross-linguistic variation observed. Based on Cable's (2010) recent theoretical advances in the study of the syntax of single wh-questions, the theory of Northern Italian wh-in situ outlined in this book provides a brand new perspective on 'optional' wh-in situ which can not only account for the phenomenon of wh-in situ across Romance, but also has interesting consequences for the theory of wh-in situ more broadly. In a sense, the book offers supporting evidence in favour of Cable's influential analysis, while also implementing Cable's original formulation of the theory.

Thanks to the vast amount of data presented and discussed, along with the predictions and theoretical contributions made, this monograph will be of interest to a wide range of specialists in human language, from typologists to Romance specialists and formal syntacticians, but also to the many experts in languages with overt Q-particles who wonder why we Romance specialists have long been so resistant to the implementation of silent Q-particles in our theoretical models.

My hope is that this first attempt to explain Romance interrogative wh-movement taking the interrogative morphosyntax of languages from other families into account will be convincing enough to inspire many others to start looking at Romance wh-in situ through this innovative lens.

### 0.1 Interrogative wh-movement

Languages are known to vary substantially in the ways in which they realise wh-movement in genuine, answer-seeking interrogatives, at least superficially. The name wh-movement stems from the early days of generative grammar, as a reference to the transformational analysis of the day whereby the wh-expression appeared in its canonical position at deep structure, i.e. in the clause-internal first-merge position occupied by the corresponding argument or adverbial in declaratives, as in (1a), and then in languages like Standard English moved leftward into its derived clause-initial position at surface structure, as illustrated in (1b): ${ }^{1}$
(1) a. Your brother ate all of my chocolates
b. What did your brother eat $\qquad$ ?

[^0]Consequently, it can be argued that wh-movement results in discontinuities that appear to follow interesting patterns cross-linguistically. Wh-phrases are operators which bind variables at the level of Logical Form, like other quantifier noun phrases: in some cases, the correct binding configuration is created before Spell-Out, i.e. 'overtly', while in other cases it is delayed to Logical Form, i.e. 'covertly'. In a way, wh-movement can be thought of as a syntactic solution to a semantic problem: just like any other quantifier, a wh-operator must be split across two positions to be interpretable, one which serves as the operator itself and one which serves as the variable. The implication of this hypothesis is that regardless of whether the movement of wh-words is detectable in the phonetic string, all wh-elements must move to create the relevant operator-variable configuration before interpretation occurs. Consequently, the different cross-linguistic distributional properties of wh-elements are often assumed to be the result of the fact that wh-movement occurs either overtly or covertly.

Genuine wh-questions can be single, when only one wh-phrase is present, as in (2a), or multiple, when two or more elements are questioned, as in (2b):
(2) a. Who did you meet $\qquad$ at the market?
b. Who did you meet $\qquad$ where?

Interestingly, in multiple wh-questions, some languages have compulsory total fronting of all wh-words (such as Serbo-Croatian and Bulgarian, as described in Rudin 1988a,b; Bošković 2000, 2002; Krapova 2002; Krapova \& Cinque 2008, a.o.), while in other languages fronting both elements is just one of many options (Persian; Mirdamadi 2018). Moreover, there are languages where only one wh-element is fronted (like English and French; Kuno \& Robinson 1972 and Kotek 2016, a.o.), languages where all wh-words stay clause-internally (as in Chinese and Japanese; Soh 2005; Takita \& Yang 2014, a.o.), and languages like French which can marginally leave more than one wh-word clause-internally (Mathieu 1999; Bošković 2001; Shlonsky 2012, a.o.). These movement patterns are linked to, yet not always constrained by, the movement properties of wh-elements in single wh-questions. In addition, in truth-conditional terms, while the interpretation of a single wh-question is always one within the set of propositions that are true for all $x$ that the wh-element can stand for, multiple wh-questions can be associated with a pair-list (PL) or a single-pair (sp) reading, or both. For example, English multiple questions like (2b) are known to be exclusively compatible with a PL reading, as illustrated in (3):
(3) What did your brother eat where?
a. $\quad \checkmark$ Pl-READING: My brother ate your chocolates on the sofa, my candies in his bed, the jar of nutella in the kitchen, ...
b. X sp-reading: * My brother ate your chocolates on the sofa

In contrast, in languages like Japanese only the single-pair reading is available (Yoshida 1995; Saito 1999), while in French a single-pair interpretation is possible iff both wh-words stay clause-internally (Bošković 2001). The availability of one or the other interpretation seems linked to the position occupied by the wh-element at Spell-Out: the pair-list reading is coupled with overt wh-fronting, while the single-pair reading only seems accessible if the language has wh-in situ. The study of multiple wh-movement goes back to Baker (1970), Kuno \& Robinson (1972), and Bolinger (1978). Among more recent contributions are Higginbotham \& May (1981), Fiengo et al. (1988), Lasnik \& Saito (1992), Kayne (1983) and Dayal (2002). Influential works on the semantics of multiple wh-questions include, among others, Hagstrom (1998), Bošković (2001), Kitagawa et al. (2004), Cable (2010) and Kotek (2014). However, the issues surrounding multiple wh-questions are complex, and are beyond the scope of this book.

The distribution of single direct wh-questions is also broad and complex. Some languages, such as Standard English, require total fronting of the wh-element in the unmarked case (Ross 1967; Culicover 1976; Chomsky 1977; Bošković 2000, a.o.), as illustrated in (4a). In these languages, the absence of wh-fronting is associated with an echo interpretation, as in (4b): ${ }^{2}$
(4) a. Genuine question

Who did you see $\qquad$ ?
b. echo question

You saw wно?!
In other languages, like Chinese (Huang 1982; Aoun \& Li 1993; Tsai 1994, a.o.) and Japanese (Lasnik \& Saito 1992; Watanabe 1992; Aoun \& Li 1993), the wh-word must stay clause-internally for the question to be felicitous, as illustrated in (5):
(5) Chinese
(adapted from Huang 1982: 253(159))
a. Ni kanjian-le shei? you see-ASP who 'Who did you see?'
b. *Shei ni kanjain-le $\qquad$ ?

who you see-ASP
In this book, languages that systematically strand wh-elements clause-internally will be referred to as 'pure in situ languages', as opposed to 'optional in situ languages',
2. Throughout, wh-words in CAPS are associated with an echo reading, while small caps in examples signal that an element is contrastively focused.
where wh-in situ co-exists with wh-fronting. Contemporary Spoken French is one example of an optional in situ language: leaving aside the question of pragmatic variation, both total wh-fronting, as in (6a), and wh-in situ, as in (6b), are attested in genuine questions (Chang 1997; Mathieu 1999; Bošković 2000; Starke 2001; Baunaz 2011, a.o.):
(6) Contemporary Spoken French
a. Qui est-ce que tu as vu ___ ?
who est-ce que you have seen
'Who did you see?'
b. Tu as vu qui?
you have seen who
Wh-in situ languages of both the pure and the optional type pose theoretical challenges: the correct binding configuration of the wh-element is clearly not obtained in overt syntax, and the phonetic string is not sufficient to understand whether the wh-element is indeed unmoved or moved covertly. The situation is further complicated in the case of optional in situ languages, since non semantically-motivated optionality is itself already a problem for any theoretical account.

I have mentioned that, since Huang (1982), pure in situ languages like Chinese and Japanese have been argued to have real wh-in situ. Consequently, the wh-words in examples like (5a) are commonly considered to be located in their first-merge position, i.e. where they are generated. Huang argues that the correct operator-variable configuration is obtained in covert syntax: the interpretation of the wh-element occurs after Spell-Out, at the level of interpretation (Logical Form). Consequently, while overt wh-fronting is ruled out in pure in situ languages, as seen in (5b), covert wh-fronting does take place, as illustrated in (7):
(7) Chinese (adapted from Huang 1982: 253(160))


Wh-words moved in Logical Form, such as that in example (7), have been argued to be subject to the same interpretation and scope as overtly moved wh-elements (such as the English wh-word in 4a), yet constrained differently in terms of sensitivity to islands and intervention effects. This theoretical model, in which the choice between overt and covert movement is considered to be parametrised, faces at least three problems: first, the fact that clause-internal wh-elements and overtly moved wh-elements are constrained differently in terms of sensitivity to islands and intervention effects (see Watanabe 1992; Reinhart 1998; Pesetsky 2000; Richards 2000,
a.o. for detailed discussion); second, while Chinese and similar languages lack any traces of overt wh-movement, full-fronting languages such as English do not actually eschew the in situ strategy, and hence cannot be said to manifest the negative setting of an overt/covert movement parameter (wh-in situ is possible, and actually the only permitted option, in multiple wh-questions, as previously exemplified in (2b)); third, the very existence of optional in situ languages is problematic, since under a parametric approach to wh-in situ, free variation between wh-movement and wh-in situ is not expected. A detailed account of the morphosyntax of pure wh-in situ, which is not the focus of this book, can be found in Huang (1982), which inspired many further developments (Lasnik \& Saito 1992; Watanabe 1992; Aoun \& Li 1993; Tsai 1994; Soh 2005; Pan 2014, a.o.). See also Beck \& Kim (1997) and Ko (2005) for Korean, Bruening \& Thuan (2006) for Vietnamese, Cole \& Hermon (1994) for Ancash Quechua, Cole \& Hermon (1998) for Malay, Kishimoto (2005) for Sinhala, and Downing (2011) for Bantu languages.

Those Romance languages that do allow wh-elements to surface clause-internally constitute a typologically interesting case between pure in situ languages, where wh-fronting is ruled out, and full-fronting languages, in which wh-in situ is disallowed (Cheng \& Bayer 2017). In single wh-questions in Romance, if wh-in situ is possible in answer-seeking contexts, it always co-exists with the option of total wh-fronting, albeit to different extents. Although wh-fronting is always possible, wh-in situ can be limited to certain wh-words, and its availability varies both intraand cross-linguistically. However, on the whole, Romance wh-in situ can indeed be considered optional, as I shall argue throughout. Optional in situ languages include French (Obenauer 1994; Mathieu 1999; Bošković 2000; Baunaz 2011; Shlonsky 2012; Cheng \& Bayer 2015, a.o.), Northern Italian dialects (Munaro 1999; Poletto 2000; Manzini \& Savoia 2005, a.o.), and to some extent Spanish (Jiménez 1997; Etxepare \& Uribe-Etxebarria 2005; Kaiser \& Quaglia 2015; Biezma 2018, a.o.) and Portuguese (Cheng \& Rooryck 2000, 2002; Kato 2013, a.o.). ${ }^{3}$

The study of wh-in situ in Romance is highly relevant to the general characterisation of wh-in situ phenomena and the theoretical models needed to explain it. All issues related to the properties of covert movement (for instance, the distinction between feature and phrasal movement), of semantic intervention phenomena (à la Beck 2006; Honcoop 1998; Szabolcsi \& Zwarts 1992, a.o), and of syntactic intervention and locality (Rizzi 1990 and further related works), are at least as intriguing, if not more so, in languages in which wh-in situ is not the only available question-formation strategy. In this book, I shall show that the theoretically challenging phenomenon of Romance wh-in situ becomes still more intriguing in light
3. Further references on various aspects of Romance wh-in situ are scattered throughout this monograph.
of novel data from a variety of Trevisan, a Venetan dialect, that I present here. The alternation between wh-fronting and (apparent) wh-in situ in Trevisan interestingly features compulsory movement of clause-internal wh-elements, i.e. what appears to be wh-in situ in this variety is not in fact a true example of this phenomenon This low movement, illustrated and described in the next section, is compulsory in answer-seeking questions and will constitute the empirical basis of the theoretical understanding of wh-in situ developed in this monograph.

## o. 2 Venetan and novel data from Trevisan

Venetan is a group of closely related varieties which represent the development of spoken Latin in North-Eastern Italy, with around 3.9 million native speakers. It is spoken principally in the Veneto region, where most of the 5 million inhabitants can at least understand it. It is also spoken and understood outside the Veneto, namely in Trentino, Friuli-Venezia Giulia, Istria, and some towns in Dalmatia.

The main regional varieties of Venetan are the Central variety, spoken in Padua, Vicenza, and the Polesine area; the Eastern or Coastal variety, spoken in Venice, Trieste, Grado, Istria, and Fiume; the Western variety, spoken in Verona and some areas of the Trentino region); the Northern-Central variety, spoken in the Destra Piave ${ }^{4}$ part of the Province of Treviso and most of the Province of Pordenone; and the Northern variety, spoken in the Sinistra Piave ${ }^{5}$ part of the Province of Treviso (including Belluno, but also Feltre, Agordo, Cadore, and Zoldo Alto). All these different varieties of Venetan are mutually intelligible to a very high degree, even those with the most substantial differences between them (the Central and the Western varieties). Other noteworthy variants are spoken in Chioggia, the Pontine Marshes, Dalmatia, some southern Brazilian cities (where Venetan is known as Talian), and the Mexican city of Chipilo.

In this book, I shall present data exclusively from Trevisan, and more specifically from the variety spoken in the wider Ponte di Piave area, i.e. a mixed Destra-Sinistra Piave variety where wh-in situ is most productive. The data presented in this book were gathered first from my own native intuitions and checked using two on-line questionnaires that asked for Likert-scale evaluations, then refined over the course of multiple sessions involving one-to-one grammaticality judgements on the most complex structures. My informants, twenty-two in total, all live in the Ponte di Piave area; they all have been exposed to Trevisan since birth and use the language daily.

[^1]
## o.2.1 The interrogative syntax of Trevisan

Northern Italian dialects, like Standard Italian, have traditionally been described as pro-drop (Poletto 1993, but see Cardinaletti \& Repetti 2008; 2010 for a partial pro-drop analysis). In generative grammar, a positive setting of the pro-drop parameter allows empty pronominal elements to be identified by their governor: structurally, the empty subject position is filled by the phonetically-null element known as pro ('little pro'). Therefore, in the unmarked case declaratives appear to be subject-less, as in (8):
(8) Trevisan

> a. pro vegnarò dopo sena
> pro come ${ }_{1 \mathrm{Ps} . \mathrm{FUT}}$ after dinner
> 'I shall come after dinner'
b. pro finiremo a ciocoeata vanti Nadal
pro finish ${ }_{1 \text { pp.fut }}$ the chocolate before Christmas
'We will eat the chocolate up before Christmas'
Along with a series of full-fledged pronouns, Trevisan also has two series of nominative clitics, assertive and interrogative. ${ }^{6}$ The declarative series of nominative clitics is incomplete: only three clitics out of six grammatical persons exist, namely 2-3PS and 3PP. Trevisan therefore behaves like Paduan, Venetian and Triestino in this regard (Poletto 1993). The situation is different when it comes to the interrogative series of nominative clitics, where the clitic for the 2PP is additionally realised, along with the 1PS and the expletive, for some speakers, but never the 1PP. In this respect, Trevisan differs from the varieties described in Poletto (1993), whose interrogative clitic series are wholly complete.

The Trevisan clitic paradigms are illustrated in Table 0.1. Forms in brackets are those that are not at the disposal of all speakers:

Table 0.1 Trevisan clitic pronouns

|  | Declarative | Interrogative |
| :--- | :---: | :---: |
| 1PS | - | (io) |
| 2 PS | te | tu |
| 3 PS | $\mathrm{el}_{\mathrm{M}} / \mathrm{a}_{\mathrm{F}} /-$ | $\mathrm{eo}_{\mathrm{M}} / \mathrm{ea}_{\mathrm{F}} / \mathrm{eo}_{\mathrm{EXPL}}$ |
| 1 PP | - | - |
| 2 PP | - | o |
| 3 PP | $\mathrm{i}_{\mathrm{M}} / \mathrm{e}_{\mathrm{F}}$ | $\mathrm{i}_{\mathrm{M}} / \mathrm{e}_{\mathrm{F}}$ |

[^2]When a subject clitic is available, it must be phonetically realised, both in declaratives, as in (9a), and in interrogatives, as in (9b). ${ }^{7}$ While the declarative clitic appears in proclisis, i.e. before its verbal host, the interrogative is enclitic on the verb, i.e. it follows it directly.
(9) Trevisan
a. ${ }^{*}(\mathrm{Te})$ gà zà senà *(you=) have already had.dinner 'You have already had dinner'
b. Ga-*(tu) zà senà? have ${ }^{*}(=y o u)$ already had.dinner 'Have you had dinner already?'

The interrogative clitics play a crucial role in the formation of Trevisan answer-seeking matrix interrogatives, which display compulsory subject-clitic inversion. This is true both of polar interrogatives, as in (10a)-(b), and wh-interrogatives, as in (10c)-(d):
(10) Trevisan
a. Vjen-tu al marcà ?
come=you to.the market
'Are you coming to the market?'
b. *Te vjen al marcà ? you= come to.the market
c. Cuando sì-tu ndà al marcà __ ? when are=you gone to.the market 'When did you go to the market?'
d. *Cuando te sì ndà al marcà ___ ? when $y o u=$ are gone to.the market

Subject-clitic inversion is a very widespread question-formation strategy in Northern Italian dialects (Poletto 1993, 2000; Munaro 1999; Manzini \& Savoia 2005, a.o.) and in wh-interrogatives it is orthogonal to the position occupied by the wh-element (as correctly observed in Manzini \& Savoia 2005, 2011). This is illustrated in (11):
(11) Trevisan
a. Chi ga-tu catà $\qquad$ ?
who have=you met
'Who did you meet?'
b. Ga-tu catà chi ?
have=you met who

[^3]As previously mentioned, Trevisan is an optional in situ language. There is indeed a high degree of optionality in the alternation between in situ and ex situ, with two exceptions: the what-word che, which is only felicitous clause-internally, as in (12), and the why-word parché, which only appears clause-initially, as in (13):
(12) Trevisan
a. Vo-tu che ?
want=you what
'What do you want?'
b. * Che vo-tu $\qquad$ ?
what want=you
(13) Trevisan
a. Parché te sì ndaa al marcà ? why $y$ ou= are gone ${ }_{\mathrm{F}}$ to.the market 'Why did you go to the market?'
b. *Te sì ndaa parché al marcà? you= are gone ${ }_{\mathrm{F}}$ why to.the market

In Bonan (2019), I argued that parché behaves like its Italian counterpart perché as described in Rizzi (2001) and further related work. Indeed, in a system that requires subject-clitic inversion in matrix questions, Trevisan parché exceptionally fails to trigger it. Moreover, the distributional and interpretational properties of this wh-word in extraction environments clearly show that it is first-merged in the Left Periphery of the clause like regular why-words (Rizzi 2001; Stepanov \& Tsai 2008; Shlonsky \& Soare 2011, a.o.). More details on the morphosyntax of parché can be found in Bonan (2017) and Bonan \& Shlonsky (accepted) while the peculiarity of che will be discussed in Chapter 3.

Aside from the exceptions in (12) and (13), wh-words in Trevisan are fairly free distributionally. In fact, not only non-D-linked but also D-linked wh-elements can be licensed clause-initially and clause-internally, as in (14). ${ }^{8}$
(14) Trevisan
a. Ga-tu leto cuanti libri ___ ?
have=you read how.many books
'How many books did you read?'
b. Cuanti libri ga-tu leto __ ?
how. many books have=you read
8. Throughout, I use the labels D-linked and non-D-linked to refer to wh-elements with and without a lexical restrictor, respectively. I do not use the terms bare and complex in order to avoid confusion. Indeed, in the approach developed in this book, wh-elements are never assumed to be bare in the computation of genuine wh-questions, in the sense that they always entertain a close structural relation with a (phonetically-realised or silent) Q-particle, in Cable's (2010) terms.

Examples such as (14) reveal another important property of Trevisan wh-in situ: the absence, in this language, of a 'sentence-final requirement' in the sense of Etxepare \& Uribe-Etxebarria (2005), i.e. the need for a clause-internal wh-element to occupy the rightmost position in the clause. This sets Trevisan apart from closely related Bellunese, in which clause-internal wh-words must occupy the rightmost edge of the clause (Munaro 1999; Munaro et al. 2001, a.o.), as I show in Chapter 1. In fact, in Trevisan the absence of a requirement for sentence-finality goes so far as to actually require clause-internal wh-elements to move, plausibly within тP: the clause-internal wh-elements of Trevisan display a peculiar movement pattern which, to the best of my knowledge, has not so far been observed in other Northern Italian varieties, nor generally in the Romance languages. The distributional properties of clause-internal wh-indirect objects and wh-adverbials suggest that 'in situ' wh-elements do not stay in their external-merge position in Trevisan. In an SVO language where the declarative order of theta-arguments and adverbs is rigidly fixed, and the latter obligatorily follow the former (see Chapter 2 for a detailed discussion), clause-internal wh-elements clearly move to a linear position below the surface position occupied by the past participle. This is illustrated in (15) and (16): ${ }^{9}$
(15) Trevisan
a. Ghe ga-tu dato $\underline{\mathrm{a}}_{\text {chi }_{\text {wh-do }}} \underline{\mathrm{a}}_{\text {tecia }_{\mathrm{o}}}$ ___? Dat have=you given to who the saucepan 'Who did you give the saucepan to?'
b. *Ghe ga-tu dato $\underline{a} \underline{\text { tecia }}_{\mathrm{IO}} \underline{\mathrm{a}} \underline{\text { chi }}_{\text {wh-do }}$ ? Dat have=you given the saucepan to who
(16) Trevisan
a. Ga-tu magnà cuando wh-adv $^{\text {el }}$ dolse $_{\text {Do }}$ have=you eaten when the cake 'When did you eat the cake?'
b. *Ga-tu magnà el dolse $_{\text {Do }}$ cuando $_{\text {wh-ADv }}$ ? have=you eaten the cake when

In the absence of clause internal movement of the wh-element, Trevisan wh-in situ receives an echoic interpretation. As in English, echo questions in Trevisan wholly lack interrogative syntax: subject-clitic inversion, otherwise compulsory in root questions, is ruled out in constructions with unmoved clause-internal wh-elements, as in the contrast in (17):

[^4](17) Trevisan
a. Te gà magnà el dolse cuando ?!
you= have eaten the cake when
'You ate the cake when?!'
b. *Ga-tu magnà el dolse cuando ?! have=you eaten the cake when

In Trevisan, wh-in situ is also quite productive in embedded environments. For the sake of descriptive ease, I use the term 'embedded' wh-in situ throughout, to refer to occurrences of wh-in situ under a complementiser, i.e. both long-distance construals, as in (18), and indirect wh-questions, as in (19). In both constructions, wh-in situ coexists with the option of total wh-fronting:
(18) Trevisan
a. Pensi-tu chea metarà dove i piteri __ ? think=you that=she= put $_{\text {rut }}$ where the vases 'Where do you think she wants to put the vases?'
b. Dove pensi-tu chea metarà i piteri __ ? where think=you that=she $=$ put $_{\text {rut }}$ the vases
(19) Trevisan
a. A domanda sel pjantarà dove i pin she $=$ asks $\quad$ if $=$ he $=$ plant $_{\text {FUT }}$ where the pines 'She wonders where he'll plant the pines'
b. A domanda dove chel pjantarà $i$ pin
she $=$ asks where that $=$ he $=$ plant $_{\text {rut }}$ the pines
The examples in (19) display an interesting alternation in the form of the embedding complementiser, whose forms are boldfaced. Trevisan is a language that systematically violates so-called 'doubly-filled comp filter' (van Riemsdijk \& Williams 1986) in embedded questions, i.e. a fronted wh-element in an embedded environment must obligatorily be construed with the relevant complementiser. In constructions with a fronted wh-element, Trevisan makes use of a canonical that-complementiser, as in (19b). However, with wh-in situ, the embedding element that is employed actually takes the form of a semantically void if-complementiser, se. I shall call this element $\mathrm{se}_{\mathrm{wH}}$ to avoid confusion with the homophonous if-complementiser of yes/no questions; its morphosyntax is discussed in detail in Chapter 4. It should be noted that the movement of clause-internal wh-elements observed in matrix questions is also compulsory in embedded questions, as in (18) and (19).

Trevisan also has wh-in situ within environments known as 'islands' for extraction. Syntactic islands have been broadly investigated in Huang (1982), Kayne (1983), Longobardi (1988), Cinque (1990) and Rizzi (1990), among others, and
come in two different types: weak and strong. While extraction out of weak islands is generally easier than extraction out of strong islands, cross-linguistic differences exist with regard to the felicity of wh-in situ within these peculiar environments. If the right context is provided, Trevisan speakers can successfully licence wh-in situ in both strong and weak islands, as illustrated by the subject island in (20) and the wh-island in (21), respectively. In both cases, overt extraction out-of-island is at best slightly degraded:

## (20) Trevisan

Context: You work in a bookshop in a commercial street. Rumours say that some clients of the clothes shop down the street left without paying this morning. You overhear a colleague of yours discussing this with a friend. However, he's actually saying something about the grocery store next door, so you think he might have got the wrong information. You ask:
> a. I te gà dito che [ i clienti [ de chi ]] noi they $=y$ ou $=$ have said that the clients of who $\mathrm{NEG}=$ they $=$ gà pagà?
> have paid
> 'Who is $x$, such as $x$ is someone's client, and you were told that $x$ didn't pay?'
> b. * De chi i te gà dito che [i clienti [__ ]] noi of who they=you= have said that the clients $\mathrm{NEG}=$ they $=$ gà pagà? have paid

## (21) Trevisan

Context: Your husband keeps on forgetting things. Your daughter tells you that, earlier in the morning, she overheard him wondering whether the two of you had already bought something that she couldn't hear. You go see him and ask:
a. No tete ricordi [ se vemo comprà [ $\operatorname{coss} a$ ]]?
NEG you=REFL= remember if have ${ }_{1 \text { PP }}$ bought what 'What is $x$ such as you don't remember whether we bought $x$ ?'
b. 'Cossa no tete ricordi [ se vemo comprà [__ ]]? what NEG you=REFL= remember if have ${ }_{1 \text { pp }}$ bought

Predictably, strong islands resist extraction more than weak islands; however, in both cases the felicity of the question is assured if the wh-element is located within the island at Spell-Out. Island-contained wh-in situ is an important phenomenon that requires investigation, since the realisation of matrix subject-clitic inversion and the possibility of extraction from islands shows interesting patterns of variation, as I discuss in Chapter 4.
o.2.2 Problems, questions, and preliminary answers

Most published work on Romance wh-in situ is based on data from European French, either exclusively or comparatively. Some notable investigations on the topic include Kayne (1972), Obenauer (1994), Chang (1997), Munaro (1997) Sportiche (1998), Boeckx (1999), Bošković (2000), Kayne \& Pollock (2000), Starke (2001), Munaro et al. (2001), Cheng \& Rooryck (2002), Poletto \& Pollock (2004), Adli (2006), Pollock (2006), Mathieu (2009), Hamlaoui (2010), Roberts (2010), Baunaz (2011), Oiry (2011), Shlonsky (2012), and Déprez et al. (2013a). Despite the large body of literature on the phenomenon, an adequate empirical description and satisfactory theoretical analysis of French (and more generally Romance) wh-in situ is clearly still lacking. In fact, the existing works attribute conflicting syntactic, semantic and prosodic properties to wh-in situ: rather unsurprisingly, on the basis of this problematic data, researchers have proposed complex and mutually incompatible analytic machineries with major implications for the architecture of the grammar.

Though they are not the main focus of this book, the wh-in situ-related properties of French are still relevant to the discussion, since they have been very often compared to Northern Italian wh-in situ in the literature (principally though not exclusively in Poletto \& Pollock 2000; Munaro et al. 2001, and much related work). Here, only the syntactic dimension will be taken into account, and more specifically the properties that are relevant to the development of a theory of Northern Italian wh-in situ, such as:
a. The ways in which the French pattern is different from the patterns observed in other optional wh-in situ languages, particularly those of Northern Italy.
b. The reasons why French wh-in situ is banned in main questions in the presence of est-ce que, in constructions with subject-clitic inversion, and in indirect questions. Munaro et al. relied heavily on this pattern to argue in favour of an intimate link between the nature of subject-clitic inversion and the way wh-in situ is licensed; however, as correctly pointed out by Manzini and Savoia (2011) and as argued in Chapter 1 of this book, no direct link between the (un)availability of subject-clitic inversion and wh-in situ is observed in Northern Italian dialects.
c. The reasons behind the availability of wh-in situ in French and some Northern Italian dialects, but not in closely related languages like Standard Italian, as illustrated in (22):
(22) Standard Italian
${ }^{*}$ Hai visto chi?
have seen who 'Who did you see?'

Related to (c), and even more mysterious, is the availability of wh-in situ in some regional varieties of Italian, such as that spoken in the Veneto region, as shown in (23):

## (23) Venetan Italian

Hai visto chi ?
have seen who
How can the grammaticality of the non-standard example in (23) be accounted for? Which properties prevent the standard variety from licensing wh-elements clause-internally, as in (22)? An explanation might be found either in the (un) availability of a clause-internal focal projection, or in the intrinsic properties of wh-words themselves. However, the first possibility seems somewhat unlikely, given Belletti's (2004) proposed $v$ P-peripheral Foc in Standard Italian.

In addition to establishing the factors that allow or block wh-in situ in the aforementioned contexts, some of the broad questions that will be explored in this monograph are the following:
i. What is the status of an optional strategy? How can the optionality between two semantically-equivalent structures be explained in diachronic terms?
ii. How is the short movement of Trevisan clause-internal wh-elements achieved? What is its nature and how can it be accounted for? Which feature (if any) triggers it and at what point in the derivation does it take place?
iii. Let us assume the movement in (ii) is syntactic wh-movement. Under Chomsky's (1973) assumption that wh-movement is successive-cyclic and Rizzi's (2006) claim that an element that lands in a criterial position cannot be moved further, how is it possible for a moving wh-element to either stop tp-internally (resulting in apparent wh-in situ) or move further to the Left Periphery (total wh-fronting)? How is the alternation possible? Does total wh-fronting skip cyclicity? Or is Trevisan clause-internal movement not feature-driven?
iv. What role is played by $\mathrm{se}_{\mathrm{wH}}$ in Trevisan indirect wh-questions? Is it an instance of exceptional wh-doubling or something else?
v. How are the relevant interrogative features checked when wh-in situ is felicitously trapped inside an island, i.e. in the absence of detectable interrogative movement to the Left Periphery of the clause?

These are only some of the questions that will be addressed in the rest of this book. The varieties spoken in Northern Italy provide rich linguistic evidence: I shall argue that different varieties license wh-in situ in different ways and that the major analyses of wh-in situ in Northern Italian dialects (Munaro et al. 2001 and related works, Manzini \& Savoia 2005, 2011; Manzini 2014) have at best data-related weaknesses. In $\S 0.3$, I provide a brief summary of the main problems and claims addressed in this monograph, to facilitate a better understanding of what follows.

## o. 3 Central claims of the book

In this book I argue that the notion of syntactic optionality in the in situ/ex situ alternation can be dispensed with if we take the movement properties of wh-elements to be a by-product of the availability of two different lexical strategies to join them with (silent or phonetically-realised) Q(uestion)-particles: both QP-selection and Q-adjunction à la Cable (2010). To do so, I draw on published cross-linguistic data from the whole Northern Italian domain, as well as on the novel data from Trevisan that I present and discuss throughout. A concise summary of these data can be found in Chapter 1, where I argue that at least two different types of wh-in situ exist in the Northern Italian Romance domain.

From my discussion it will clearly emerge that although it could be argued that simple featural variations in bare wh-words can account for their ability to surface either sentence-initially or clause-internally, Northern Italian wh-doubling provides evidence in favour of treating wh-elements as composite structures à la Cable (2010). The Romance languages that have optional wh-in situ, I claim, are at different stages of an ongoing linguistic development towards generalised, unmoved wh-in situ.

According to Cable (2010), wh-fronting and wh-in situ languages share a very similar subjacent structure, in which the interpretation of wh-words is made possible by the presence of a (silent or phonetically-realised) Q-particle, which must move to the Left Periphery of the clause in time for interpretation. Accordingly, languages differ in the way the Q-particle attaches to wh-elements: either directly or to a larger structure that selects the wh-element, i.e. a wh-phrase (here, WhP). Compare the configurations in (24) and (25):
(24) Q-PROJECTION

...wh-word...
(25)

Q-ADJUNCTION


Wh-in situ languages crucially differ from wh-fronting languages in the way Q-particles project after they are integrated in the derivation: in the former, Q adjoins to XP and XP projects, as in (25), while in the latter Q merges with XP and projects a QP layer, as in (24). For Cable, the choice between Q-adjunction and Q-projection is made at the level of the individual language and used in the derivation of all questions of the given language. As a generalisation, we can say that languages vary in terms of two variables: the choice between Q-projection vs Q-adjunction, and the timing of Q-movement to C (which can happen either overtly or covertly). Optional in situ languages, I argue, derive their relatively free alternation between wh-fronting and wh-in situ from the exceptional availability of both strategies for joining the Q-particle to wh-elements in their evolving interrogative grammar.

Given these assumptions, I argue that Trevisan wh-fronting is a very ordinary instance of overt QP-fronting, made possible under Q-agreement, and driven by an EPP-feature in Rizzi's (1997) left-peripheral FocusP (which I call Focus ${ }_{\text {HIGH }}$ throughout). Similarly, adapting Cable's account, I claim that wh-in situ in this variety is a by-product of the availability of Q -adjunction. On the basis of the movement pattern of clause-internal wh-elements discussed in $\S 0.2$, whereby Trevisan wh-elements do not surface in their first-merge position but in a linear position higher than that occupied by the past participle, I argue that Cable's theory of wh-in situ should be implemented: while some languages check both [q] and [foc] in C, some others are able to check [foc] clause-internally, in the periphery of $v \mathrm{P}$. Whether the languages of the second type display low movement of wh-elements or not depends on the presence/absence of an EPP feature (or another movement-triggering tool) in $v$ P. In these languages, wh-in situ is therefore made possible under Q-agreement between the Q-adjoining wh-element and the head of Focus $_{\text {HIGH }}$, plus (overt or covert) Q-to-C attraction of the silent Q-particle triggered by the EPP. In languages like Trevisan, the interpretable [foc] feature is not located in C but in the clause-internal domain, whence their movement into the Spec of Belletti's (2004) $v$ P-peripheral focal projection, Foc (here, Foc ${ }_{\text {Low }}$ ). ${ }^{10}$

The movement analysis for Trevisan wh-in situ developed in this monograph, which I refer to as Wh-to-Foc, is justified both by the movement patterns of clause-internal wh-elements (which appear to target a linear position below the surface position of the past participle), and by the presence of clause-internally moved contrastive focus in Trevisan. I argue that the short movement under consideration is not proper wh-movement but rather focus-movement carried out under focus-agreement, along the lines of (26). C-checking then proceeds via the

[^5]Q-particle as in regular in situ languages where focus-movement of wh-elements is not present.
(26) FOCUS AGREEMENT + CLAUSE-INTERNAL FOCUS-MOVEMENT


The literature offers other morphosyntactic accounts of Northern Italian wh-in situ, which provide diametrically opposed explanations for the phenomenon. To the best of my knowledge, no account of Northern Italian wh-in situ as subject to focus-movement into Belletti's (2004) SpecFoc has ever been developed, with the sole exception of Manzini's (2014) non-empirically motivated argument in favour of movement into the periphery of $v \mathrm{P}$. In contrast, robust empirical evidence in support of focus-movement of clause-internal wh-elements exists for non-Romance varieties, and many authors have already discussed interrogative focus-movement to a low focal projection, be it Foc or the edge of $\nu \mathrm{P}$ (Kahnemuyipour 2001; Aboh 2006; Manetta 2010; Cheng \& Bayer 2017, a.o.). Similar claims have been put forward for Brazilian Portuguese (Kato 2003, 2013) and French (Belletti 2006), although the movement under investigation in these cases is taken to be proper wh-movement, not focus-movement.

The major weakness of the existing treatments of Northern Italian wh-in situ is that they try to account for the massive morphosyntactic variability observed by means of a single, unchanging derivation. As a consequence, and on the basis of the Trevisan data and of the newly-proposed analysis in terms of Wh-to-Foc, I establish a primitive typology of Northern Italian (and more generally Romance) wh-in
situ that crucially ranges over different linguistic types on the basis of a number of variables relevant to the licensing of clause-internal wh-elements: Q-projection vs Q-adjunction; presence of a [q;foc] featural bundle in C or scattering of the two features between C and $v \mathrm{P}$; presence or absence of clause-internal focus-movement; and setting of the interrogative movement parameter as overt or covert.

Along with these variables, cross-linguistic microvariations concerning, for example, the availability of wh-in situ in embedded questions and/or within islands for extraction will be linked to the presence or absence of either wh-doubling or of a special complementiser for embedded wh-in situ, and the height at which the Q-particle attaches to islands. Similarly, other minor variations in the distributional properties of wh-elements will, in turn, be explained in terms of the presence of special prosodic requirements, and of different stages of a seemingly universal linguistic evolution towards generalised, unmoved wh-in situ.

## Wh-in situ in Northern Italian dialects

Optional wh-in situ is a very widespread phenomenon in Northern Italian dialects. In these languages, wh-in situ alternates rather freely with wh-fronting. The different degrees to which this alternation applies are discussed in detail in what follows. Throughout, I use the term wh-in situ as a synonym of clause-internal, without really adopting a position on the structural placement of the wh-elements under consideration (first-merge vs derived position), unless otherwise stated.

In the Introduction, I mentioned that wh-in situ is a very productive questionformation strategy also in Contemporary Spoken French. ${ }^{11}$ However, it must be noted that in this language wh-in situ has a unique, puzzling feature: it is incompatible with subject-clitic inversion, as illustrated by the contrast in (1), and with the insertion of est-ce que, as in (2). These two interrogative strategies, which are perfectly acceptable in constructions with wh-fronting, are inconsistent with a clause-internal wh-element:
(1) Contemporary Spoken French
a. Qui as-tu rencontré __ ?
who have=you met
'Who did you meet?'
b. *As-tu rencontré qui?
have=you met who
(2) Contemporary Spoken French
a. Qui est-ce que tu as rencontré ___?
who est-ce que you have met
b. *Est-ce que tu as rencontré qui
est-ce que you have met who
Over the years, the peculiar interrogative grammar of French wh-in situ has been explained as either the result of syntactic properties or prosodic constraints (Aoun et al. 1981, Aoun 1986, Obenauer 1994, Boeckx 1999, Mathieu 1999, Munaro et al.

[^6]2001, Starke 2001, Cheng \& Rooryck 2002, Etxepare \& Uribe-Etxebarria 2005, Adli 2006, Baunaz 2011, Oiry 2011, a.o.). However, to date several serious descriptive inaccuracies remain in the study of wh-in situ in European French. To construct a reliable theoretical account of French wh-in situ, the distinction between Standard French and Contemporary Spoken French is crucial, only the latter being relevant to the study of French wh-in situ.

The alternations observed in (1) and (2) are not attested in the Northern Italian domain, where the realisation of subject-clitic inversion in root questions is orthogonal to the position occupied by the wh-element at Spell-Out (as correctly observed in Manzini \& Savoia 2011). This observation is crucial for the understanding of Northern Italian wh-in situ, and will hence be discussed in detail in the present chapter. The morphosyntax of Northern Italian wh-in situ is a fertile research field: indeed, the derivation of the phenomenon has been the subject of an intense 20-year debate, which I outline briefly in what follows and hope to conclude in the rest of the volume.

As mentioned in the Introduction, research into the syntax of wh-movement in Romance was initiated by Kayne (1972), on the basis of French data. Later, Kayne's (1994) 'antisymmetry', with its emphasis on strict binary branching (one complement and one Spec per head) and the ban on rightward movement, provided a very productive framework for the study of simple and complex interrogative inversion (Kayne \& Pollock 2000, 2012; Hulk \& Pollock, 2001; Pollock 2006 and references therein). Research into cross-linguistic variation in the syntax of interrogatives then received substantial impetus from Rizzi's (1996) paper. According to Rizzi, wh-movement is driven by a so-called 'Wh-Criterion', namely the formal requirement that a [+wh]-carrying wh-element ends up in a Spec-head relation with C, which is also specified as [+wh] in questions. The Criterion was revisited and refined in a recent development of the theory, Rizzi (2006). The most influential syntactic investigations of Northern Italian wh-in situ have been carried out within this framework, and adopt two diametrically opposed stances: clause-internal wh-words in Northern Italian dialects are either taken to be moved into a left-peripheral Spec (henceforth the 'remnant-IP movement hypothesis') or to stay in their first-merge position ('covert movement hypothesis'). A third theoretical explanation for Northern Italian wh-in situ, not too distant from the covert movement analysis, was developed in Munaro (1997): according to this analysis, clause-internal wh-elements are indeed unmoved in the dialects of Northern Italy, while all observed intervention effects can be traced back to the overt movement of an interrogative Operator which, from its IP-internal first-merge position, raises to the CP-layer to determine the scope of the wh-word, along the lines of (3):
(3) REAL WH-IN SITU + MOVEMENT OF OP $+_{\text {int }}$ INTO CP


To the best of my knowledge, Munaro's analysis outlined in (3) has remained almost unnoticed, quite possibly because the author later embraced the remnant-IP movement analysis. Nonetheless, as I shall claim in Chapter 5, this analysis constitutes an accidental precursor of Cable's (2010) theory that is adopted and implemented in this monograph.

Let us now move to the two most influential analyses of Northern Italian wh-in situ. Following Kayne's (1994) influential work, Munaro et al. (2001) and Poletto \& Pollock (2004) (and further related papers) have extended the remnant-movement approach to the syntax of interrogatives in French and Northern Italian dialects. This theory is based on Bellunese as described in Munaro (1999), and on linguistically-related Venetan and Lombard varieties; in these varieties, they claim, wh-interrogatives only license non-D-linked (= lexically restricted) wh-words clause-internally (and only in sentence-final position), and do so exclusively in root contexts, and never within syntactic islands. According to these studies, in the answer-seeking questions of Northern Italian dialects, clause-internal wh-words are instances of fake wh-in situ: these are assumed to undergo wh-movement into a left-peripheral Spec, which is masked in the phonetic string because further movements take place, which displace the whole remnant-IP to the CP of the clause. A very simplified derivation of a Bellunese question such as (4) is provided in (5):
(4) Bellunese (Poletto \& Pollock 2000: 118(5))

Ha-tu parecià che?
have=you prepared what
'What did you prepare?'
(5) BELLUNESE MOVED WH-IN SITU

Input: ${ }_{\text {IP }}$ tu ha parecià che $]$
a. First step: Wh-movement to a functional projection higher than IP (here, XP) ${ }^{\mathrm{XP}}{ }$ che $\mathrm{i}_{\mathrm{i}} \mathrm{X}^{\circ}{ }_{{ }_{\mathrm{IP}}}$ tu ha parecià $\qquad$ ]]
b. Second step: Movement of the remnant-IP to a higher functional projection (YP) $\left[\mathrm{YP}[\mathrm{IP} \text { tu ha parecià __i }]_{j} \mathrm{Y}^{\circ}\left[{ }_{\mathrm{XP}}\right.\right.$ che $\left.\left.\mathrm{X}^{\circ} ـ_{\mathrm{j}}\right]\right]$

The remnant-IP movement analysis came under strong criticism from Manzini \& Savoia (2005, 2011), both for theory-internal and data-related reasons. These authors, who based their discussion on Lombard data, claimed that Northern

Italian clause-internal wh-elements should be assumed to be unmoved from their first-merge position, i.e. covertly moved to the Left Periphery after Spell-Out, as in Chinese-like languages. However, as I shall argue extensively in Chapter 5, the data used to support the covert movement analysis are very different from those used by Munaro et al.: most Lombard dialects, in fact, do not display a D-linked/non-Dlinked asymmetry, fail to have a sentence-final requirement for clause-internal wh-elements (in Etxepare \& Uribe-Etxebarria's 2005 terms), and felicitously license wh-in situ not only in long construals and indirect wh-questions, but also within islands for extraction. On Manzini \& Savoia's understanding, the parameter between wh-in situ and wh-fronting in Northern Italian dialects is a very classical distinction between scope construal and overt scope (respectively), and the different distributions of clause-internal wh-elements observed in their varieties and those studied by Munaro et al. have their origins in the setting of very basic properties. In their account, in the context of micro-variation among closely-related varieties, it is in fact possible that some factors force wh-movement in embedded sentences in some grammars but not in others; similarly, they argue that differences in island sensitivity can be explained if these are assumed to be related not to conditions on movement operations but rather conditions on Logical Form interpretive construals. Interestingly, in a more recent development, Manzini (2014) very briefly suggested that Northern Italian wh-in situ might actually move from its first-merge position and target a TP-internal Spec. The projection in question is Foc, within Belletti's (2004) $v$ P-periphery, which has a structure along the lines of that shown in (6):
(6) PERIPHERY OF VP (as in Belletti 2004)

$$
\left[\left[_ { \mathrm { CP } } \ldots \left[_ { \mathrm { TP } } \ldots \left[_{\text {Topp }} \text { Top }\left[\left[_{\text {Focp }} \text { Foc }\left[\left[_{\text {TopP }} \text { Top } \ldots \mathrm{VP}\right]\right] נ\right]\right]\right.\right.\right.\right.
$$

In this book, I shall argue that there are at least two main problems with these existing analyses of Northern Italian wh-in situ: first, they are based on varieties that display completely contrasting behaviour in how they allow wh-in situ; and second, they aim to establish a unifying theory based on the legitimate yet idealistic desire to account for all cross-linguistic data by means of a unique, unchangeable derivation.

Approaches similar to that of Manzini (2014), where wh-in situ is argued to target a clause-internal focal projection, had already been proposed for some Romance languages (Kato 2013 for Brazilian Portuguese, Belletti 2006 for French) and for some non-Romance ones (Mahajan 1990 and Manetta 2010, 2011 for Bangla and Hindi/Urdu; Jayaseelan 1996 for Malayalam; Aboh 2006 for the Bantu language Aghem; Sinopoulou 2008 for Greek multiple wh-questions, Kahnemuyipour 2001 and Mirdamadi 2018 for Persian, a.o.). Interestingly, Cheng and Bayer (2017) claimed that wh-in situ in South Asian languages is also actually an instance of
overt movement to the left edge of $v p / v \mathrm{P}$. Their claim is that there is no evidence for wh-movement to the CP-domain in these languages, with the sole exception of Kashmiri, a V2-language. Consequently, they have argued that South Asian languages form a 'typologically interesting and significant linguistic type between full-moving and pure in situ languages' (p.21). More details on the status of wh-in situ in South Asian languages, along with concrete examples, are provided in Chapter 3 of this book. To the best of my knowledge, a TP-internal wh-movement of the South Asian sort has never been attested in Northern Italian dialects; however, as I shall argue throughout, short movement of clause-internal wh-elements is indeed found in Trevisan, the Venetan dialect presented in the Introduction.

To conclude, it should be noted that Northern Italian wh-in situ displays a peculiar property that makes it unique in the Romance domain, and beyond. Indeed, in several varieties, there exists not only the regular single wh-in situ type described so far (where only one wh-element appears clause-internally and no other wh-word or wh-operator is present in the structure), but also so-called 'wh-doubling', where a clause-internal wh-word is construed with a higher, left-peripheral wh-word or wh-operator (as widely discussed in Manzini \& Savoia 2005, 2011; Poletto \& Pollock 2000-2015; Manzini 2014, a.o.). Two instances of wh-doubling are provided in the examples in (7):
(7) Illasiano (Poletto \& Pollock 2009: 2(1))
a. Sa-lo fat che?
what=has=he done what
'What did he do?'
b. Ndo e-lo ndat endoe?
where is=he gone where
'Where did he go?'
Wh-doubling configurations are not instances of multiple wh-questions: the two wh-words are in fact interpreted as a unit, hence the semantics of the question in which they appear is merely that of a regular single wh-question. Depending on the variety under investigation, wh-doubling can be a root-only phenomenon and/or a non-root phenomenon, and it can either be compulsory or can alternate with single (= non-doubling) wh-in situ. The extent to which it applies to different wh-words is subject to significant variation, as I shall show in $\S 1.2$. Wh-doubling, as I claim in Chapter 2, provides indirect supporting evidence for my decision to posit the existence of Q-particles in the Romance languages as well.

In this chapter, I provide an overview of the literature on the in situ-ex situ alternation in Northern Italian dialects, paying special attention to data from Venetan (as described in Benincà \& Vanelli 1982; Poletto \& Vanelli 1993; Munaro 1995, 1997; Munaro et al. 2001; Obenauer 2004, 2006; Benincà \& Poletto 2004; Manzini
\& Savoia 2005; Munaro 2005; Poletto \& Pollock 2000-2015; Garzonio 2016; Bonan 2017b, 2018, a.o.), Lombard (Manzini \& Savoia 2005, 2011; Manzini 2014; Poletto \& Pollock 2000, 2005, a.o.), and Southern Swiss dialects (Lurà 1987; Poletto \& Pollock 2009, 2015, a.o.). The varieties described and discussed in this chapter are only a sample of the numerous Romance dialects spoken in Northern Italy. The selection of dialects for investigation was intended to cover all patterns of distribution and/ or co-occurrence of single wh-in situ, wh-doubling, and subject-clitic inversion as thoroughly as possible. My principal aim here is to support my claim that the existing theories of Northern Italian wh-in situ are not powerful enough to account for the whole range of attested morphosyntactic variation in the alternation between wh-fronting and wh-in situ. In addition, I shall use the empirical data of this chapter to argue that a correct account of the morphosyntax of Northern Italian wh-in situ requires the division of the varieties into at least two types.

Those familiar with the Northern Italian data could technically skip this chapter. However, since some valuable comparisons between Trevisan and other Northern Italian dialects are made here, which should facilitate understanding of later chapters, the reader is invited to take the time to consider the Northern Italian data from the perspective adopted here.

## Organisation of this chapter

§1.1 provides an overview of the Venetan, Lombard and Southern Swiss Northern Italian dialects which allow for matrix ( $\$ 1.1 .1$ ) and embedded ( $\$ 1.1 .2$ ) optional wh-in situ of the single type to varying extents. $\$ 1.2$ deals with all the different types of wh-doubling attested in the literature which, as I shall argue, follow strict behavioural patterns. In $\$ 1.3$, I shall first discuss the distribution of subject-clitic inversion in Northern Italian dialects, then argue that at least two types of Northern Italian varieties can be identified on the basis of the distribution of clause-internal wh-elements in matrix and embedded clauses and, where relevant, within syntactic islands. This distinction will lay the groundwork for my discussion in Chapter 5, where I outline a primitive typology of Romance and non-Romance wh-in situ.

### 1.1 Single wh-in situ

The phenomenon referred to as optional wh-in situ has been attested to varying degrees in numerous Northern Italian dialects, quite extensively in matrix contexts ( $\$ 1.1 .1$ ) and less frequently in embedded questions ( $\$ 1.1 .2$ ). Remember that I use the term embedded to refer to both long construals and indirect wh-questions. In

Chapters 2 and 3 of this monograph, I shall actually argue against the presence of syntactic optionality in the in situ-ex situ alternation. However, for descriptive ease I use the traditional term 'optional wh-in situ' to refer to the relatively free variation between wh-elements in cause-initial or clause-internal position in answer-seeking questions.

### 1.1.1 Wh-in situ in matrix questions

In Venetan dialects such as Feltrino (Benincà \& Vanelli 1982), Pagotto ${ }^{12}$ (Munaro 1995, 1997; Munaro et al. 2001; Obenauer 2004; Manzini \& Savoia 2005; Munaro 2005; Poletto \& Pollock 2000-2015), Zoldoaltino (Manzini \& Savoia 2005) and Cortese (Manzini \& Savoia 2005), among others, wh-in situ has been argued to alternate to different extents with wh-fronting in genuine direct questions. The same optional 'in situ-ex situ alternation' has been attested in Lombard dialects such as Monnese (Benincà \& Poletto 2004; Poletto \& Pollock 2000, 2005, 2015), Passiranese (Manzini \& Savoia 2005), Grumellese (Manzini \& Savoia 2005), Borghese (Manzini \& Savoia 2005) and Strozzense (Manzini \& Savoia 2005; Manzini 2014), among others. A number of Lombard dialects spoken in Southern Switzerland also display optional wh-in situ. Among these is Mendrisiotto (Lurà 1987; Poletto \& Pollock 2009), where wh-in situ has actually been argued to be associated to an interpretation of surprise or disapproval, in contrast to wh-fronting, which constitutes the genuine, unmarked option, as in (8): ${ }^{13}$
(8) Mendrisiotto (Poletto \& Pollock 2009: 3-4(7-6))
a. Cusè ta mangiat?
what you eat
'What are you eating?'
b. T'è fai cusè?
you=have done what
'What (on Earth) have you done?'
Note that wh-words do not necessarily have the same phonological form when they appear clause-initially or clause-internally, as illustrated by the alternation in (9)
12. Spoken in Alpago, a comune in the Province of Belluno. It is the variety that has been simply referred to as 'Bellunese' in much work on Venetan dialects, starting from Munaro (1995).
13. Here, pragmatic and discourse-related notions will be excluded from the syntactic discussion, along with the quantitative distribution of clause-internal wh-elements. In fact, what I am interested in is the ability of the grammars under consideration to license wh-in situ, and the syntactic facts with which this phenomenon co-occurs: as long as wh-in situ is grammatical in non-echo questions, then it belongs in my discussion.
between fronted ngo and clause-internal ngont ('where'). This phenomenon, quite widespread in Northern Italian dialects, is rarely observed elsewhere in Romance.
(9) Monnese (Poletto \& Pollock 2005: 136(2))
a. Ngo fet majà?
where do=you eat
'Where do you eat?'
b. Fet majà ngont?
do=you eat where
To generalise, when Northern Italian dialects allow for both wh-fronting and single wh-in situ, there are two options: either the clause-internal wh-word and its fronted counterpart are phonologically identical, or two different forms exist. I shall argue that this generalisation also holds in embedded contexts; however, the availability of wh-in situ in embedded questions is subject to substantial variation, which I explore in $\$ 1.1 .2$. The varieties that allow for genuine matrix wh-in situ only in the presence of wh-doubling (including Civate and Olgiate, Manzini \& Savoia 2005 and Manzini 2014; and Mendrisiotto, Lurà 1987) shall be discussed in $\S 1.2$.

### 1.1.2 Wh-in situ in embedded questions

In some Northern Italian varieties, wh-in situ has been claimed to be exclusively a root phenomenon. Among these Northern Italian dialects are the variety of Bellunese spoken in Tignes d'Alpago, Mendrisiotto, the variety of Bresciano spoken in Rovato (Poletto \& Vanelli 1993), and Pagotto (Munaro 1995; Munaro et al. 2001). In Northern Italian dialects, the availability of matrix single wh-in situ is a necessary but not sufficient condition for a variety to be able to license single wh-in situ in long-distance and in indirect wh-questions. Nonetheless, there are varieties that license clause-internal wh-words in non-root environments, as I shall argue throughout this section. Since wh-in situ does not have the same distribution in long-distance questions and in indirect wh-questions, a distinction will be drawn between the two. Here, only data from the varieties that license single wh-in situ are presented.

### 1.1.2.1 Long-distance construals

In the Introduction I argued that in long-distance construals, Trevisan wh-elements surface either in the clause-internal position or in the higher Left Periphery, as in (10). Unsurprisingly, since clause-typing takes place in the matrix C, wh-elements cannot surface in the embedded Left Periphery, as in (10c):
(10) Trevisan
a. Chi pensi-tu [ che vegnarà catarne]? who think=you that come ${ }_{\text {FUT }}$ see.us 'Who do you think will visit us?'
b. Pensi-tu [ che vegnarà catarne chi]? think=you that come ${ }_{\mathrm{FUT}}$ see.us who
c. *Pensi-tu [ chi che vegnarà catarne]? think=you who that come ${ }_{\text {FUT }}$ see.us

Wh-in situ in long-distance questions is also attested in Venetan varieties of the Belluno area, namely Cortese and Zoldoaltino, and in Lombard varieties spoken in the Province of Bergamo, such as Grumellese, Borghese, Colognese, Sanrocchese and Strozzense (Manzini \& Savoia 2005). In Trevisan, the non-realisation of the that-complementizer che systematically gives rise to ungrammaticality, as in (11):
(11) Trevisan
a. Cossa pensi-tu *(che) i voje magnar?
what think=you that they $_{M}=$ want $_{\text {SUBJ }}$ eat
'What do you think they want to eat?'
b. Pensi-tu *(che) i voje magnar cossa?
think=you that the $_{M}=$ want $_{\text {sUBJ }}$ eat what
The availability of optional omission of the embedded complementizer in longdistance questions has only been attested in Strozzense (Manzini \& Savoia 2005). An example in provided in (12): ${ }^{14}$
(12) Strozzense (adapted from Manzini \& Savoia 2005: 591(155))
'penset (k) el 'faye ko'ze?
think $_{2 \text { ps }}$ (that) he does what 'What do you think he is doing?'

In the other varieties mentioned above, all occurrences of long-distance construals display an overt complementiser. In the absence of positive evidence that omission of the embedded complementiser is permitted, I shall just assume that most Northern Italian varieties other than Strozzense require the embedded complementiser to be realised, as Trevisan does.

[^7]
### 1.1.2.2 Wh-in situ in indirect questions

Single wh-in situ in indirect questions is somewhat rare. There are also two respects in which varieties differ in constructions with indirect wh-in situ: the realisation and the form of the embedded complementiser. The first of properties relates to the possible extraordinary absence of an embedded complementiser, which is only attested in Colognese (Manzini \& Savoia 2005). Examples are given in (13):
(13) Colognese (Manzini \& Savoia 2005: 592(156))
a. do'mande-ga 1 a 'fartf ko'he
ask-him he has done what
'Ask him what he did'
b. 'øre ha'i l e n'dartf indo's
want $_{\text {lps }}$ know he is gone where
'I want to know where he went'
The Colognese examples in (13) are the only cases of indirect wh-in situ under no complementiser attested in the literature on Northern Italian dialects. ${ }^{15}$ The extraordinary lack of an embedded complementiser in these constructions actually raises questions about their plausible analysis as reported speech.

The second respect in which Northern Italian indirect questions differ is the possible presence of a specialised complementiser for wh-in situ, different from that used in constructions with wh-fronting. As mentioned in the Introduction, Trevisan has a specialised semantically-vacuous if-complementiser (se) which obligatorily introduces indirect wh-questions when the wh-element surfaces clause-internally, as in (14):
(14) Trevisan
a. Me domando [ se te gà magnà cossa ] REFL ask ${ }_{1 \text { ps }} \quad$ if= you= have eaten what 'I wonder what you ate'
b. A se domanda [ se l vegnarà cuando] she $=$ REFL asks $\quad$ if $=$ he $=$ come $_{\text {FUT }}$ when 'She wonders when he's going to come'

The complementiser in (14), which I call $\mathrm{se}_{\mathrm{wH}}$ to avoid confusion with the homophonous if-complementiser found in indirect yes/no questions, does not give rise to a yes/no interpretation: indeed, it fails to add anything to the semantics of the indirect questions in which it appears. As a consequence, a sentence like (14a) does not mean 'what is $x$ such that I wonder whether you ate $x$ ', but simply 'I wonder

[^8]what is $x$ such that you ate $x^{\prime} . \mathrm{Se}_{\mathrm{wH}}$ is not at the disposal of all speakers of Trevisan; however, only those who have it are able to license wh-in situ in these special environments. To the best of my knowledge, the presence of a complementiser equivalent to $\mathrm{se}_{\mathrm{wH}}$ has never previously been attested in Northern Italian dialects, but it has been briefly discussed for other Romance languages such as European Portuguese (Cheng \& Rooryck 2002), Brazilian Portuguese (Kato 2013) and Belgian French (Boeckx et al. 2000), as I discuss in Chapter 5.

It should be noted that in languages such as Trevisan, when the wh-element is moved to the embedded Left Periphery, the presence of $\mathrm{se}_{\mathrm{wH}}$ is ruled out and a that-complementiser, che, must be used instead, as in (15):
(15) Trevisan
a. ${ }^{*} \mathrm{Me}$ domando [ cossa se te gà magnà ] REFL ask ${ }_{\text {lps }} \quad$ what if= you= have eaten 'I wonder what you ate'
b. Me domando [ cossa che te gà magnà ] REFL ask ${ }_{\text {lps }} \quad$ what that $=y o u=$ have eaten

In non-doubling configurations where the wh-word is moved to the embedded Left Periphery, the presence of a similar that-complementiser in two Lombard varieties, Civate and Strozzense, is attested in Manzini \& Savoia (2005). In these same varieties, interesting cases are attested of embedded wh-doubling where the higher wh-item resembles Trevisan se ${ }_{\mathrm{wH}}$, as in (16) and (17):
(16) Civate (adapted from Manzini \& Savoia 2005: 593(156))
a. al so 'mia se 'fa ku'ze
it know $_{\text {lps }}$ NEG se do what
'I don't know what to do'
b. di-m se te 'fe ku'ze tell-me se you do what 'Tell me what you're doing / you do’
(17) Strozzense (adapted from Manzini \& Savoia 2005: 593(156))
a. 'so 'mia se por'ta-t (ko'ze) know $_{\text {lps }}$ NEG se bring-you what 'I don't know what to bring you'
b. 'so 'mia se man'dja ko'ze know $_{\text {lps }}$ NEG se eat what 'I don't know what to eat'

No evidence exists regarding the possibility of doubling wh-words other than direct objects using the se in (16) and (17). It is therefore difficult to understand whether the Civate examples (along with similar se-doubling configurations in Olgiate and Strozzense discussed in Manzini 2014) are instances of se ${ }_{\mathrm{wH}}$ or actual wh-doubling configurations with se as the higher of the two what-words. However, the Strozzense case in (17a), where the lower wh-item is optional, suggests that at least in this variety $s e$ is a genuine doubling wh-item.

Nonetheless, the very existence of these structures raises questions regarding:
i. the reasons why some languages have a $\mathrm{se}_{\mathrm{wH}}$-like complementiser, while others do not;
ii. the very nature of $\mathrm{se}_{\mathrm{wH}}$ : is this an instance of embedded wh-doubling (see $\$ 1.2$ ), a real complementiser, or an element of different nature?;
iii. the reasons why in some varieties se only appears construed with what-words.

In Chapter 4, I shall argue that the answers to the questions in (i)-(iii) follow straightforwardly from the analysis that I provide for Trevisan wh-in situ. To sum up, single wh-in situ in indirect questions is only attested in Northern Italian dialects in Colognese and Trevisan: in the absence of an overt complementiser in the former, and under se $\mathrm{wH}_{\mathrm{H}}$ in the latter. Some varieties have a $\mathrm{se}_{\mathrm{wH}}$-like element which has to date been treated as an instance of wh-doubling. In contrast, embedded wh-fronting is never construed with $\mathrm{se}_{\mathrm{wH}}$ but with a that-complementiser, which is also attested in varieties that lack wh-in situ in indirect questions.

### 1.2 Different patterns of wh-doubling

The distribution of wh-doubling configurations and their co-existence with single wh-in situ display multiple different patterns. This section provides an overview of all possible matrix and embedded wh-doubling configurations attested in Northern Italian dialects. I shall divide the configurations into three categories based on the nature of the doubling elements involved, building on Poletto \& Pollock (20092015), as in (18):

## DOUBLING CONFIGURATIONS

a. Type A doubling: Clitic wh-pronoun \& wh-strong pronoun

Sa eto dito che?
what have=you said what
'What did you say?'
(Illasiano, adapted from Poletto \& Pollock 2015: 146(26))
b. Type B doubling: Weak wh-pronoun \& tonic wh-pronoun Cusa t'è fai cusè? what you'have done what 'What have you done?'
(Mendrisiotto, adapted from Poletto \& Pollock 2015: 146(28))
c. Type C doubling: Invariant wh-operator \& wh-pronoun

Che fèt dàjel a chi?
who do-you give=it to whom
'To whom will you give it?'
(Mendrisiotto, adapted from Poletto \& Pollock 2015: 147(29))
According to Poletto and Pollock (2015), Type A doubling is restricted to the counterparts of what, who, when and how and is never attested with D-linked wh-elements. Type B doubling is restricted to the same subset of wh-elements as Type A, the only difference being that Type B excludes subject-clitic inversion altogether, even in the dialects where subject-clitic inversion is otherwise obligatory. Finally, Type C doubling resembles German and Dutch partial wh-movement, where the higher invariable what-word doubles a lower one, which takes various shapes and functions. In Poletto \& Pollock (2015) and much related work, no embedded wh-in situ is attested, be it single or doubling. However, Manzini \& Savoia $(2005,2011)$ provide extensive evidence of the presence of embedded wh-in situ of both types in Lombard.

Here, to avoid the debate about the legitimacy of a tripartite division of pronominal forms à la Cardinaletti \& Starke (1999), and more precisely regarding the existence of so-called weak pronouns, I call the doubling element of the second paradigm a non-clitic wh-pronoun, a term intended to cover all elements that are neither wh-clitics nor invariable operators.

### 1.2.1 Configuration A: Fronted clitic wh-pronoun

The first type of wh-doubling configuration found in Northern Italian dialects involves a clause-initial wh-clitic that doubles a clause-internal non-clitic wh-word. Doubling configurations of this type have been attested in Venetan, Lombard and Southern Swiss Italian dialects.

### 1.2.1.1 Matrix wh-questions

As a general rule, wh-doubling configurations are not as widespread in the Venetan region as they are in Lombard or Southern Swiss varieties. For instance, Type A wh-doubling in matrix questions has been attested only in Illasiano which only licenses wh-in situ in doubling configurations (Poletto \& Pollock 2004).

The situation is radically different when it comes to Lombard varieties, where wh-doubling is very productive both in matrix and in embedded contexts. In matrix questions, Type A doubling is attested in Monnese (Poletto \& Pollock 20002015), Strozzense, Civate and Intelvino (Manzini \& Savoia 2005). An example from Monnese is provided in (19):
(19) Monnese (Poletto \& Pollock 2004: 284(2))
a. Ch'et fat què?
what'have=you done what
'What have you done?'
b. Ngo fet majà ngont?
where do=you eat where 'Where do you eat?'

While only Type A wh-doubling is attested in Monnese, in all other varieties this doubling strategy co-exists with Type B doubling. As I shall argue throughout this section, the cross-linguistic availability of more than one type of wh-doubling is in fact a fairly widespread phenomenon.

Among Southern Swiss Northern Italian varieties, wh-in situ in Type A wh-doubling has been attested in Mendrisiotto (Poletto \& Pollock 2009), where it co-exists with Type B (\$1.2.2) and Type C doubling (\$1.2.3), but also with single wh-in situ (§1.1.1).

### 1.2.1.2 Embedded wh-questions

Type A wh-doubling has been observed in embedded contexts both in Venetan (Poletto \& Pollock 2005) and in Lombard varieties (Poletto \& Pollock 2005; Manzini \& Savoia 2005, 2011; Manzini 2014). Its availability, however, is very limited, especially in Venetan. Indeed, in long-distance wh-questions, Type A wh-doubling was only observed in two varieties by Manzini \& Savoia (2005): Borghese, where it is optional and only attested with $k i$ ('who'), as illustrated in (20a), and Sanrocchese, where it appears limited to ndo ('where'), as in (20b):
(20) a. Borghese (Manzini \& Savoia 2005: 591(155))
(ki) 'penset 'ke l 'vene ki?
who think $\mathrm{k}_{\text {ps }}$ that he comes who
'Who do you think will come?'
b. Sanrocchese
ndo 'kreðct ke 'aych n'doe?
where think $2_{2 \text { ps }}$ that $\mathrm{go}_{1 \mathrm{ps}}$ where
'Where do you think I'm going?'

In indirect questions, Type A wh-doubling is only observed in the Venetan area in Illasiano (Poletto \& Pollock 2005). In the Lombard area, Type A wh-doubling is observed in Passiranese with the wh-word ke ('what'), but also in Civate and in Strozzense (Manzini \& Savoia 2005). In (21), I provide an example from Strozzense, where Type A wh-doubling co-exists with Type B in indirect questions (\$1.2.2):
(21) Strozzense (Manzini \& Savoia 2005: 593(156))
so 'mia se por'ta-t ko'ze know $_{\text {lps }}$ NEG what bring=you what 'I don't know what to bring you'

Type A wh-doubling is thus rare in embedded contexts and, with the exception of some indirect clefts found in Passiranese (which are not relevant to the present discussion), it is never found in constructions with subject-clitic inversion nor with an overt embedded complementiser. Cases of wh-doubling similar to Type A are in fact attested in Monnese (Poletto \& Pollock 2005). However, in this variety the high doubling element looks more like a demonstrative and is followed by an overt complementiser, as in (22), as it would be in the corresponding French structure given in (23):
(22) Monnese (adapted from Poletto \& Pollock 2005: 147(37))

So mia col che l'a fat què
know $_{\text {lps }}$ NEG DEM that he=has done what
'I don't know what he did'
(23) French (adapted from Poletto \& Pollock 2005: 147(37))

Je ne sais pas ce qu'il a fait
I ne know neg dem that=he has done
'I don't know what he did'
Because of their structural deviation from the usual model described throughout this section, the Monnese data are not relevant to the present discussion.

### 1.2.2 Configuration B: Fronted non-clitic wh-pronoun

The second type of wh-doubling configuration attested in Northern Italian dialects involves a clause-internal wh-element that is doubled by a clause-initial wh-word that is neither a wh-clitic nor an invariable operator.

### 1.2.2.1 Matrix wh-questions

As stated in $\$ 1.2 .1$, wh-doubling is not a very widespread phenomenon in Venetan. In matrix questions, Type B wh-doubling has only been attested in Pagotto (Munaro 1997; Munaro \& Obenauer 1999; Poletto \& Pollock 2000), where it is limited to
$\operatorname{cossa}$ ('what') ${ }^{16}$, and exists alongside single wh-in situ, as discussed in section §1.1.1. Again, the situation is different in Lombard varieties, where Type B wh-doubling is attested as the only form of doubling in Grumellese and Sanrocchese, while it co-exists with Type A in Strozzense, Civate and (Manzini \& Savoia 2005). This is shown in (24):
(24) Sanrocchese (Manzini \& Savoia 2005: 588(154))
a. koha ma 'portet ko'he?
what to.me bring ${ }_{2 p s}$ what
'What are you bringing me?'
b. indo 'et indo' $\varepsilon$ ?
where $\mathrm{go}_{2 \mathrm{ps}}$ where
'Where are you going?'
In Southern Swiss varieties, Type B matrix wh-doubling is attested in Mendrisiotto (Lurà 1987; Poletto \& Pollock 2009-2015), where it co-exists with Type A and with single wh-in situ, as argued in $\$ 1.2 .1$, but also with Type $C$ wh-doubling ( $\$ 1.2 .3$ ).

### 1.2.2.2 Embedded wh-questions

In long-distance questions, Type B wh-doubling is only attested with non-clitic what-words, and only in Sanrocchese and Strozzense (Manzini \& Savoia 2005). Rather surprisingly, the embedded complementiser can be omitted in Strozzense, as in (25): ${ }^{17}$
(25) Strozzense (Manzini \& Savoia 2005: 591(155))
'koza 'penset (k) el 'faye ko'ze?
what think 2ps that he do $_{\text {SUBJ }}$ what
'What do you think he's doing / he does?'
Type B wh-doubling appears more productive in indirect wh-questions. In the Venetan area, it is only observed in Illasiano (Poletto \& Pollock 2005), while in Lombardy it is attested in Grumellese, Borghese, Sanrocchese, Strozzense and Civate (Manzini \& Savoia 2005), mostly with the counterparts of what and when, but also with how in Strozzense, as in (26):
16. Munaro and Obenauer (1999) argue that wh-doubling in Pagotto actually gives rise to special questions. However, given that these are answer-seeking wh-questions with regular interrogative syntax, I do include them in the discussion.
17. A valid question at this point is whether these are real instances of indirect questions or simply of reported speech. I am unable to provide an answer here, and hence shall leave these very marginal occurrences out of the discussion.
(26) Strozzense (Manzini \& Savoia 2005: 592-3(156))
a. so 'mia 'kome i fa ko'me know $_{\text {lps }}$ NEG how they do how 'I don't how they do (what they're doing)'
b. me se do'mande 'koza i 'fa ko'ze me they ask what they do what 'I'm asked what they're doing / they do'

### 1.2.3 Configuration C: Fronted invariable wh-operator

In the third wh-doubling configuration found in Northern Italian dialects, a clause-initial invariable wh-word/operator doubles a clause-internal wh-word. This is not attested in Venetan, nor in embedded contexts in any variety.

### 1.2.3.1 Matrix wh-questions

The two Lombard varieties which display Type C wh-doubling in matrix questions, Passiranese and Olgiate (Manzini \& Savoia 2005), have it as their only wh-doubling strategy. In the former, the doubling element is $k e$, as in (27), while in the latter it is $s e$, as in (28):
(27) Passiranese (Manzini \& Savoia 2005: 190(154))
a. ke ma 'portet ki?
ke to.me bring ${ }_{2 p s}$ what
'What are you bringing to me?'
b. ke ni:-f en'do $\varepsilon$ 'oter?
ke come=you where you
'You, where are you going?'
(28) Olgiate (Manzini \& Savoia 2005: 190(154))
a. se 'fe:t ku'z ?
se $\mathrm{do}_{2 \text { ps }}$ what
'What are you doing?'
b. se la 'fŋy kuy ku'ze 'lu:r?
se it $\mathrm{do}_{3 \text { pp }}$ with what them
'They, what to they do it with?'
Of the Southern Swiss varieties, Mendrisiotto has Type C wh-doubling (Poletto \& Pollock 2009, 2015), along with single wh-in situ and Type A and B wh-doubling (as in $\$ 1.2 .1$ and $\S 1.2 .2$ ). In this variety, the doubling uses either che, as in (29a), or cosa, as in (29b):
(29) Mendrisiotto (Poletto \& Pollock 2015: 147(29, 31))
a. Che fèt dàjel a chi?
what do=you give.it to who
'[To] whom will you give it?'
b. Cosal pesa quanto, l'to sac?
what it weights how.much the'your bag
'How much does your bag weight?'
Of all the Northern Italian varieties discussed in this section, Mendrisiotto is the only one to have all three types of wh-doubling configurations.

### 1.2.4 Regularities in the distribution of wh-doubling

The patterns of distribution of wh-doubling and subject-clitic inversion in matrix and embedded contexts observed so far are summarised in Tables 1.1 to 1.4. Since, as previously argued, the distribution of wh-in situ in long-distance questions is strikingly different from its availability in indirect questions, I discuss the two separately. For each variety, I list all fronted doubling wh-elements attested in the literature I am aware of, and indicate the status of subject-clitic inversion (SClI). NA, 'non attested', means that a construction has not been observed in the literature cited here; the symbol $x$ is used when evidence exists for the unavailability of a construction.

As a generalisation, wh-doubling is restricted to theta-arguments and to the wh-adverbs where and how in matrix questions. Northern Italian dialects show one or two forms of wh-doubling, with the sole exception of Mendrisiotto, which has all three configurations. As argued in Poletto \& Pollock (2015), no Northern Italian dialect has a generalised doubling strategy valid for all wh-words, nor a combination of the three types that is powerful enough to allow stranding of any wh-word.

The patterns of wh-doubling observed in Northern Italian matrix clauses are illustrated in Tables 1.1 and 1.2.

According to Poletto and Pollock (2015), Type A wh-doubling is restricted to a limited subset of wh-words: what, who, where and how, as discussed in $\$ 1.2 .1$ and summarised in Tables 1.1-2. Type B wh-doubling is realised with the same wh-words as Type A, and is claimed to be incompatible with subject-clitic inversion, 'even when subject-clitic inversion is otherwise active in the dialect' (p. 147). Finally, in Type C the operator is systematically a what-word which doubles different types of clause-internal wh-elements. However, Poletto and Pollock's (2015) claim that Type B wh-doubling is never construed with subject-clitic inversion is invalidated by the Strozzense and Intelvino examples in (30) and (31), where non-clitic

Table 1.1 Wh-doubling patterns: Matrix questions (i)

| Type | SCII | Venetan |  | Lombard |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Illasi | Pagotto | Monnese | Strozzense | Civate | Intelvino |
| A | YES | s 'what' ndo 'where' ci 'who' | NA | ch 'what' ngo 'where' | ki 'who' ndo 'where' | $x$ | sa 'what' kus 'what' |
|  | NO | $x$ | NA | $x$ | $x$ | se 'what' me 'how' | $x$ |
| B | YES | NA | cossa <br> 'what' | NA | $x$ | $x$ | indu 'where' kuma 'how' |
|  | NO | NA | $x$ | NA | koza 'what' kome 'how' | inde <br> 'where' | $x$ |
| C | YES | NA | NA | NA | NA | NA | NA |
|  | NO | NA | NA | NA | NA | NA | NA |

Table 1.2 Wh-doubling patterns: Matrix questions (ii)

| Type | SCII | Lombard |  |  |  | Southern Swiss |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Grumellese | Sanrocchese | Passiranese | Olgiate | Mendrisiotto |
| A | YES | NA | NA | NA | NA | $x$ |
|  | NO | NA | NA | NA | NA | sa/se 'what' me 'why' |
| B | YES | $x$ | koha 'what' indo 'where' kome 'how' | NA | NA | $x$ |
|  | NO | koha 'what' | $x$ | NA | NA | cusa 'what' cuma 'how' indua 'where' |
| C | YES | NA | NA | ke 'what' | $x$ | $x$ |
|  | NO | NA | NA | $x$ | se 'what' | che 'what' cosa 'what' |

doubling elements are construed with clause-internal wh-words in the presence of subject-clitic inversion:
(30) Strozzense (Manzini \& Savoia 2005: 589 (154))
a. koza me 'port-el ko'ze?
what to.me bring=he what
'What is he bringing me?'
b. kome fi:-f ko'me?
how do=you how
'How do you do (this)?'
(31) Intelvino (Manzini \& Savoia 2005: 590 (154))
a. in'du $\varepsilon$-l 'nai ndu' ?
where is=he gone where
'Where did he go?'
b. 'kuma l a-l 'fai ku'me?
how it has=he done how
'How did he do it?'

The situation is significantly different in embedded environments. All instances of wh-doubling observed in long-distance questions are given in Table 1.3. As argued in $\S 1.1$, the embedded complementiser is systematically realised in Northern Italian dialects, except in Strozzense where it is optional.

Table 1.3 Wh-doubling patterns: Long-distance questions

| Type | SCII | Lombard |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Strozzense | Grumellese | Sanrocchese | Borghese |
| A | YES | NA | NA | $\boldsymbol{x}$ | NA |
|  | NO | NA | NA | ndo 'where' + ke | NA |
| B | YES | $\boldsymbol{x}$ | $\boldsymbol{x}$ | $\boldsymbol{x}$ | $\boldsymbol{x}$ |
|  | NO | koza 'what' $(+\mathrm{ke})$ | koha 'what' + ke | koha 'what' + ke | ki 'who' + ke |
| C | YES | NA | NA | NA | NA |
|  | NO | NA | NA | NA | NA |

The patterns observed in indirect wh-questions are given in Table 1.4. As in longdistance questions, wh-doubling never co-occurs with subject-clitic inversion here. This is unsurprising, since the absence of subject inversion in embedded questions is a (virtually) universal property of human language. Doubling is also not compatible with an overt complementiser in the embedded Left Periphery. As previously observed in Poletto \& Pollock (2005), this is also true in the varieties that systematically violate the 'doubly-filled COMP filter' (van Riemsdijk \& Williams 1986), i.e. where the embedded complementiser has a compulsory phonetically-realised form when single wh-movement to the embedded Left Periphery takes place. The omission of the that-complementizer with wh-doubling is theoretically relevant, and will play an important role in the discussion of Trevisan $\mathrm{se}_{\mathrm{wH}}$ in Chapter 4.

To sum up, in the two first sections of this chapter, I have presented the distribution of root and embedded wh-in situ in Northern Italian dialects, drawing a distinction between two types: single wh-in situ (\$1.1), and doubling wh-in situ ( $\$ 1.2$ ). I have argued that the phenomenon of root wh-in situ is widespread across the whole Northern Italian area, while embedded wh-in situ is observed almost exclusively in Lombard varieties, where wh-doubling is the most productive. What

Table 1.4 Wh-doubling patterns: Indirect questions

| Type | SCII | Lombard |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Civate | Grumellese | Sanrocchese | Passiranese | Borghese | Strozzense |
| A | YES | $x$ | NA | NA | k 'what' + ke | NA | NA |
|  | NO | se 'what' m 'how' | NA | NA | $x$ | NA | NA |
| B | YES | $x$ | $x$ | $x$ | NA | $x$ | $x$ |
|  | NO | in'de <br> 'where' | koha 'what' in'do 'where' | koha 'what' ndo 'where' | NA | koha <br> 'what' | koza <br> 'what' <br> kome <br> 'how' <br> n'do <br> 'where' |
| C | YES | NA | NA | NA | NA | NA | NA |
|  | NO | NA | NA | NA | NA | NA | NA |

have I claimed is that, despite the superficial complexity of the Northern Italian linguistic panorama, it is possible to find some regularities in the distribution of doubling and non-doubling wh-in situ. For instance, among the languages which have wh-in situ, only some license wh-doubling. Also, among those which do have wh-doubling, none requires systematic doubling to license wh-in situ in root clauses: in all varieties, single root wh-in situ is always possible. The same is not true for embedded wh-in situ, which some varieties are only able to license in the presence of wh-doubling (Grumellese, Borghese, Sanrocchese and Civate, as described in Manzini \& Savoia 2005). In addition, some varieties that never require wh-doubling in root questions do actually license it in embedded environments (Borghese, Manzini \& Savoia 2005). To conclude, all varieties that allow for both wh-doubling and single wh-in situ in indirect questions systematically realise the embedding that-complementiser when the wh-element is fronted and not doubled, while no complementiser is realised in case of wh-doubling. I discuss this property in Chapters 2 and 4.

Two more generalisations from the literature on wh-doubling, not discussed in this chapter, should be mentioned at this point: first, the fact that the relative order of the two sub-parts involved in wh-doubling can never be changed (Poletto \& Pollock 2004); and second, the fact that the counterparts of why cannot be doubled (Poletto \& Pollock 2015). These observations, which will play a role in the development of my theory of Northern Italian wh-in situ, form the basis of the discussion of $\S 1.3$, where I provide an overview of the distribution of different wh-elements in Northern Italian dialects, along with the interaction of doubling and single wh-in situ with subject-clitic inversion, and the felicity of wh-in situ
inside islands to extraction. What I shall argue is that Northern Italian dialects show regular behavioural patterns in the distribution of (doubling and single) wh-in situ along (at least) three variables:
i. the position occupied by the clause-internal wh-element (final vs non final);
ii. availability in long-distance and/or indirect questions;
iii. felicity within islands.

### 1.3 Wh-in situ-related patterns in Northern Italian dialects

The morphosyntax of Northern Italian wh-in situ is complex, but some distributional patterns can be observed, which I discuss in detail in this section. In $\$ 1.2$, I argued that the first generalisation that can be made for Northern Italian wh-in situ concerns the availability of single wh-in situ in root clauses in varieties that have wh-doubling: in all contexts where doubling is possible, single wh-in situ is also systematically possible. Then, I also showed that the generalisation does not hold in the opposite direction, since the felicity of a structure construed with wh-doubling is not guaranteed in the absence of doubling. Long construals and indirect wh-in situ are possible more often with wh-doubling than with single wh-in situ, and are hence found more frequently in Lombard varieties, where wh-doubling is the most productive.

Here, I shall show that the distributional patterns of (doubling and single) wh-in situ can be better explained by observing the interaction of three major variables: (i) the position in the clause occupied by the clause-internal wh-element (edge position vs non-final position); (ii) the availability of wh-in situ in long-distance and/ or indirect questions; and (iii), the felicity of wh-elements inside (weak and strong) islands to extraction. In $\$ 1.3 .1$, I address the co-occurrence of subject-clitic inversion and wh-in situ, and claim that no direct correlation between the two is observed in Northern Italian dialects (as in Manzini \& Savoia 2011), pace much work related to Munaro et al. (2001) where the proposed derivation for wh-in situ crucially relies on the presence of subject-clitic inversion in French and Northern Italian dialects.

### 1.3.1 Distribution of subject-clitic inversion

There is significant variation across Northern Italian dialects with regard to sub-ject-clitic inversion in matrix and embedded questions. The alternation between presence and absence of subject-clitic inversion in constructions with clause-internal wh-elements in languages that allow optional wh-in situ is a well-known cross-linguistic puzzle. Take for example the striking difference between French
(as described in Chang 1997; Mathieu 1999; Bošković 2000; Baunaz 2011; Shlonsky 2012, a.o.) and Trevisan wh-in situ: what is the explanation for the incompatibility of subject-clitic inversion with wh-in situ in the former (mentioned in the introduction of this chapter) versus its obligatory presence in the latter?

The situation in Northern Italian dialects is further complicated by the presence of embedded wh-in situ and of three types of wh-doubling. The patterns attested in Northern Italian dialects are shown in Table 1.5:

Table 1.5 Distribution of subject-clitic inversion across Northern Italian dialects

|  | Matrix questions |  | Embedded questions |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Long-distance |  | Indirect |  |
|  | Single | Wh-doubling | Single | Wh-doubling | Single | Wh-doubling |
| Pagotto | $\checkmark$ | $\checkmark$ | NA | NA | NA | NA |
| Cortese | $\checkmark$ | NA | $x$ | NA | NA | NA |
| Zoldoaltino | $\checkmark$ | NA | $x$ | NA | NA | NA |
| Trevisan | $\checkmark$ | NA | $x$ | NA | $x$ | NA |
| Illasi | $\checkmark$ | $\checkmark$ | NA | NA | NA | $x$ |
| Monnese | $\checkmark$ | $\checkmark$ | NA | NA | NA | $x$ |
| Comunnuovese | $x$ | NA | $x$ | NA | $x$ | NA |
| Strozzense | $\checkmark$ | $\checkmark$ | $x$ | $x$ | NA | $x$ |
| Civate | $x$ | $x$ | $x$ | NA | $x$ | $x$ |
| Sanrocchese | $\checkmark$ | $\checkmark$ | $x$ | $x$ | NA | $x$ |
| Grumellese | $\checkmark$ | $\checkmark$ | $x$ | $x$ | $x$ | $x$ |
| Borghese | $\checkmark$ | NA | $x$ | $x$ | $x$ | $x$ |
| Colognese | $\checkmark$ | NA | $x$ | NA | $x$ | NA |
| Passiranese | $\checkmark$ | $\checkmark$ | $x$ | NA | $x$ | $x$ |
| Olgiate | $x$ | $x$ | NA | NA | NA | NA |
| Intelvino | $\checkmark$ | $\checkmark$ | NA | NA | NA | NA |
| Mendrisiotto | $\checkmark$ | $\checkmark$ | NA | NA | NA | NA |

The varieties where wh-in situ is exclusively a root phenomenon, like Pagotto (Munaro 1995; Munaro et al. 2001), show a very classical pattern with respect to the distribution of subject-clitic inversion, which is compulsory in matrix questions and disallowed in embedded contexts. However, since these varieties do not license embedded wh-in situ in the first place, no pattern of co-occurrence between embedded wh-in situ and subject-clitic inversion can be observed. The same is true for varieties like Trevisan and Colognese, where embedded wh-in situ is indeed possible, but only of the single type. In these languages, when subject-clitic inversion is compulsory in matrix questions, it is ungrammatical in embedded contexts (Trevisan), and when subject-clitic inversion is never present in matrix questions it is predictably also disallowed in embedded questions (Colognese). In short, it appears that the
realisation of subject-clitic inversion is orthogonal to the presence of wh-in situ in Northern Italian dialects. Similarly, in the varieties that do allow wh-doubling, the distribution of matrix subject-clitic inversion varies cross-linguistically but never language-internally and also, whether a language has subject-clitic inversion in matrix questions or not, it is always ruled out in non-root environments (as for instance in Grumellese). Therefore, no variety is attested among Northern Italian dialects that has subject-clitic inversion as a question-formation strategy but bans it in constructions with clause-internal wh-elements, as French does.

### 1.3.2 Distribution of Wh-phrases

This section deals with the distributional patterns of D-linked and non-D-linked wh-words in Northern Italian dialects. Aggressively non-D-linked wh-words are not discussed here because their distribution is consistently canonical in the languages under consideration, i.e. they can only appear fronted, as discussed in Pesetsky (1987).

On the basis of the robust distributional patterns of wh-in situ in different Northern Italian dialects, I shall argue that different types of varieties exist: those that behave like Bellunese, those that resemble Manzini \& Savoia’s (2005) Lombard Northern Italian dialects, and finally Trevisan and similar varieties. In the following chapters I shall argue that, while Bellunese superficially seems completely different from Trevisan, theoretically it can actually be explained as a special sub-variety of the Trevisan type. For now, though, I will deal with the Bellunese type separately, since its interrogative syntax seems to set it apart from most varieties of the Northern Italian domain; I then analyse the two last types together, as these differ only in how they license wh-in situ in indirect wh-questions and in the phenomenon of short-movement of clause-internal wh-elements, which is not attested in Lombard. Interestingly, the Bellunese and the Lombard types correspond to the groups of varieties used in the existing theoretical treatments of Northern Italian wh-in situ, i.e. the 'remnant-IP movement analysis' à la Munaro et al. (2001) and the 'covert movement hypothesis' à la Manzini \& Savoia (2005). These approaches, as I shall argue in Chapter 5, have the major weakness of being unifying, i.e. their aim, which is not achieved successfully, is to provide one single explanation that is strong enough to account for all Northern Italian data.

It should be noted that Manzini and Savoia (2005) provided data in support of their analysis from both Lombard and Venetan varieties. Here, I am using the 'Lombard' label exclusively for descriptive ease: it is an inclusive term that I use to refer also to those Venetan varieties that share their wh-in situ-related properties with Lombard.

### 1.3.2.1 Wh-in situ: The Bellunese type

The first type of Northern Italian wh-in situ is the Bellunese type. In Bellunese, wh-in situ is mostly of the single type (the sole exception being the doubling what-word cossa). In Pagotto, the variety of Bellunese first described in Munaro (1995), non-D-linked wh-words can only be licensed clause-internally, as in (32), while D-linked wh-elements are obligatorily fronted, as in (33):
(32) Bellunese (Munaro 1999: 14 (1.2))
a. Che vestito à-tu sièlt?
what dress have=you chosen
'Which dress did you choose?'
b. *A-tu sièlt che vestito?
have=you chosen what dress
(33) Bellunese (adapted from Munaro 1999: 50 (1.56))
a. A-tu parecià che?
have=you prepared what
'What did you prepare?'
b. *Che à-tu parecià? what have=you prepared

Two non-D-linked wh-words have an unusual status, since they can only appear fronted: cossa ('what') and parché ('why'). Also, only two non lexically-restricted wh-words, qual ('which one') and quant ('how much') are able to surface either clause-internally or in the clause-initial position.

In Bellunese, embedded wh-in situ is felicitous in long-distance environments, as (34), and excluded in indirect questions, as (35): ${ }^{18}$
(34) Bellunese (Munaro 1999: 72 (1.100-102))
a. À-tu dit che l'à comprà che? have=you said that he=has bought what 'What did you say he bought?'
b. À-tu dit che l'é 'ndat andé? have=you said that he=is gone where 'Where did you say he went?'

[^9](35) Bellunese (Munaro 1999: 69 (1.93))
a. No so che che l'a comprà neg know $_{\text {lps }}$ what that he'has bought 'I don't know what he bought'
b. ${ }^{*}$ No so (che) l'ha comprà che NEG know $_{\text {lps }}$ (that) he'has bought what

Note that Bellunese displays a systematic violation of the 'doubly-filled COMP' filter, as illustrated in (35a). This variety also lacks a complementiser of the se wh type. Bellunese is therefore unable to license indirect single wh-in situ, since the that-complementizer is incompatible with a clause-internal wh-word, as in (35b).

Another crucial property of Bellunese wh-in situ, which will be highly relevant for the discussion in Chapter 5, is the requirement for clause-internal wh-words to occupy the rightmost position in the clause. According to Munaro (1999), Poletto \& Pollock (2015), and related works, the order of internal arguments in Bellunese wh-questions shows that clause-internal wh-words obey what I call a sentence-final requirement (à la Etxepare \& Uribe-Etxebarria 2005). This is illustrated in (36):
(36) Bellunese (adapted from Poletto \& Pollock 2015: 139 (2))
a. Al ghe ha dat al libro a so fradel
he dat has given the book to his brother
'He gave the book to his brother'
b. *Ghe ha-lo dat che a so fradel?
dat has=he given what to his brother
'What has he given to his brother?'
c. Ghe ha-lo dat che, a so fradel?
dat has=he given what \# to his brother
In Bellunese che-questions, like that in (36b), the dative complement (a so fradel, 'to his brother') is necessarily de-accented, though not in statements like (36a). Moreover, the wh-do must occupy the rightmost position, while anything that follows is an independent intonational phrase ('comma intonation', indicated by \#). According to the Poletto \& Pollock, if the wh-word in cases like (36a) was in the ordinary sentence-internal Do-position (where il libro 'the book' is located in 36a), these facts would be difficult to understand. In Chapter 5, I shall show that this argument is central to their discussion, which takes Bellunese (and more generally Northern Italian) clause-internal wh-words to be instances of fake wh-in situ that have actually been moved from their first-merge position.

The literature on Northern Italian dialects claims that clause-internal whelements show different sensitivities to weak and strong syntactic islands (in the sense of Huang 1982; Kayne 1983; Longobardi 1988; Cinque 1990; Rizzi 1990, a.o.) in Venetan and Lombard dialects. Munaro (1999) noticed that in Pagotto the
presence of a wh-word inside a syntactic island gives rise to different degrees of degradation, and even ungrammaticality with strong islands, which are opaque for extraction. Munaro provides examples of subject islands, of complex-NP islands, and of adjunct islands. Examples of subject (i.e. strong) islands where the wh-element is a complement of the embedded preverbal subject are provided in (37):
(37) Bellunese (Munaro 1999: 74 (1.104))
a. ${ }^{*}$ Te à-li dit che $[\mathrm{i}$ clienti de chi $]$ no i-à pagà? you have=they said that the clients of who NEG they=have paid 'Whose clients did they tell you didn't pay?'
b. *Pensi-tu che [ partir quando ] saria sbaglià? think=you that leave when would.be wrong 'When do you think it would be wrong to leave?'

Degradation is also observed in the distribution of wh-in situ within weak islands, although to a lesser degree than in strong islands. According to Munaro, this is true both in wh-islands, where a wh-element is found inside an indirect wh-question, and in negative islands, where a wh-word is in the scope of negation. Examples of wh-islands (i.e. weak) are provided in (38):
(38) Bellunese (adapted from Munaro 1999: 74-75 (1.107))
a. ??No te-te-ricorda [ andé che von comprà che ]??

NEG you=REFL=remember where that have ${ }_{1 p p}$ bought what 'You don't remember where we bought what?'
b. *Te à-li domandà [ parché che al-se-à
you have=they asked why that he=REFL=has
comportà comé ]?
behaved how
'They asked you why he behaved how?'
The data concerning the infelicity of wh-in situ inside syntactic islands were originally presented in Munaro (1999) to posit the existence of systematic movement of wh-words in interrogatives. In his approach, interrogative movement is also present in the case of (apparent) wh-in situ, which he explained in terms of the presence of an abstract operator that moves to the sentence-initial position and determines the scope of the clause-internal wh-word with which it is construed. In a sense, Munaro's original analysis runs along the same lines as the analysis that I shall propose in Chapter 5, except that what moves in my account is a silent adjoining Q-particle, à la Cable (2010).

Later, the same data were employed in Munaro et al. (2001) and Poletto \& Pollock (2000-2015) to actually prove the existence of left-peripheral wh-movement in all apparent instances of wh-in situ in Pagotto and in Northern Italian varieties in general.

### 1.3.2.2 Wh-in situ: The Trevisan and Lombard types

In the Introduction, I provided an overview of the interrogative syntax of Trevisan. Trevisan wh-in situ displays peculiar distributional properties with respect to Bellunese, despite the geographical proximity of the two varieties. Some Lombard dialects, as described in Manzini \& Savoia (2005), appear more closely related to Trevisan than Bellunese, though they are not identical. The first two properties that Manzini \& Savoia's (2005) Lombard varieties share to some extent with Trevisan are the absence of a 'D-linked/non-D-linked asymmetry' in clause-internal position and of a sentence-final requirement. The third property is the availability of wh-in situ in long-distance construals of the type in (39):
(39) Borghese (Manzini \& Savoia 2005: 591(155))
a. in'do to 'penset ke l in'dage?
where you think that he goes
'Where do you think he's going?'
b. 'penset ke l in'dage in'doe?
think $2_{2 \mathrm{ps}}$ that he goes where
The fourth shared property is the felicity of wh-in situ in indirect wh-questions. However, Lombard varieties and Trevisan do clearly differ in the way they licence indirect wh-in situ: Lombard lacks a specialised complementiser of the $\mathrm{se}_{\mathrm{wH}}$ type, hence can only license indirect wh-in situ in constructions with wh-doubling. An example is provided in (40):
(40) Strozzense (Manzini \& Savoia 2005: 593 (156))
a. 'so 'mia se por'ta-t (ko'ze)
know $_{\text {lps }}$ NEG se bring-you what
'I don't know what to bring you'
b. 'so 'mia se maj'dza ko'ze
know $_{\text {lps }}$ NEG se eat what
'I don't know what to eat'
The fifth and last similarity relates to the availability of island-contained wh-elements. Manzini and Savoia (2005) discuss the cases of Grumellese and Borghese, where no island effect is observed inside subject islands, as in (41a), complex-NP islands, as in (41b), and adjunct islands, as in (41c): ${ }^{19}$

[^10](41) Grumellese (adapted from Manzini \& Savoia 2005: 593-4 (157))
a. 'dig-ei ke ge e'nit [[ i a'mis de 'ki ]]? say=them that it has come the friends of who 'What is $x$ such as $x$ is someone's friends and $x$ came?'
b. ta 'pjah[[ i 'liber k i 'parla $\mathrm{d} \varepsilon$ ko'he ]]? you $_{2 \text { ps }}$ like the books that they speak of what 'What is $x$ such as you enjoy books about $x$ ?'
c. l $\varepsilon$ n'datf i'vja [[ 'henha haly'da ki ]]? he is gone away without greeting who 'What is $x$ such as he left without greeting $x$ ?'

Note that the status of subject-clitic inversion in constructions with island-trapped wh-in situ is unclear (it is present in 41a but not in 41b-c). I shall discuss this in Chapter 4, along with Manzini and Savoia's crucial observation that island effects do appear in Lombard when an island-trapped wh-word is doubled by its left-peripheral counterpart.

To conclude, Lombard dialects actually differ from Trevisan in some of their wh-in situ properties. First, the exclusive availability of wh-doubling in the former, as discussed in $\S 1.2$. Second, the ways in which wh-in situ is licensed in indirect wh-questions: single wh-in situ is enough in Trevisan, while Lombard dialects require wh-doubling to license embedded wh-in situ felicitously. Third, short-movement of clause-internal wh-elements has never been attested in Lombard, hence its status is uncertain. Consequently, it seems more reasonable to treat these two type of varieties separately, at least for the time being. The legitimacy of the division of Northern Italian varieties into types will become clearer in Chapter 5, where I address the existing theoretical treatments of wh-in situ in Northern Italian dialects. At the end of my theoretical discussion, I shall conclude that most differences between the Trevisan and the Lombard type can be reduced to the presence or absence of an EPP-feature within $v$ P. Bellunese, meanwhile, can plausibly be classified as the Trevisan type, with most of its peculiarities explained in terms of either a different stage of linguistic evolution towards generalised wh-in situ, or a special prosodic requirement.

### 1.4 Intermediate remarks

In this chapter, I have offered a detailed overview of the different patterns of in situ/ ex situ alternation observed in Northern Italian dialects. My discussion was based on published data (Munaro et al. 2001; Poletto \& Pollock 2000-2015; Manzini \& Savoia 2005, 2011; Manzini 2014, a.o.), which I compared to the novel data from Trevisan presented in the Introduction. Crucially, the availability of both single and
doubling wh-in situ in matrix and/or embedded contexts was discussed, along with the language-internal and cross-linguistic distribution of subject-clitic inversion, and the different degrees of sensitivity to weak and strong syntactic islands. These observations raised a number of hypotheses and questions which I address briefly in what follows, and then develop further in the rest of this monograph.

First of all, the Northern Italian data regarding the distribution of wh-in situ presented so far display significant enough variation to cast doubt on the feasibility of a unified explanation to account for all distributional properties attested in Northern Italian dialects. The degree of micro-variation observed might indeed be so significant and complex that one single explanation cannot account for all existing patterns of in situ/ex situ alternation. All theories of Northern Italian wh-in situ presented in the literature are unifying in nature, i.e. their aim is to account for the phenomenon by means of one single, unchangeable licensing mechanism. As I shall argue in Chapter 5, this is too ambitious: an approach that, in the absence of major typological divides, predicts micro-variation along certain variables is preferable.

From the discussion presented so far, it certainly seems desirable to posit at least two different ways of deriving wh-in situ in Northern Italian dialects. The first applies to Bellunese and similar varieties, where wh-in situ is limited to non-Dlinked wh-words and is a root phenomenon that can only be licensed felicitously at the rightmost sentential edge. The fact that in these varieties wh-movement is present and indeed takes place before Spell-Out is confirmed by the sensitivity that clause-internal wh-words display to both weak and strong islands (Munaro et al. 2001; Poletto \& Pollock 2015 and related works; see Chapter 5 for a detailed discussion). Bellunese and related varieties do seem to constitute a group that should be treated independently, yet in Chapter 5 I shall claim that most of their peculiar properties can be explained in terms of micro-variations with respect to the Trevisan type. Indeed, I shall argue that languages of the Bellunese type derive wh-in situ as Trevisan does, except for a number of properties related to the extent to which Q-adjunction applies and, plausibly, the presence of a special prosodic constraint which translates into the sentence-final requirement. The second type is the derivation whereby the clause-internal wh-element stays TP-internally, whether it is unmoved à la Manzini \& Savoia $(2005,2011)$ or TP-internally moved, as I shall argue for Trevisan. However, the undocumented status of short-movement of wh-elements in Lombard varieties, along with the presence of wh-doubling and related properties, somewhat suggests that Lombard and similar varieties and Trevisan should be treated as two sides of the same coin: on the one hand, Trevisan and similar varieties where virtually all types of wh-elements can surface either sentence-initially or clause-internally, and wh-in situ is both a root and a non-root phenomenon that targets a linear position below the surface position of the past
participle; on the other hand, Lombard varieties, where indirect wh-in situ is only possible in constructions with overt wh-doubling, and clause-internal wh-elements might not move.

Why are some varieties able to license wh-in situ both in matrix and in embedded environments whereas for some others wh-in situ is exclusively a root phenomenon? What makes island-contained wh-in situ possible? What is the role of wh-doubling, and what can it reveal about wh-movement in general? These questions could probably be explained as suggested in Manzini \& Savoia (2011): respectively, as the consequence of parametrised properties that force (or do not force) overt wh-movement from embedded clauses, as different conditions on interpretive construals in Logical Form, and as an overt realisation of both the wh-element and its left-peripheral scope marker. However, these arguments are not sufficient to account for the D-linked/non-D-linked asymmetry found in certain varieties, nor for the presence or absence of a sentence-final requirement. Furthermore, in this approach, the status of the short-movement that clause-internal wh-elements undergo in Trevisan is not clear. Against this theoretical background, the major prediction is that it ought to be possible to draw a typology of wh-in situ that goes from Chinese-like languages where clause-internal wh-elements are unmoved (i.e. licensed in their first-merge position, à la Huang 1982 and related works), to languages which display clause-internally moved wh-elements.

In the two next chapters, I shall focus on the analysis of the Trevisan data. All other data discussed so far will be analysed in Chapter 5, where I also survey the strengths and weaknesses of the major existing analyses of Northern Italian wh-in situ, and the general predictions of my model for the phenomenon of wh-in situ as a whole.

# On short movement of clause-internal wh-elements 

Wh-to-Foc

This monograph adopts the cartographic approach to syntactic structures, i.e. the attempt to draw maps of syntactic configurations that are as precise and detailed as possible. Here, I shall briefly introduce this theoretical approach and its history.

Syntactic structures are complex objects whose fine properties have been investigated by decades of formal syntactic studies. In a sense, structures have always been central in the framework of Generative Grammar (Chomsky 1957, 1965 and many further developments), but the focus on structural maps eventually arose in the early nineties, alongside the development of the Minimalist Program (Chomsky 1989, 1993). This interest in structural maps was an obvious progression from the identification and formalisation of multiple functional heads during the first ten years of the Principles and Parameters framework (Chomsky 1981, 1982). The interest in mapping extended this claim to the functional elements of the clause (Chomsky 1986), crucially isolating the Verb Phrase (VP) first, an Inflection Phrase (IP), and then a Complementiser Phrase (CP), along the lines shown in (1):
(1) CLAUSES: FUNCTIONAL FIELDS
$\left.\left[{ }_{\mathrm{CP}} \operatorname{Spec} C^{\circ}{ }_{\text {IP }} \operatorname{Spec} I^{\circ}\left[{ }_{\mathrm{VP}} \operatorname{Spec} V^{\circ}\right]\right]\right]$
The motivation behind (1) was the idea that phrases, and more generally clauses, are composed of a lower lexical structure and a higher functional structure, both corresponding to hierarchical sequences of the X-bar schema. Under these assumptions, a crucial development followed the observation that functional structures, unlike lexical projections, actually consist of more than one head: indeed, in (1), IP and CP are not functional projections but rather functional fields. In fact, the preliminary investigations into the core functional structure of the clause, Pollock (1989) and Belletti (1990), led to the definition of IP not as a projection but as a layer, and were followed by many studies along the same lines (Cinque 1999; Shlonsky 1997, 2000; Sigurðsson 2000; Cardinaletti 2004; Schweikert 2005; Bianchi 2006, a.o.). The same logic then led to a splitting of the CP into more articulated hierarchical sequences of functional projections, the CP-domain or Left Periphery, first proposed in Rizzi
(1997) and then refined in (2001) and related works. Further investigations include, among many others, Benincà (2001, 2006), Benincà \& Poletto (2004b), Bocci (2004), Cruschina (2006), Frascarelli \& Hinterhölzl (2007). Similar claims have also been made for the Determiner Phrase (DP) (Cinque 1994; Brugè 2002; Giusti 2002 Scott 2002; Svenonius 2008), and more recently for Prepositional Phrases (PP) (Cinque \& Rizzi 2010), though these are beyond the scope of this book.

On the basis of the evidence gathered over the last two decades, the cartographic approach assumes that the distinct hierarchies of functional projections are to be considered universal, even though languages differ in the type(s) of movements that they allow and/or in the extent to which they realise each functional head and $\operatorname{Spec}($ ifier ) overtly. The universality comprises not only the type of heads and specifiers contained within the functional layers dominating VP, NP, AP (Adjectival Phrase), PP, IP etc., but also the number of those heads and specifiers and their relative order. This possibility, widely explored in Cinque (2006) and Kayne (2008), implies that if a language provides evidence for the existence of a particular functional head or Spec, that projection must be present in every natural language, independently of the presence or absence of overt evidence for it. It follows that, because of its universal nature, all work stemming from the cartographic program is based firmly on the evidence coming from comparative and typological studies.

In the approach that I develop in this monograph, I shall make extensive use of two functional layers, Rizzi's (2001) Left Periphery and the periphery of $v \mathrm{P}$ as described in Belletti (2004), whose fine structures have been the subject of many investigations. Crucially, following Rizzi (2001), Rizzi \& Bocci (2017) and Belletti (2004), I take the Left Periphery of the clause to have the form in (2), and the $\nu \mathrm{P}-$ periphery to consist of the projections in (3):
(2) the left periphery (as in Rizzi \& Bocci 2017: 8 (29))
[ Force [ Top ${ }^{*}$ [ Int [ Top ${ }^{*}$ [ Focus [ Top ${ }^{*}$ [ Mod [ Top ${ }^{*}$ [ Qemb [ Fin [ IP ... []]]]]]]]]]
(3) the low periphery (as in Belletti 2004)
... [ Top [ Foc [ Top [ vp ... ]]]]]
Here and in the works cited above, the Left Periphery of the clause is assumed to consist of strictly-ordered projections that encode functional information such as force, finiteness etc. These projections are delimited by ForceP, where a connection is established between the clause and the discourse or a higher selecting verb, and Fin(iteness)P, which is in direct contact with IP, as in (2). FocusP is the projection whose Spec is commonly assumed to host either focused elements or fronted wh-elements, while the low Qemb(edded)P (previously called WhP in Rizzi 2001)
has been argued to host wh-elements in focus-containing indirect wh-questions (see Rizzi 2001, 2004 and Rizzi \& Bocci 2017 for a detailed discussion). ${ }^{20}$

The presence of a focal projection in the periphery of $v \mathrm{P}$, Foc, was originally posited in Belletti (2004) as the host of Italian post-verbal subjects. Because of the ungrammaticality of the wh-in situ strategy in Standard Italian, Belletti's Foc was at first thought to only attract focused elements, not wh-movement. However, further studies have subsequently proposed that Belletti's SpecFoc is available as the target of Romance clause-internal wh-elements, such as the work by Kato (2003) (published as Kato 2013) for Brazilian Portuguese, Belletti (2006) for French, and Manzini (2014) for Northern Italian dialects. This analysis of wh-in situ as targeting Foc, refined on the basis of robust data from non-Romance languages (Mahajan 1990; Manetta 2010, 2011; Jayaseelan 1996; Aboh 2006; Sinopoulou 2008; Cheng \& Bayer 2017, a.o.), is the one that I shall adopt here to account for the Trevisan data. Throughout, to avoid any possible confusion, I shall refer to Rizzi's left-peripheral focal projection as Focus High , and to Belletti's low focal projection as Foc ${ }_{\text {Low }}$.

In Chapter 1, I provided extensive evidence in favour of a (minimally) bipartite treatment of Northern Italian wh-in situ. In this chapter, I shall continue with this approach, outlining a theory of Trevisan wh-in situ, and shall then develop it further in Chapters 3 to 5 . This treatment is in contrast to much previous work which has attempted to bring together Northern Italian (and Romance) wh-in situ under a unifying approach (Poletto \& Pollock 2000 and later developments, Munaro et al. 2001; Manzini \& Savoia 2005 and related works, Manzini 2014, a.o.). More specifically, I have claimed that different types of varieties can be identified on the basis of the distributional properties of clause-internal wh-elements. These are Lombard varieties, which seem very likely to have to have real wh-in situ as claimed in Manzini \& Savoia (2005); Trevisan and similar varieties, in which clause-internal wh-elements appear to be TP-internally moved to a linear position below the surface position of the past participle; and Bellunese and similar varieties. The last of these, which correspond to those investigated in the remnant-IP movement analysis (Poletto \& Pollock 2000; Munaro et al. 2001), appear empirically very dissimilar to the two other types, but will eventually be classified as a sub-group of the Trevisan type. In this chapter, I shall focus exclusively on Trevisan in situ/ex situ alternations such as those in (4):

[^11](4) Trevisan
a. Ga-tu magnà cuando el dolse $\qquad$ ? have=you eaten when the cake 'When did you eat the cake?'
b. Cuando ga-tu magnà el dolse $\qquad$ ? when have=you eaten the cake

As illustrated in (4), the first working hypothesis behind this chapter is that Trevisan wh-elements are moved not only when they surface in sentence-initial position, as in (4b), but also when they appear clause-internally, as in (4a). This is based on the data presented in the Introduction, which I explore in detail in $\$ 2.1$. The second working hypothesis is that clause-internal wh-elements are moved to a clause-internal focal projection, more precisely Belletti's (2004) Foc Low (a type of low movement of wh-elements that I shall henceforth refer to as 'Wh-to-Foc').

According to Belletti, the $v \mathrm{P}$-periphery is typically activated in Italian sub-ject-inversion structures, which display the non-canonical VS order, with the subject interpreted as focus of new information, as in (5).
(5) Italian
a. Question: Chi è partito / ha parlato? who is left / has spoken 'Who left / spoke?'
b. Answer: È partito / ha parlato Gianni is left / has spoken Gianni ‘Gianni left / spoke’
c. Answer: * Gianni è partito / ha parlato

Gianni is left / has spoken
Note that in the cases in (5) the canonical pre-verbal position is not available for the subject. Conversely, in languages like Italian, the post-verbal position is unavailable if the subject of the utterance is known, i.e. shared information, unless it is dislocated. Observe the contrast between the canonical SV structures in (6b) and (6c):
(6) Italian
a. Question: Che cosa ha fatto Gianni?
what has done Gianni
'What did Gianni do?'
b. Answer: * E partito / ha parlato Gianni
is left / has spoken Gianni
‘Gianni left / spoke’
c. Answer: È partito / ha parlato, Gianni
is left / has spoken \# Gianni
'Gianni, he left / spoke'

The derivation proposed by Belletti for Italian VS orders is illustrated in (7):
(7) DERIVATION OF SUBJECT-INVERSION STRUCTURES
$\left[{ }_{\text {Ср }} \ldots\left[_{\text {тр }}\right.\right.$ pro $\ldots$ è partito / ha parlato $\ldots$ [Foclow Gianni $\left.\left.\left.\left[{ }_{\mathrm{Vp}} \ldots\right]\right]\right]\right]$
However, despite the presence of a focal projection in the periphery of $v \mathrm{P}$, Standard Italian fails to license wh-elements clause-internally (Rizzi 1982; 1997, Calabrese 1984, a.o.), as in (8):
(8) Standard Italian
a. ${ }^{*}$ Mangi quando da me?
eat ${ }_{2 \text { ps }}$ when at me
'When are you coming over for dinner?'
b. *Hai affidato a chi l'incarico?
have $_{2 \text { ps }}$ given to who the'job
'Who did you give the job to?'
Under the aforementioned assumptions, the ungrammaticality of (8) is puzzling. Remember that it is not only Trevisan that has wh-in situ, but also closely-related Venetan Italian, as stated in the Introduction. While a parametrisation of Standard Italian $\mathrm{Foc}_{\text {Low }}$ as an impossible landing site for movement of wh-elements seems implausible, it is tempting to attribute the cross-linguistically different distributions of wh-in situ either to a parametrisation of the features that are checked in C and/ or TP-internally à la Miyagawa (2001), or to properties linked to the morphosyntax of wh-elements themselves, à la Cable (2010). Here, I shall provide a detailed discussion of both options, and then argue in favour of an adaptation of Cable's grammar of Q to Northern Italian dialects (\$2.2).

Approaches in which wh-in situ is argued to target a low focal projection have also been proposed for non-Romance languages: these include Mahajan (1990) and Manetta $(2010,2011)$ for Bangla and Hindi/Urdu; Jayaseelan (1996) for Malayalam; Kahnemuyipour (2001) for Persian; Aboh (2006) for the Bantu language Aghem; Sinopoulou (2008) for Greek multiple wh-questions. Cheng \& Bayer (2017) also claimed that wh-in situ in South Asian languages is systematically an instance of overt movement to the left edge of $v \mathrm{P}$, the sole exception being the V2-language Kashmiri.

If Foc ${ }_{\text {Low }}$ was shown to be able to host wh-elements in some languages, there would be a theoretically-welcome correspondence between the Left Periphery and the low periphery, with both Focus $_{\text {HIGH }}$ and Foc $_{\text {Low }}$ able to host focus-movement and wh-movement. However, many non-Romance languages are pure in situ languages, which makes their analysis less problematic, i.e. where relevant, the wh-element is probed into a clause-internal Spec by whatever feature is relevant to wh-movement, and no further movement is needed (at least in overt syntax). This is not the case
for optional in situ languages, whether Romance or not, where wh-elements surface either clause-internally, or move all the way up to sentence-initial position.

Since Chomsky (1973), wh-movement has been known to operate succes-sive-cyclically, i.e. fronted wh-elements are not extracted directly from their firstmerge position, as in (9a), but pass through every CP that they cross on the way to their final landing site, as in (9b):

## (9) CYCLICITY OF WH-MOVEMENT

Movement of wh-elements from the external-merge position to their final landing site in the higher CP is not direct but broken into a sequence of local steps, in a successive-cyclic way:
a. $\mathrm{I}_{\mathrm{CP}} \mathrm{Who}_{\mathrm{i}}$ did $\mathrm{I}_{\mathrm{TP}}$ Mary think $\mathrm{I}_{\mathrm{CP}} \mathrm{I}_{\mathrm{TP}}$ John saw i]1]]


The cyclicity of wh-movement has been successfully argued for in notable works on wh-agreement, wh-movement-related inversion phenomena, and pronunciation of intermediate copies in the case of partial wh-movement (Torrego 1984; McDaniel 1986, 1989; McCloskey 2001, 2002; Willis 2000, a.o.). I shall therefore assume here that the existence of successive-cyclic movement is certain. Cyclicity means that, if both $\mathrm{Foc}_{\text {Low }}$ and Focus $_{\text {HIGH }}$ are targets for interrogative wh-movement, a fronted wh-element like that in (4b) starts out within VP and then moves to SpecFocus HIGH successive-cyclically, along the lines of the diagram in (10):


It is indeed not implausible that wh-movement should pass through SpecFoc $_{\text {Low }}$ : in phase theory, fully-fronted wh-elements pass through every phrase-edge, i.e. both the edge of $v \mathrm{P}$ and of CP. This is not incompatible per se with the idea of intermediate wh-movement through Foc $_{\text {Low }}$, if we accept that the Spec of this projection is indeed at the edge of $v \mathrm{P}$.

There is, however, a major problem with this approach, namely the fact that a wh-element that moves into SpecFoc $_{\text {Low }}$ must be probed there by a feature or criterion: consequently, once the intermediate derived position is reached, further movement to the sentence-initial position would cause a violation in terms of Criterial Freezing, a principle formulated in Rizzi (2004) which blocks phrases in
the position in which they satisfy a relevant Criterion. This means that in Trevisan one of the following must be true:
i. $\quad \mathrm{Foc}_{\text {Low }}$ is not criterial, which is highly implausible, or;
ii. there exists an escape-hatch to avoid Criterial Freezing in Foc ${ }_{\text {Low }}$ and to allow further movement of the clause-internal wh-element if needed; or
iii. the clause-internal movement under investigation is indeed criterial but not relevant to proper wh-movement.

An explanation along the lines of (iii) could be available if Trevisan Wh-to-Foc was actually focus-movement, triggered by a [foc]-feature, not real wh-movement driven by [wh], as claimed for example for Persian wh-in situ (Kahnemuyipour 2001).

To conclude, note that an analysis of Trevisan wh-in situ in terms of Wh-to-Foc requires a parallel explanation for the fact that the wh-element, clause-internally moved into SpecFoc ${ }_{\text {Low }}$, linearly follows the past participle, which entails that both move, as shown in (11):


Depending on the analysis adopted, the past participle is generally expected to surface lower in the structure, at least no higher than $v \mathrm{P}$. The presence of Wh -to-Foc hence implies that the Trevisan past participle is moved to a position above Foc ${ }_{\text {Low }}$, as in (11), which is theoretically not implausible given Cinque's (1999) analysis of past participle movement out of the VP in Italian, and its linguistic proximity to Trevisan (as I shall argue in $\$ 2.1 .3$ ).

## Organisation of this chapter

In this chapter, I describe and analyse Trevisan short movement of clause-internal wh-elements. I first discuss and confirm the existence of a $v \mathrm{P}-$ periphery in Trevisan (\$2.1.1), and then outline the reasons why the TP-internal movement that Trevisan clause-internal wh-elements undergo is an instance of bona fide syntactic movement ( $\$ 2.1 .2$ ); finally, I argue that this short movement does indeed target Belletti's (2004) Foc. In $\$ 2.2$, I investigate the ways in which wh-elements are probed into SpecFoc $_{\text {Low }}$ (in the case of wh-in situ) or SpecFocus HIGH (in the case of total fronting), with specific focus on the mechanisms of C-checking that operate when no phonetically-overt movement to C is detectable. Crucially, I first investigate the
possibility that Trevisan clause-internal wh-elements are merged within interrogative Clitic Phrases, as suggested for other Northern Italian dialects by Poletto \& Pollock (2000) and related works (\$2.2.2), then abandon this approach in favour of a more up-to-date analysis à la Cable (2010) (\$2.2.3).

### 2.1 Characterising Wh-to-Foc

I have claimed that Trevisan wh-in situ is minimally characterised by the following properties:
i. felicity of both D-linked and non-D-linked wh-elements in clause-internal position (lack of what I call a D-linked/non-D-linked asymmetry), with the exceptions of che ('what') and parché ('why'), which can respectively surface only in situ and only fronted;
ii. lack of a sentence-finality requirement à la Etxepare \& Uribe-Etxebarria (2005), i.e. clause-internal wh-elements need not occupy the rightmost edge of the clause in which they appear;
iii. compulsory short movement of clause-internal wh-elements, only detectable in the phonetic string in the case of wh-IOS and wh-adverbials;
iv. felicity in both long-distance construals and in indirect wh-questions;
v. felicity inside syntactic islands (from which wh-extraction is at best degraded).

Properties (i) to (iii) will be addressed in this chapter, while (iv) and (v) are the subject of Chapter 4.

### 2.1.1 Free subject inversion and the pro-drop parameter

The hypothesis that clause-internal wh-elements in Trevisan (and similar languages) target a focal projection higher than $v \mathrm{P}$ raises at least one prediction: that a $v \mathrm{P}$-periphery along the lines of that proposed for Italian in Belletti (2004) must be active in the varieties under consideration. The prediction is confirmed by the Trevisan data. What has commonly been referred to as 'free subject-inversion' in Italian is widely acknowledged to involve movement of the subject to the $\nu$ P-peripheral focus projection, as in the diagram seen in (7). VS structures of the sort are also attested in Trevisan, as illustrated in (12):
(12) Trevisan

Ze partio / gà parlà Giani
is left / has spoken Gianni
‘Gianni left / spoke’

Free subject-inversion is a fundamental property of null-subject languages that appears to be linked to the possibility of leaving the pre-verbal subject position phonetically unrealised, i.e. filled by pro. In Bonan (2019) I claimed that although Trevisan might superficially look like a partial pro-drop language solely on the basis of the distributional properties of its incomplete series of nominative clitics, it is actually a bona fide instance of Romance positive setting of the pro-drop parameter (for detailed discussion of the parameter, see Chomsky 1981; Rizzi 1982, 1986; Jaeggli \& Safir 1989; Moro 1997, a.o.). Indeed, as shown in the Introduction, Trevisan has a complete declarative paradigm of non-clitic pronouns, and two incomplete paradigms of clitic forms. When a nominative clitic exists it must be realised, be it alone, as in (13a), construed with a pronoun of the non-clitic series, as in (13b), or with a full DP, as in (13c):
(13) Trevisan
a. ${ }^{*}(\mathrm{El})$ zé zà partìo
he= is already left
'He has already left'
b. $\mathrm{Lu}^{*}(\mathrm{el})$ zé zà partìo
he he= is already left
c. Toni ${ }^{*}(\mathrm{el})$ zé zà partìo

Toni he= is already left
'Toni has already left'
In contrast, non-clitic nominative pronouns are incompatible with co-referential full DPs, as in (14a), and can be omitted in unmarked declaratives, as in (14b):
(14) Trevisan
a. Toni $\left({ }^{*} \mathrm{lu}\right){ }^{*}(\mathrm{el})$ zé zà partìo

Toni he he= is already left
'Toni has already left'
b. $(\mathrm{Lu})^{*}(\mathrm{el})$ zé zà partìo
he he= is already left
'He has already left'
(14) shows that the behaviour of Trevisan declarative subject pronouns of the non-clitic series mirrors that found in Standard Italian, as exemplified in (15):
(15) Standard Italian
a. Toni (*egli) è già partito

Toni he is already left
'Toni has already left'
b. (Toni / egli) è già partito

Toni / he is already left
'Toni / he has already left'

Therefore, although the Trevisan paradigm of declarative nominative clitics might superficially lead to the conclusion that Trevisan is only partially pro-drop, the complementary distribution of full-DP subjects and the Italian-like non-clitic pronominal series confirms the pro-drop status of the language. In Bonan (2019), I outlined numerous arguments in support of the analysis of the subject clitics of Trevigiano not as proper pronouns but as the phonetic realisations of phi-features in either T (in the case of declaratives) or C (in interrogatives), with all morphological differences between the two series linked to the presence of an additional [q]-feature in interrogatives. Those interested in Trevisan nominative clitics can find a complete empirical and theoretical account in Bonan (2019).

The pro-drop analysis of Trevisan is further confirmed by classic tests such as the ability to extract the subject of a subordinate clause to the matrix clause domain across an overt that-complementiser (Perlmutter 1971), as in (16), the non-realisation of the quasi-argumental subject of weather verbs, as in (17), and the compulsory emptiness of the position vacated in the case of extraposition of a clausal subject, as in (18). Observe the contrast between the Trevisan examples in (a) and the counterparts in English, a universally-recognised non pro-drop language, in (b):
(16) SUBJECT-EXTRACTION ACROSS OVERT THAT-COMP
a. Chi ${ }_{\mathrm{i}}$ pensi-tu [ che __i la ciamarà ]?
who think=you that her call ${ }_{\mathrm{FUT}}$
'Who do you think will call her?'
b. ${ }^{*} \mathrm{Who}_{\mathrm{i}}$ do you think [ that ___i will call her ]?
(17) QUASI-ARGUMENT OF WEATHER VERbS
a. ( ${ }^{*}$ El) pjove
it rains
b. ${ }^{*}(\mathrm{It})$ rains
(18) Rightward extraposition of a clausal subject
a. __ zé sicuro [ che a Luisa noa partirà ] is sure that the Louise $\mathrm{NEG}=$ she= leave $_{\mathrm{FUT}}$
'It is sure that Louise will not leave'
b. *__j is sure [ that Louise will not leave $]_{j}$

Let us now return to (Italian) post-verbal subjects and their derivation. Belletti's (2004) analysis of free subject inversion along the lines seen in (7) leads to the assumption that Italian post-verbal subjects are focal in nature, and remain clause-internal. Indeed, that the inverted focused subject does not move to the Left Periphery of the clause is confirmed by the fact that the position must be c-commanded by the IP-internal negation in Italian. Likewise, contrasts like that shown in (19), where nesuni ('anyone') must be c-commanded by the negation, constitute further evidence in favour of the presence of a $v \mathrm{P}$-periphery in Trevisan:
(19) Trevisan
a. No me o gà dito nesuni NEG to.me it has said anyone 'No one told me that'
b. ${ }^{*}$ Nesuni no me o gà dito anyone NEG to.me it has said

In examples like (19) the negative quantifier nesuni ('anyone') must be c-commanded by the negation, no ('not'). This rules out the possibility, suggested in some studies, of positing movement of the subject to the left-peripheral focus position, followed by remnant movement of the IP. Indeed, this type of movement analysis would exclude c-command.

From the discussion in this section, it appears reasonable to propose that Trevisan has an Italian-like $v \mathrm{P}$-periphery. In $\S 2.1 .2$, I argue in favour of a movement analysis for Trevisan clause-internal wh-elements, and claim that there are reasons to believe that this low functional layer is indeed the landing site for clause-internally moved wh-elements.

### 2.1.2 Are clause-internal wh-elements moved?

In proposing an account of the syntax of questions such as that in (20), it is first necessary to determine whether the movement displayed by the clause-internal wh-elements of Trevisan is syntactic, i.e. compulsory and triggered by the need to check a relevant feature, or movement of a different type:
(20) Trevisan

Ga-tu visto cuando me mama ___ ?
have=you seen when my mum
'When did you see my mum?'
One might wonder whether the material that follows the clause-internal wh-elements in questions like (20) is actually external to the core of the clause, i.e. somehow right-dislocated or marginalised. I wish to claim that an analysis along these lines would be incorrect. Trevisan is in fact an SVO language where the relative order of verb-selected arguments is rigidly fixed, as in (21), as is the order of verb-selected arguments and adverbials, as in (22):
(21) Trevisan
a. $\quad \mathrm{V}($ erb $)>\mathrm{D}($ irect $) \mathrm{O}$ (bject) $>\mathrm{I}$ (ndirect) O (bject)

Ghe go dato $\underline{\text { i }}$ pomi $_{\text {Do }} \underline{a}_{\text {Giani }_{\text {o }}}$ DAT have $_{1 \mathrm{ps}}$ given the apples to John 'I gave the apples to John'
b. ${ }^{*} \mathrm{~V}>\mathrm{IO}>\mathrm{DO}$
${ }^{*}$ Ghe go dato $\underline{\text { a }}$ Giani $_{\text {IO }} \underline{\text { i }}$ pomi $_{\text {Do }}$ DAt have ${ }_{1 p s}$ given to John the apples
(22) Trevisan
a. Arguments $>\operatorname{ADV}(\text { verbial })_{\text {Time }}>\operatorname{Adv}_{\text {Place }}$

Go magnà gnochi ${ }_{\text {Do }}$ jeri sera $_{\text {TIME }}$ aa sagra $_{\text {pLACE }}$ have $_{1 \text { ps }}$ eaten gnocchi yesterday night at.the festival 'I ate gnocchi yesterday evening at the festival'
b. ? Arguments $>\operatorname{Adv}_{\text {Place }}>\operatorname{Adv}_{\text {Time }}$

Go magnà gnochi ${ }_{\text {Do }} \underline{\text { aa }}$ sagra $_{\text {PLACE }}$ jeri $\underline{\text { sera }}_{\text {TIME }}$ have $_{\text {ips }}$ eaten gnocchi at.the festival yesterday night
c. ${ }^{*} \mathrm{Adv}_{\text {Place/Time }}>$ Arguments
${ }^{*}$ Go magnà $\left\{\right.$ jeri sera $\left._{\text {TIME }}\right\}$ \{aa sagra $\left._{\text {PLACE }}\right\}$ gnochi ${ }_{\text {Do }}$ have $_{\text {lps }}$ eaten yesterday night at.the festival gnocchi

However, the declarative linear orders in (21) and (22) are not reproduced in wh-interrogatives. Observe the interrogative linear orders in (23) and (24):
(23) Trevisan
a. $\mathrm{V}>$ wh-IO $>\mathrm{DO}$

Ghe ga-tu dato $\underline{a}$ chi $_{\mathrm{IO}} \underline{\mathrm{i}}$ pomi $_{\mathrm{Do}}$ ?
DAT have=you given to whom the apples
'To whom did you give the apples?'
b. ${ }^{*}$ V $>$ wh-IO $>$ DO

Ghe ga-tu dato $\underline{\text { i }}$ pomi $_{\text {}}^{\text {do }}$ a chi $_{\text {IO }}$ ?
Dat have=you given the apples to whom
(24) Trevisan
a. wh-ADV > DO

Ga-tu magnà cuando ${ }_{\text {wh-ADV }}$ gnochi $_{\text {Do }}$ aa sagra $_{\text {ADV }}$ ?
have=you eaten when gnocchi at.the festival
'When did you eat gnocchi at the festival?'
b. ${ }^{*} \mathrm{DO}>$ wh-ADV
${ }^{*}$ Ga-tu magnà gnochi ${ }_{\text {Do }} \underline{\text { aa }} \underline{\text { sagra }}_{\text {ADV }} \underline{\text { cuando }}_{\text {wh-ADV }}$ ? have=you eaten gnocchi at.the festival when

In genuine interrogatives such as those in (23) and (24), the interrogative indirect object precedes the direct object in the phonetic string, as do wh-adverbials. Following basic generative assumptions, I take the underlying structure of declaratives and interrogatives to be the same, and different surface orders to be derived via pre-Spell Out movement(s) (in the sense of Chomsky 1964 and further developments).

In line with the contrasts observed in the examples above, it seems reasonable to posit that Trevisan clause-internal wh-elements obligatorily move higher than the position in which they are externally-merged, plausibly to an FP outside of $v$ P. (25) exemplifies the $v \mathrm{P}$-to-FP movement under consideration in the case of a wh-indirect object. Note that I use the symbol ' $>$ ' to signal that the relevant order here is the surface order, and only bracket FP and $v \mathrm{P}$ for the sake of clarity:
(25) TREVISAN SHORT MOVEMENT OF WH-ELEMENTS


An analysis along the lines of (25) also needs to be extended to cases in which the movement is not detectable in the phonetic string, as for example with wh-direct objects, as in (26). A schematic representation along the lines of (25) is provided in (27):
(26) Trevisan

Ga-tu visto $\operatorname{ch} i_{\mathrm{i}}$ —i i jeri sera?
have=you seen who yesterday night
'Who did you meet last night?'
(27) TREVISAN SILENT SHORT MOVEMENT OF A WH-DO


One might wonder whether the material that follows the clause-internal whelement in wh-questions such as (23) and (24), repeated here in (28), might be right-dislocated, which would rule out an analysis in terms of short movement of the wh-element:
(28) Trevisan
a. Ghe ga-tu dato a chi i pomi? dat have=you given to whom the apples 'To whom did you give the apples?'
b. Ga-tu magnà cuando gnochi aa sagra? have=you eaten when gnocchis at.the festival 'When did you eat gnocchis at the festival?'

I argue that they are not. In fact, Trevisan requires dislocated constituents to be phrased as independent intonational phrases, with obligatory realisation of a resumptive clitic (if available) in the extraction site, co-indexed with the dislocated element. Additionally, with analytic verb forms, phi-agreement (gender and number) must be realised on the past participle, as in (29):
(29) Trevisan

Ghe $\mathbf{i}_{\mathrm{j}}$ ga-tu dati a chi, i pomi ?
DAT they= have=you given $\mathrm{m}_{\text {M.PL }}$ to who \# the apples
'The apples, who did you give (them) to?'
In the absence of any of the three above properties, dislocation fails, as illustrated in (30):
(30) a. ABSENCE OF A RESUMPTIVE CLITIC
*Ghe ga-tu dati a chi, i pomi?
DAT have=you given M.PL to who \# the apples
b. ABSENCE OF AGREEMENT ON THE PAST PARTICIPLE
${ }^{*}$ Ghe $\mathrm{i}_{\mathrm{j}}$ ga-tu dato a chi, i pomi ?
DAT they= have=you given to who \# the apples ${ }_{j}$
c. ABSENCE OF 'COMMA INTONATION'
?? Ghe $\mathrm{i}_{\mathrm{j}}$ ga-tu dati a chi i pomi ${ }_{j}$ ?
DAT they= have=you given ${ }_{\text {M.PL }}$ to who the apples
Richard Zimmermann (pc.) noted that the felicity of the short movement hypothesis is further validated if, in the presence of a clause-internal wh-adverbial, the following direct object can only precede the indirect object in the absence of dislocation, and is free to either precede or follow the indirect object when clitically right-dislocated. This prediction is confirmed by the examples in (31), where the indirect object aa Maria ('to Mary') of the ditransitive verb $\operatorname{dar}$ ('to give') is able to precede the direct object l'anel ('the ring') iff the latter is properly right-dislocated, as in (31b):

EFFECTS OF RIGHT-DISLOCATION ON WORD ORDER
a. Ghe ga-tu regaeà cuando ${ }^{*}\{$ aa Maria\} l'anel $\{$ aa Maria\}? dat have=you given when to.the Maria the'ring to.the Maria 'When did you give Maria the ring?'
b. Ghe $\mathrm{o}_{\mathrm{j}}$ ga-tu regaeà cuando, \{ aa Maria\}, l'anel ${ }_{j}$, \{ DAT it= have=you given when \# to.the Maria \# the'ring \# aa Maria\}
to.the Maria
'The ring, when did you give to Maria?'
To conclude, the unchangeable declarative orders in (21) and (22) also exclude the possibility of Italian-like emarginazione ('marginalisation') in Trevisan, while at the same time the compulsory status of the movement under consideration would be unexpected if it was a by-product of an optional dislocation (for more details on Italian emarginazione, refer to Antinucci \& Cinque 1977; Cardinaletti 2001, 2002; Samek-Lodovici 2015, a.o.). As a consequence, the distributional patterns
observed for Trevisan clause-internal wh-elements must be due to movement of the wh-element itself. Moreover, the mandatory status of this phenomenon suggests that we are dealing with genuine syntactic movement driven by the need to check a relevant feature. I provide a preliminary discussion of this feature in what follows, before going into more detail in Chapter 3.

The mandatory status of Trevisan short movement of clause-internal wh-elements clearly differentiates it from the marked optional movement of clause-internal wh-elements observed in Contemporary Spoken French (see Tual 2017 for an experimental study in this area), as in (32):
(32) Contemporary Spoken French
a. unmarked declarative order: $\mathrm{DO}>\mathrm{IO}$

you'have given your purse to Jeanne
'You gave your purse to Jeanne'
b. unmarked interrogative order: $\mathrm{DO}>$ wh-IO

you'have given your purse to who
'Who did you give your purse to?'
c. MARKED INTERROGATIVE ORDER: wh-IO > DO
?T'as donné à quín ton sac $_{\mathrm{Do}}$ ___ro?
you'have given to who your purse
In Chapter 5, bearing in mind that the French unmarked declarative order is $V>$ $\mathrm{DO}>\mathrm{IO}>$ Advs, I shall claim that the optionality of movement in (32c) suggests that this should be treated as an instance of pragmatically-driven short-distance scrambling, rather than feature-checking driven syntactic movement, and shall characterise wh-in situ in Contemporary Spoken French as unmoved.
2.1.3 Which spec is targeted by clause-internally moved wh-elements?

The analysis of the movement of Trevisan clause-internal wh-elements as proper syntactic short movement raises at least two questions:
i. which functional projection is targeted by this type of movement?
ii. which feature triggers the movement under consideration and how are the interrogative features in C checked in the absence of phonetically-detectable movement to the Left Periphery of the clause?

I address point (i) here, with discussion of (ii) left to $\$ 2.2$ and Chapter 3. Let us first observe the linear position occupied by clause-internally moved wh-indirect objects. In the presence of a synthetic verb form, such as the Trevisan simple present,
the position targeted by clause-internally moved wh-elements appears to be situated below the cluster formed by the verb and the inverted subject clitic, as in (33):
(33) Trevisan

Ghe datu a chi e sarese $\qquad$ ? Dat give=you to who the cherries 'Who will you give the cherries to?'

The facts in (33) lead immediately to the first working hypothesis that I mentioned in the Introduction of this chapter, i.e. that Trevisan short movement of clause-internal wh-elements targets the periphery of $v \mathrm{P}$. Various authors have suggested that Romance wh-in situ targets Foc $_{\text {Low }}$ : Kato $(2003,2013)$ for Brazilian Portuguese, Belletti (2006) for French, Manzini (2014) for Northern Italian dialects. Given that Trevisan has an Italian-like periphery above $v \mathrm{P}$, as claimed in $\$ 2.1 .1$, $\mathrm{Foc}_{\text {Low }}$ is a suitable candidate for clause-internally moved wh-elements to target, as illustrated in (34):


However, this straightforward hypothesis is challenged by the distribution of clause-internal wh-elements in the presence of analytic verb tenses, such as the Trevisan present perfect (which in Trevisan, as in all regional varieties of Italian spoken in Northern Italy, has the value of a simple past). In fact, in constructions with analytic verb tenses, clause-internal wh-elements move below the linear position occupied by the active past participle, as in (35):
(35) Trevisan

Ghe gatu dato a chi e sarese $\qquad$ Dat have=you given to who the cherries 'Who have you given the cherries to?'

The linear position targeted by short movement in (35) constitutes a problem for the Wh -to-Foc analysis that I am pursuing here, at least superficially. In fact, if the wh-indirect object cuando ('when') moves into a $v \mathrm{P}$-peripheral Spec, one would expect the active past participle to follow it linearly, as in the example in (36), which is actually ungrammatical:
(36) Trevisan
${ }^{*}$ Ghe ga-tu a chi dato e sarese? Dat have=you to who given the cherries

Fortunately, the Wh-to-Foc hypothesis can be reconciled with the ungrammaticality of (36) in a relatively uncomplicated fashion. Cinque (1999) provided substantial cross-linguistic evidence for the treatment of adverbs as located in the Specs of rigidly-ordered functional projections (FPs) within IP. The position(s) occupied by adverbials is provided in (37); note that more than one FP can be active at the same time, as exemplified in Cinque's Standard Italian example in (38):
(37) LOCATION OF ADVERBIALS WITHIN IP
$\ldots\left[_{\mathrm{IP}} \mathrm{T}^{0}\left[{ }_{\mathrm{LP}}\right.\right.$ adverbial $\mathrm{F}^{\circ} \ldots\left[_{\mathrm{VP}} \mathrm{v}^{\circ}\left[_{\mathrm{VP}} \mathrm{V}^{0}\right] \mathrm{J}\right]$
(38) Italian
a. Da allora, non hanno di solito mica più sempre since then NEG have usually NEG any longer always completamente put everything well in order completely rimesso tutto bene in ordine '[...] they haven't usually not any longer always put everything well in order' (adapted from Cinque 1999: $45(1 ; 3)$ )
b. [ solitamente X [ mica X [ già X [ più X [ sempre X ... [vp $]$ ]]]]]]]

The presence of an Italian-like IP-internal functional layer in which adverbials are externally-merged can also be observed in Trevisan, as illustrated in (39):
(39) Trevisan

Da lora, no i gà mia pì sempre rimesso tuto since then NEG they have NEG any longer always put everything ben a posto
well in order
'Since then, they haven't usually any longer always put everything well in order'
Cinque also noted that in Italian '(active) past participles must move to the head to the left of tutto ['all']' (p. 46). This claim can also be extended to Trevisan, as illustrated in (40):
(40) Trevisan
a. A gà magnà tuto
she $=$ has eaten all
'She ate everything'
b. *A gà tuto magnà
she $=$ has all eaten
Under Cinque's analysis, the active past participle in (40a) must be moved from its vP-internal position. I argue that tuto occupies the head of an FP located higher than $v \mathrm{P}$ (FP1 here), and the active past participle obligatorily moves to the head of the FP merged immediately above (FP2), as in (41):
(41)

MOVEMENT OF THE PAST PARTICIPLE PAST TUTO


Given (41), the order displayed in examples like (35) follows straightforwardly, as in (42):
(42) WH-TO-FOC AND MOVEMENT OF THE PAST PARTICIPLE


To summarise, my proposal is that Trevisan and related varieties license instances of fake wh-in situ, which are actually derived through short movement of the clause-internal wh-element. I have provided substantial evidence in favour of treating Belletti's (2004) $\mathrm{Foc}_{\text {Low }}$, in the low periphery of the clause, as the position targeted by this type of movement. In addition, I have claimed that the mandatory status of this movement strongly suggests that it must be feature-driven, i.e. syntactic movement, which I explore in more detail in $\$ 2.2$. From my analysis in terms of Wh-to-Foc, it follows that the clause-internal Foc Low must be compatible with both wh-elements and foci, like the left-peripheral Focus HIGH (Rizzi 1997, Rizzi \& Bocci 2017, a.o.). I shall argue in Chapter 3, however, that the feature that triggers left-peripheral movement into SpecFocus ${ }_{\text {HIGH }}$ is unlikely to be the same as the feature that probes short movement of clause-internal wh-elements into $\mathrm{SpecFoc}_{\text {Low }}$.

### 2.2 Checking C in the presence of Wh-to-Foc: Preliminary investigation

The Wh-to-Foc analysis detailed in $\$ 2.1 .3$ raises (at least) three questions. The first concerns the unexpected unavailability of $\mathrm{Foc}_{\text {Low }}$ for wh-in situ in Standard Italian. Two further questions concern the nature of the feature that triggers short movement into the Spec of $\mathrm{Foc}_{\text {Low }}$, and the way in which the interrogative feature(s) in C are checked in the absence of movement of any (overt) material to the CP-domain. I address these questions in the following sections, then provide a refined analysis in Chapter 3, based on an adaptation of Cable's (2010) grammar of Q. What I shall claim is that, contra Rizzi (1990), interrogative wh-elements are not positively specified for [q] and [wh]: [q] is indeed checked independently in C by the (silent) Q-particle, while wh-elements are endowed with either an interpretable [foc] or an interpretable [wh] feature, depending on the context.
2.2.1 On [wh]- and [q]-features

Wh-words are used in interrogative sentences, though not exclusively. Observe the distribution of the wh-adverbial dove ('where') in (43):
(43) Trevisan
a. Dove ve se-o conossui?
where you each.other=you met
'Where did you meet?'
b. El ristorante dove che ve sé conossui
the restaurant where that each.other are met
'The restaurant where you met'
While (43a) is an instance of interrogative, (43b) is a relative clause. Rizzi (1990) argued that wh-words are associated with both [+wh] and [+q] features. Their specification changes depending on the context, as outlined in Table 2.1:

Table 2.1 Featural specifications of wh-words

|  |  | Interrogatives | Relatives |
| :---: | :---: | :---: | :---: |
| WH-wORD | $[\mathrm{wh}]$ | + | + |
|  | $[\mathrm{q}]$ | + | - |

The analysis that assumes that wh-words have positive settings for both [wh] and [q], which I explore here but abandon later, has one major consequence for wh-questions: it requires that both features must be properly checked in the derivation to ensure that the structure is correctly interpreted as an answer-seeking interrogative. Under these assumptions, Kato (2003) proposed a derivation along the lines of (45) for Brazilian Portuguese in situ questions such as (44). In her approach, the [q] and the [wh] features to be checked are located in the CP-domain and in $\mathrm{Foc}_{\text {Low }}$, respectively:
(44) Brazilian Portuguese (adapted from Kato 2003)

Você viu quem?
you saw who
'Who did you see?'
(45) Kato's (2003) derivation of brazilian portuguese wh-in situ


The derivation in (45) was extended to French wh-in situ in Belletti (2006). Unfortunately, however, I have reasons to believe that Wh-to-Foc is actually unavailable in Contemporary Spoken French, as I suggest in Chapter 5. In contrast, in my understanding, prima facie nothing rules out the extension of (45) to Trevisan, as outlined in (46):

$$
\begin{align*}
& \text { PLAUSIBLE DERIVATION OF TREVISAN WH-IN SITU }  \tag{46}\\
& \\
& {\left[\begin{array}{lll}
{ }_{\mathrm{CP}} \ldots \phi_{+\mathrm{Q}} \cdots & \text { ga-tu } & \text { visto }\left[\begin{array}{ll}
\mathrm{Foc} & \\
& \text { chi }\left[\phi _ { + \mathrm { WH } } \left[{ }_{v \mathrm{P}} \cdots\right.\right.
\end{array}\right]
\end{array}\right.}
\end{align*}
$$

Nevertheless, a derivation of Trevisan wh-in situ along the lines of (46) fails to explain why wh-in situ is excluded in closely-related Standard Italian but perfectly fine in the regional variety of Italian spoken in the Veneto region (and elsewhere), as observed in the Introduction. It is clear that the contrast between Standard Italian and Trevisan cannot be linked to the absence or presence of subject-clitic inversion, given that non-standard Italian and Brazilian Portuguese are clearly able to license wh-in situ in the absence of subject-clitic inversion. In fact, wh-in situ in the absence of subject-clitic inversion is also attested in many Northern Italian varieties, as claimed in Manzini \& Savoia $(2005 ; 2011)$ and discussed in Chapter 1 of this book. The explanation for this puzzling phenomenon must instead be connected to the way(s) in which the features relevant to interrogative wh-movement are checked.

Miyagawa (2001) argued that languages that allow for wh-in situ check [+wh] TP-internally and only [+q] in C, while languages that require wh-fronting (such as English, Standard Italian, etc.) must check both features in C. In the spirit of Miyagawa's work, it could be tempting to say that the difference between Standard Italian on the one hand and the non-standard variety and Trevisan on the other is parametrised and resides in the locus where the relevant interrogative features are checked.

In what follows, I shall argue that a finer explanation can be provided, which is linked not only to the location of interrogative features but also to the complex structure of wh-elements. I shall compare two different analyses: one proposed for Northern Italian dialects by Poletto \& Pollock starting from their (2004) paper, which is crucially based on the morphosyntax of wh-doubling, and a more recent one, Cable's (2010) work on the interrogatives of languages with phonetically-realised Q-particles. I shall argue that Poletto \& Pollock's analysis of wh-in situ as an instance of silent wh-doubling has a number of weaknesses that make it difficult to extend cross-linguistically (\$2.2.2); my discussion will then result in a re-adaptation
of Cable's work on the grammar of Q. Crucially, I relate the seemingly-optional alternation between in situ and ex situ observed in Trevisan to the existence of both strategies of QP-selection and Q(P)-adjunction, and claim that [q] is indeed checked in C, only not by the wh-element itself but by the Q-particle (\$2.2.3).

### 2.2.2 On bipartite wh-words

Starting from Poletto \& Pollock (2004), it has been proposed that the internal structure of Northern Italian wh-words is bipartite, as I shall outline here. This model, which relies on the existence of wh-elements merged within big DPs of the 'clitic-phrase' type, has some formal and data-related problems which render it a theoretically-undesirable explanation for the seemingly-optional in situ/ex situ alternation found in Romance.

As argued in Chapter 1 of this book, many Northern Italian dialects have whdoubling (Poletto \& Pollock 2004;2005, Manzini \& Savoia 2005; 2011), which makes their wh-questions unique in the Romance domain. An example of wh-doubling is provided in (47):
(47) Monnese (Poletto \& Pollock 2005: 141 (16))

Ngo fet majà ngont?
where do=you eat where
'Where do you eat?'
The two wh-words in configurations such as (47) do not give rise to a multiple-wh interpretation, but rather to a single-wh reading. In these varieties, wh-doubling co-exists with single wh-fronting of the type in (48a) and single wh-in situ, as in (48b), with no semantic change:
(48) Monnese (Poletto \& Pollock 2005: 136(2))
a. Ngo fet majà?
where do=you eat
b. Fet majà ngont?
do=you eat where
On the basis of instances of non-interrogative Romance clitic doubling such as those in (49), which are argued to start out as complex DPs along the lines of (50) by some authors including Kayne (1991) and Uriagereka (1996), Poletto \& Pollock (2005) claimed that the two wh-items found in cases of wh-doubling such as (47) must be merged within bipartite interrogative clitic phrases, like those in (51):
(49) ROMANCE CLITIC DOUBLING
a. Spanish (adapted from Poletto \& Pollock 2005: 140 (13))

Lo vi a Juan
him saw $_{\text {lps }}$ to Juan
'I saw Juan'
b. French

Il me parle à moi
he to.me speaks to me
'He's speaking to me'
(50) THE CLitic Phrase (Poletto \& Pollock 2005: 140 (14))
[ClP a Juan [ lo ]]
(51) interrogative clp in nids (Poletto \& Pollock 2005: 141 (17))
[CIP ngont [ ngo ]]
In Poletto \& Pollock's analysis shown in (51), the wh-clitic realises the head of the complex interrogative clitic phrase, whose Spec is occupied by the non-clitic wh-element. On the basis of this claim, the authors argue that sentences like (48a) and (48b) only differ from the overt wh-doubling exemplified in (47) in that the former has a null wh-clitic, as illustrated in (52a), and the latter a null non-clitic form, as in (52b):
(52) INTERROGATIVE CLP IN NIDS (ii)
a. [[CIP ngont [ ø ]]
b. [[ ${ }_{\mathrm{ClP}} \varnothing[$ ngo $\left.]\right]$

In their account, cases of wh-in situ like (53) are roughly derived as in (54). Remember that, in their remnant-IP movement analysis, both wh-in situ and wh-fronting target the CP. Crucially, in the case of single wh-in situ, the interrogative ClP moves to the lower portion of the CP , and then at the end of the derivation its silent head moves further to a position higher than ForceP; a more detailed discussion of their derivations is provided in Chapter 5 of this monograph.
(53) Bellunese (Poletto \& Pollock 2000: 118 (5))

Ha-tu parecià che?
have=you prepared what
'What did you prepare?'
(54) PROJECTIONS TARGETED BY INTERROGATIVE CLITIC-PHRASES
a. Input: tu ha parecià [CIP che [ø ]]
b. ClP moves to Op1P, in the lower portion of the CP: $\left[_{\mathrm{Op1P}}\left[{ }_{\mathrm{ClP}} \text { che }[\varnothing]\right]_{\mathrm{i}} \mathrm{Op1}^{\circ}\left[_{\mathrm{IP}}\right.\right.$ tu ha parecià $\qquad$ l]
c. IP-internal elements move to higher FPs for feature-checking; subsequently, the silent part of ClP moves to SpecOp2P:

[ IP —— $\quad$ ] $]$
A derivation along the lines of (54) can only account for the special properties of Bellunese and similar varieties, as I shall argue in Chapter 5. However, extending this analysis of wh-words as joined within clitic phrases to the wider cross-linguistic domain might not seem unreasonable at first glance. In what follows, I discuss this hypothesis, and then show why it should be rejected.

### 2.2.2.1 On the illegitimacy of an extension of interrogative ClPs to all Northern Italian dialects

Wh-doubling is widely attested in Northern Italian dialects, both in Lombard and in those Venetan varieties which license optional wh-in situ. An extension of Poletto \& Pollock's analysis of interrogative ClPs to Trevisan (and beyond) does not therefore seem undesirable per se. However, this requires at least a modification of the proposed analysis. It appears redundant and unnecessary to posit the existence of both bipartite structures in (52), repeated here as (55): the existence of a special silent clitic wh-word, i.e. only of the structure in (55a), would be enough to account for the Trevisan facts under investigation.

EXTENDING CLP TO TREVISAN: MINIMALLY-NEEDED INGREDIENTS
a. [[ClP ngont [ $\varnothing]]$
b. $\mathbb{E}_{\text {EP }} \phi[$ nge $]=$ unnecessary!

To exclude the structure in (55b) would mean that Northern Italian dialects do not have a double series of phonologically identical wh-words, but only a silent wh-word which can (but does not necessarily) merge with an overt wh-word within an interrogative CIP, along the lines of (56b):
(56) PLAUSIbLE EXTENSION OF INTERROGATIVE CLP TO TREVISAN
a. option 1: bare wh-word: cuando ('when') ${ }^{21}$
b. option 2: non clitic wh-word and silent wh-clitic merged within a ClP:

21. The choice of cuando is arbitrary: it stands for any wh-word that surfaces either clause-internally or fronted.

This treatment of wh-elements is more economical than that proposed by Poletto \& Pollock. Moreover, for Trevisan, where virtually all wh-elements can be either fronted or clause-internally moved with no change in their phonological form, it provides a better explanation for the morphological identity: the bare wh-word is the same in both cases, but it merges within an interrogative ClP to be able to stay clause-internally. In this theoretical background, the main distinction between Standard Italian and Trevisan would be the presence of a silent wh-clitic and the possibility of merging wh-words within complex interrogative ClPs in the latter, as in (56b), which is ruled out in Standard Italian. The fact that wh-words cannot be merged within interrogative ClPs in Standard Italian is not surprising, given that complex ClPs simply do not form part of the grammar of the language. In contrast, Trevisan does have clitic doubling of the type seen in (49), though exclusively with datives, as in (57):
(57) Trevisan
*(Ghe) gò prestà tuti i me schei a Toni
Dat have ${ }_{1 p s}$ lent all the my money to Toni 'I lent all of my money to Toni'

Therefore, it is not clear how and why ClPs would be able to operate with any constituent in interrogatives, and apply only to datives in declaratives. Also, an analysis like (56) predicts that while in Trevisan it is possible for wh-elements to stop in $\mathrm{SpecFoc}_{\text {Low }}$ and check the relevant interrogative feature(s) in C silently via sub-extraction of the null wh-clitic, as in (58), Standard Italian needs to front the wh-word and check both [wh] and [q] in C, along the lines of (59):
(58) PLAUSIble extension of interrogative clp to trevisan (ii)

(59)

UNAVAILABILITY OF INTERROGATIVE CLP IN STANDARD ITALIAN


A consequence of the analysis in (59) is that the parametrisation of $\mathrm{Foc}_{\text {Low }}$ in the spirit of Miyagawa (2001) ceases to be valid: under these assumptions, in Standard Italian all features related to interrogative wh-movement are checked in C not because of a negative setting of the capacity for $\mathrm{Foc}_{\text {Low }}$ to host movement of wh-elements, but because the language has no wh-elements able to merge within complex ClPs. As most speakers of the Venetan regional Italian are also native
speakers of a Northern Italian dialect alongside Standard Italian, the felicity of wh-in situ could easily be attributed to the borrowing of dialectal-like bipartite wh-elements in Italian. That language-specific inherent properties of wh-words might play a role in their distribution, i.e. in the position that they target, has already been convincingly proven. Lee (1991) and Finer (2014), for example, discussed Korean-English code-switching data suggesting that wh-elements in code-switched sentences maintain the same distributional properties as in the original language. If the above analysis is correct, then the derivation of a non-standard wh-in-situ containing question is as given in (60):
(60) PLAUSIBLE EXTENSION OF INTERROGATIVE CLP TO VENETAN ITALIAN


However, it is not clear how the features related to interrogative wh-movement, [q] and [wh], might be checked in different peripheries when a wh-element stays clause-internally, primarily because in the case of total fronting they must both be checked in C. In fact, proposing that wh-movement first targets Foc ${ }_{\text {Low }}$ to check one feature and then proceeds further to check some other feature in Focus ${ }_{\text {HIGH }}$ would create a violation in terms of Criterial Freezing à la Rizzi (2004), since frozen-inplace elements cannot move further, and only sub-extraction out of them is possible (refer to $\$ 2.2 .3$ for a detailed discussion). Furthermore, the treatment of fronted wh-elements as bare is severely undermined by substantial data from languages with overt Q-particles, as discussed in Cable (2010). In $\$ 2.2 .3$, I briefly outline Cable's analysis of wh-fronting and wh-in situ in languages with overt Q-particles. I then adopt this analysis and discuss its consequences for the theory of Wh-to-Foc that I am developing. In what follows, it will become clear that a parametrisation of the loci where interrogative features are checked, à la Miyagawa, is indeed still desirable; an additional implementation of (phonetically-realised or silent) Q-particles in the computation of interrogatives, I argue, is then required in order to predict all the different cases of wh-in situ observed in the literature.

### 2.2.3 The grammar of Q and consequences for optional wh-in situ

Cable (2010) explored the interrogative morphosyntax of Tlingit, a Northern American language spoken in Alaska, making important claims regarding the interaction between (phonetically-realised and silent) Q-particles and wh-elements. I summarise his analysis in what follows and then apply it, with slight modifications,
to Trevisan. In a nutshell, I shall claim that the Trevisan optionality is connected to the presence of two strategies to integrate the silent Q-particle to wh-elements, one leading to overt fronting of the wh-element, the other to wh-in situ. The movement of clause-internal wh-elements will then be linked to a parametrisation of $\mathrm{Foc}_{\text {Low }}$ (instead of Focus ${ }_{\text {HIGH }}$ ) as the projection where [foc] is encoded and checked.

### 2.2.3.1 Cable's (2010) 'Grammar of Q’

Cable (2010) argues that in Tlingit wh-questions, the wh-element must precede the main predicate, and is typically clause-initial. The wh-element is followed by the Q-particle sá, which either directly follows the wh-element or directly follows a phrase containing the wh-element. The remaining material in the sentence typically follows the wh-element, with a strong tendency to follow the verb. An example is provided in (61), and a representation in (62):
(61) Tlingit (Cable 2010:3 (1), from Dauenhauer \& Dauenhauer 2000: 138) Wáa sá sh tudinookw i éesh?
how Q he feels your father 'How is your father feeling?'
(62) General form of a wh-question in tlingit (Cable 2010: 4 (2))
[S ... [ [ ... wh-word ... ] sá ] ... Main Predicate ... ]
Cable's main claims are that in Tlingit the structure of wh-elements is composite and that wh-fronting is actually not an instance of fronting of the wh-word itself but of fronting of the Q-particle, which leads to somewhat parasitic pied-piping of the wh-element. In his account, fronted wh-elements have the structure in (63):
(63) Q-projection


As in (63), in Tlingit a Q-particle takes its sister as its complement, with the result that a QP node immediately dominates the Q-particle and its sister. As a consequence, attraction of the Q -feature to the CP -domain entails that the entire QP projection is moved, as illustrated in (64):
(64) WH-FRONTING AS A SECONDARY EFFECT OF Q-MOVEMENT (Cable 2010: 39 (53))


On the basis of the analysis in (64), i.e. that wh-fronting languages are actually QP-fronting languages even when the Q-particle is silent, Cable proposes a new typology of wh-in situ languages. His claim is that wh-in situ languages comprise at least two distinct syntactic types:
i. languages where the Q -particle adjoins to its sister and moves to C alone (such as Japanese and Korean), which he calls ' Q -adjunction languages';
ii. languages where the Q-particle takes its sister as complement, as in QP-fronting languages, but QP-movement occurs covertly (such as Sinhala), which he calls 'Q-projection languages'.

In Q-adjunction languages, the Q-particle does not take its sister as complement, but rather adjoins to it. As a consequence, the node which immediately dominates the Q-particle and its sister is not a QP, but rather of the same type as the sister of Q , as outlined in (65):

Q-ADJUNCTION


In the case of Q-adjunction, Cable adopts Hagstrom's (1998) treatment of Japanese wh-questions, along the lines of the diagram in (66):


From (66), it follows that attraction by the Q-feature into the CP entails only that the Q-particle moves, while its sister, i.e. the wh-element, remains clause-internal. In a way, in languages of this type the Q-particle is more free: it does not enter a Spec-head configuration with any material in Spec and is able to move alone to C.

In contrast, in Q-projection in situ languages, the structure of wh-elements is the same as that posited for Tlingit in (63). In these languages, the only difference with respect to Tlingit lies in the timing of movement, which takes place here in covert syntax, along the lines of (67):
(67) covert QP-movement as a source of wh-in situ (Cable 2010: 86 (3))


Following Cable's convincing account, it is tempting to extend the analysis of wh-fronting in Tlingit as triggered by Q-probing to the fronting of wh-elements in Trevisan. I discuss this possibility in what follows, and then extend the analysis to the instances of wh-in situ.

### 2.2.3.2 Extending the theory of $Q$ to Trevisan wh-fronting

According to Cable, the Q-based analysis should be extended to wh-questions in all wh-fronting languages, i.e. in his account, no language exists in which wh-questions display direct attraction into the Left Periphery of the wh-word alone. His claim is supported by robust cross-linguistic data that suggest that the Q-particles analysis should also be extended to languages in which these particles are not phonetically-realised, including data on intervention and the felicity of wh-elements within islands to extraction which will prove crucial in the discussion of some of the Trevisan data in Chapter 4.

Let us therefore assume that Trevisan fronted wh-words have the structure in (68). Remember that I have thus far taken wh-words to be associated with a [wh;q] featural bundle, whence the [wh] feature in $\mathrm{Wh}^{\circ}$ and the [q] feature in the structural position occupied by the Q-particle. In Chapter 3, I shall actually claim that in direct wh-questions the featural specification of the wh-element that enters a relation with the silent Q-particle is [+foc] and that, while the [q]-feature is checked in C, the [foc]-feature is checked within T. For now, note that the Trevisan Q-particle, which carries the [q] feature, is null, as Cable posits for fronting languages like English:
(68) TREVISAN FRONTED WH-WORDS AS QPS


Note that, for short, I use the label WhP to refer to the lexical XP projected by the wh-element. Of course, WhPs can have different natures, but are mostly DPs or PPs in Romance. An analysis of fronted wh-words as in (68) predicts that in Trevisan the derivation of wh-fronting must be QP-fronting, taking place as shown in (69):
(69) TREVISAN WH-FRONTING AS A SECONDARY EFFECT OF Q-MOVEMENT


Cable (2010) canonically takes Rizzi's (1997) SpecFocus HIGH to be the landing site of fronted wh-elements, as I did in (69) for Trevisan. Let us now consider the case of (optional) wh-in situ. If Trevisan is to be considered a QP-language where wh-fronting is parasitic on Q-probing to C, as in (69), then a question arises regarding how QPs can remain clause-internal. A straightforward yet highly implausible explanation would be to connect this optional clause-internal QP-placement to an optionality in the timing of movement. In this framework, as in QP-languages that license answer-seeking wh-in situ felicitously, wh-words in Trevisan would appear clause-internally if QP-fronting is delayed to LF; in all other cases, movement to C would take place before Spell Out, and leads to QP-fronting. However, this explanation fails to account for at least two facts: (i) the distributional properties of subject-clitic inversion which suggest that all interrogative movement to C does indeed take place before Spell Out (as I argued extensively in Bonan 2019), and (ii) the case of wh-words that do not display optionality in the situ/ex situ alternation. Consider for instance the case of che ('what') in (70):
(70) Trevisan
a. Ga-tu fato che?
have=you done what
'What did you do?'
b. *Che ga-tu fato?
what have=you done
An explanation of the in situ/ex situ alternation as an instance of optionality in the timing of movement would fail to explain the data in (70). It appears more convincing to posit that wh-words can be associated with different underlying structures, and can therefore have different distributional properties. Given that the existence of overt Q-particles in many languages of the world is a clear indication that Q-particles should also be added to the computation in languages where these have no phonetic form, it is tempting to analyse the in situ/ex situ alternation found in Northern Italian dialects (and Romance in general) as an instance of the exceptional co-existence of both lexical strategies to join Q-particles to interrogative wh-words. That two semantically-related lexical or syntactic strategies might co-exist peacefully within a language is not surprising, and functions as an indicator of an intermediate step in the process of linguistic evolution, which will eventually result in the generalisation of one strategy at the expense of the other (Roberts 2007b; Ledgeway 2012, and many others). Under these assumptions, for Trevisan che to be only able to surface clause-internally is likely to indicate that this wh-word is one step ahead of all other wh-words in a process that is moving in the direction of generalised wh-in situ, as I shall claim in Chapter 5 . Now consider the examples in (71):
(71) Trevisan
a. Ga-tu fato cossa? have=you done what 'What did you do?'
b. Cossa ga-tu fato? what have=you done

Unlike che, ordinary wh-words such as cossa ('what') are able to merge within XPs with different inherent structures: QP-selected interrogative elements that are obligatorily fronted, as in (71b) and in the examples of QP-fronting discussed above, and Q-adjoining WhPs that stay clause-internally, as in (71a). I outline the structure of the latter in (72), again taking it to be a WhP:


If my intuition is correct, Trevisan is a mixed language, i.e. it is both Q-projecting and Q-adjoining at the same time. By extension, all languages that display optional wh-in situ should be analysed in the same way. In this theoretical approach, it is the very existence of both strategies for joining wh-elements and the (silent) Q-particle that makes both wh-in situ and (QP-)fronting available in Trevisan. In the rest of this book, I shall pursue this claim and shall treat optional wh-in situ as an intermediate stage in which both adjoining and projecting Q-particles exist, with interesting consequences for the treatment of wh-doubling, indirect wh-in situ and wh-in situ within islands, as discussed in Chapters 4 and 5.

Following the discussion in this section, the derivation of Trevisan wh-in situ can be tentatively taken to consist of the following steps:

1. the wh-word is of the Q-adjoining type and Wh-to-Foc takes place under Agreement with a relevant feature in $\mathrm{Foc}^{\circ}{ }_{\text {Low }}$, which I have so far taken to be [wh]. In Chapter 3, I shall provide extensive evidence that the relevant feature is in fact [foc]. Once Wh-Agreement has taken place, the Q-adjoining wh-element is probed into the Spec of $\mathrm{Foc}_{\text {Low }}$;
2. once the Q -adjoining wh-element is in $\mathrm{Foc}_{\text {Low }}$, it meets the relevant (Wh-) Criterion and is frozen in place under Criterial Freezing (Rizzi 1997 and later developments);
3. Under Cable's (2010) assumption that QP-fronting targets the left-peripheral FocusP, Focus ${ }_{\text {Higн }}^{\circ}$ must be the [q]-containing head relevant to the fronting of Q. Thus, Q-to-C must take place under Q-Agreement between Q itself and Focus ${ }_{\text {HIGH }}$. This movement out of the frozen-in-place wh-element is possible because it is an instance of sub-extraction, as I shall discuss shortly. The tentative derivation proposed in (58) therefore needs to be modified as in (73):
(73) WH-TO-FOC AND SUB-EXTRACTION OF Q INTO FOCUS HIGH


In Chapter 3, I shall argue in favour of [foc] as the triggering feature for clause-internal movement of wh-elements. For the time being, I shall briefly discuss the legitimacy, in the framework of Criteria (Rizzi 1997 and further developments), of an analysis of wh-in situ which includes splitting of the complex wh-element during the derivation.

### 2.2.3.3 Legitimacy of sub-extraction out of frozen wh-elements

In cartographic terms, the left-peripheral Focus ${ }_{\text {HIGH }}$ is taken to be a criterial position, in the sense of Rizzi (1997) and further developments. Criterial positions are dedicated functional positions where scope-discourse features are encoded, which are regulated by Criteria. The Criteria are specific principles that require a special relationship known as Spec-head agreement with respect to certain features ([+wh]
for questions, [+top] for topics, [+foc] for focus). ${ }^{22}$ Within criterial projections such as Focus ${ }_{\text {ніGн }}$ and TopicP(s), the functional head is endowed with the relevant scope-discourse feature, which acts as a criterial probe, i.e. it attracts a criterial goal (phrase bearing the matching scope-discourse feature) into its Spec, as in (74). The pertinent Criterion is satisfied via the Spec-head agreement thus created:

> SPEC-HEAD CONFIGURATION WITHIN A CRITERIAL PROJECTION $\left[{ }_{\mathrm{XP}}\right.$ criterial goal [ criterial probe $\left.]\right]$

In this theoretical framework, an analysis of Foc $_{\text {Low }}$ as criterial appears straightforward: this $v \mathrm{P}$-peripheral head must be endowed with a special Criterion that probes the wh-goal into its Spec. However, in standard cartographic terms, a phrase cannot pick up discourse-related properties from an intermediate position within an A'chain. This was formulated in Rizzi (2004) as a principle that blocks phrases in the position where they satisfy a relevant Criterion, namely Criterial Freezing (75):

CRITERIAL FREEZING (Rizzi 2004c)
A phrase meeting a Criterion is frozen in place.
As a result of Criterial Freezing, a phrase can be endowed with the discursive properties picked up from one and only one position. This might seem to constitute a problem for the analysis of Wh-to-Foc outlined here, whereby a part of the wh-element leaves the criterial $\mathrm{Foc}_{\text {Low }}$ to check an additional feature in C. In fact, this is not problematic: while extraction of whole frozen elements fails systematically, sub-extraction out of frozen-in-place elements has been convincingly shown to be felicitous (Rizzi \& Shlonsky 2007). Consequently, once wh-elements are frozen-in-place in $\mathrm{SpecFoc}_{\text {Low }}$, nothing bans probing of the Q-particle and its sub-extraction into the C-domain.

The preliminary analysis of Wh-to-Foc outlined so far, which is crucially based on the presence of a probing feature in $\mathrm{Foc}_{\text {Low }}{ }^{\circ}$ and on the special relationship between wh-words and Q even in languages in which Q is not phonetically realised, has two main theoretical advantages. First, a derivation in terms of Wh-to-Foc that relies on the presence of Q -adjoining WhPs in Trevisan versus their absence in Standard Italian accounts straightforwardly for the infelicity of wh-in situ in the latter: if all wh-elements in Standard Italian join within QPs, and wh-fronting is

[^12]parasitic to QP-fronting à la Cable (2010), then the unavailability of SpecFoc ${ }_{\text {Low }}$ as a landing site for Italian wh-words is explained. Second, an analysis of wh-in situ in terms of Wh-to-Foc that relies on the presence of both QP-selecting and Q-adjoining wh-words in Trevisan eliminates the spurious notion of proper optionality in the in situ/ex situ alternation, a property that is problematic for any theoretical account. In fact, my account explains the seemingly-optional alternation as a property that follows from how the Q-particle is merged within wh-words: the peculiarity of Trevisan and optional in situ languages, I claim, is not optional wh-movement but rather the exceptional existence of two strategies for integrating the (silent) Q-particle to wh-words: in the case of QP-selection, QP-fronting applies, while in the case of Q-adjunction, the wh-element remains clause-internal and the relevant interrogative feature(s) in C are checked via sub-extraction of the (silent) Q into C. Consequently, while the peculiarity of Trevisan resides in the presence of two strategies for joining Q , which should be analysed as a property that indicates the presence of an intermediate linguistic step in the evolution towards unmoved wh-in situ, Standard Italian is a very classic instance of a pure QP-language, whence the unavailability of wh-in situ. Similarly, Venetan Italian can borrow Trevisan Q-adjunction and leave wh-elements clause-internally, plausibly as a result of code-switching phenomena.

Note that the notion of adjunction is not entirely compatible with a cartographic approach. However, the strongest reason behind the decision to keep Q-adjunction here is that in Cable's (2010) account this operation is crucial for the felicitous computation of the semantics of wh-questions, and its legitimacy is supported by robust cross-linguistic data from languages with phonetically-realised Q-particles. The legitimacy of the operation could very plausibly be preserved by positing that the alternation is not between selection and adjunction but rather between the realisation of Q as either a free or a suffixal morpheme, eliminating adjunction in favour of a notion more widely accepted by cartographers. However, this is a minor detail that does not undermine the theory of Wh-to-Foc developed here; further investigations in this regard will therefore be left aside for further studies.

### 2.3 Intermediate remarks

The discussion outlined in this chapter is likely to provoke a common question, namely whether Wh-to-Foc is actually the overt realisation of cyclic wh-movement through the edge of $v \mathrm{P}$ (in line with much generative work, starting from Chomsky 1995). To my understanding, it is not, first and foremost because my work is crucially based on the assumption that the $v \mathrm{P}$ has a periphery à la Belletti (2004), and that it is precisely one of these $v \mathrm{P}$-peripheral functional heads that probes
clause-internal movement of wh-elements. Note that I am not claiming that interrogative movement of Trevisan wh-elements (or better, QPs) to the Left Periphery of the clause proceeds in one single step, violating successive-cyclicity, but simply that Trevisan fake wh-in situ is not an instance of cyclic wh-movement stopped at the edge of $v$ P. In Chapter 3, I shall actually claim that Wh-to-Foc is an instance of focus-movement taken under Focus-Agreement between the [foc]-feature on the Q-adjoining wh-word and its correspondent in $\mathrm{Foc}^{\circ}{ }_{\text {Low }}$.

Thus far, extending Cable's (2010) analysis of Q to Trevisan, I have proposed that Trevisan fronted wh-words are actually QPs, and that clause-internal wh-words are merged within complex, Q-adjoining wh-elements. This claim provides a preliminary explanation for the exceptional distribution of the what-word che in terms of a developmental stage peculiar to this precise wh-word, which can no longer be selected by the silent Q-particle, and is only compatible with Q-adjunction. This of course raises a question about the morphosyntax of Trevisan D-linked wh-elements, which can appear both fronted and clause-internally, with (for most speakers) a preference for fronting. Cable's (2010) analysis of D-linked wh-elements, based on Tlingit examples such as (76), is provided in (77):
(76) Tlingit (Cable 2010: 116 (32)) [ ${ }_{\mathrm{DP}}$ Aadóo yaagú ] sá ysiteen? who boat Q you.saw.it
'Whose boat did you see?'
(77) QP-Selection of tlingit d-Linked wh-elements (Cable 2010: 117 (34))


The extension of the analysis in (77) to Trevisan fronted D-linked wh-elements is straightforward. Similarly, along the lines of the discussion outlined so far, the possibility for Trevisan D-linked wh-elements to optionally surface clause-internally should be linked to the (partial) availability of Q-adjunction. The QP-fronting derivation that should be posited for a Trevisan question such as (78) is along the lines of (79):
(78) Trevisan

Che profesor ${ }_{i}$ preferissi-tu $\qquad$ ?
what professor prefer=you
'Which professor do you prefer?'


In this theoretical framework, the partial infelicity of D-linked wh-elements in clause-internal position for some speakers is a clear indication that the extension of Q-adjunction to D-linked wh-elements remains an ongoing process. Indeed, in Chapter 5 I shall suggest that languages seem to evolve in the direction of generalised Q-adjunction, and of unmoved wh-in situ. A more thorough historical investigation would be required to answer this question with certainty, and I leave this aside for further work.

For now, bearing in mind that what triggers Q -to- C is a [q]-feature in the head of Focus HIGH à la Cable, let us move on to the identification of the feature responsible for the short movement that wh-elements undergo clause-internally in languages like Trevisan.

## CHAPTER 3

## Wh-to-Foc is focus-driven

In Chapter 2, I characterised the locus targeted by Trevisan short movement of whelements as $\mathrm{Foc}_{\text {Low }}$, within Belletti's (2004) $v$ P-periphery. I first provided evidence in support of the existence of a $v \mathrm{P}$-periphery in Trevisan, and then investigated the ways in which wh-elements are able to surface either clause-internally or clauseinitially, with specific focus on the mechanisms of feature-checking in C that operate when no phonetically-overt movement of interrogative material to C can be detected. Crucially, I adopted an analysis à la Cable (2010), claiming that the apparent optionality observed in the in situ/ex situ alternation is actually better explained by assuming that it results from the existence of two means of integrating the silent Q-particle into wh-elements: Q-projection, leading to fronting, and QP-adjunction, leading to wh-in situ. I believe that this treatment of 'optional wh-in situ' as the result of two strategies for integrating Q into wh-elements ought to be extended to all languages in which wh-elements are able to surface either in the Left Periphery of the clause or within TP, with interesting theoretical consequences that I shall address in the following chapters.

However, my analysis is not sufficient to explain all the Trevisan facts, since it fails to account for the fact that Q-adjoining wh-elements, which stay clause-internal as a result of $Q$ being able to check the relevant [q]-feature in $C$ alone, do not undergo short movement in all languages that license wh-in situ. The working hypothesis behind this chapter is that, if the feature to be checked in genuine wh-questions is [q], this is checked in C by the silent Q-particle, while a different feature must be responsible for short TP-internal movement. Given that the targeted Spec is that of a focal projection, I shall pursue the possibility that the feature relevant for Wh-to-Foc is [foc]. Crucially, this would predict that most languages that are able to license wh-in situ have Q-adjoining wh-elements, and that in these languages wh-in situ is possible because the [q]-bearing Q-particle agrees with the [q]-feature in Focus ${ }_{\text {HIGH }}$, and undergoes movement into SpecFocus ${ }_{\text {HIGH }}$ alone. With regard to [wh], I shall argue that its presence on the Q-particle ought to be posited only in the case of wh-doubling.

As for the theory of Wh-to-Foc which I develop further here, only a subclass of the languages that license wh-in situ also have short movement into $\mathrm{SpecFoc}_{\text {Low }}$, probed by the [foc]-feature in $\mathrm{Foc}^{\circ}{ }_{\text {Low }}$. In a framework where wh-elements are known to display striking behavioural similarities to focused constituents, it is not
surprising that Q -adjoining structures, which are in fact complex WhPs, are able to agree with, and be probed by, a [foc]-feature. One question that arises is whether in QP-selecting wh-elements, which are actually QPs, the [foc]-feature becomes somewhat irrelevant; I shall discuss this issue in Chapter 5. Trevisan wh-in situ must therefore be derived along the following lines:
i. establishment of an Agree relation between the focus feature in $\mathrm{Foc}^{\circ}{ }_{\text {Low }}$ and the [foc]-feature of the Q-adjoining wh-element, with subsequent probing thereof into SpecFoc $_{\text {Low }}$;
ii. establishment of an Agree relation between Focus ${ }_{\text {HIGH }}$ and the [q]-feature in the Q -adjoining WhP, with subsequent movement of Q into SpecFocus $_{\text {HIGH }}$

A prediction of the working hypothesis that I shall pursue here is that while both stages are relevant for some wh-in situ languages, such as Trevisan, other wh-in situ languages only have stage (ii), namely those that do not display clause-internal movement of wh-elements. Later, I shall claim that what differentiates languages is actually their ability to check both interrogative features in C, or to scatter them between C and T and, in the latter case, the presence or absence of a clause-internal movement triggering EPP feature in T.

Here, in the spirit of many authors who have argued in favour of focus movement (or 'non-wh-movement') of clause-internal wh-elements (Horvath 1986; Rochemont 1986; É. Kiss 1995; Bošković 1997; Ndayiragije 1999; Kahnemuyipour 2001, a.o.), I shall argue that the parallelism between the movement of focused elements and that of clause-internal wh-elements indicates that Q -adjoining WhPs must be inherently focused and must undergo clause-internal movement for focus purposes when a focus-feature is present in the periphery of $v P$. Horvath (1986) claimed that whenever languages have a special position for contrastively-focused constituents, this will also be available for wh-elements, which she justifies on the basis of the interpretational similarities displayed by focused constituents and wh-elements. Here, I show that her claim is tenable for Trevisan. Alongside the analyses mentioned previously that take Brazilian Portuguese and French wh-in situ to be moved to SpecFoc $_{\text {Low }}$ (Kato 2003, 2013 and Belletti 2006), it has also been proposed that wh-in situ in some non-Romance languages targets a low focal projection (be it $\mathrm{Foc}_{\text {Low }}$ or the edge of $v \mathrm{P}$ ), as widely discussed in Cheng \& Bayer (2017). Studies that have adopted this approach include Jayaseelan (1996) for Malayalam, Mahajan (1990), Manetta (2010) and Dayal (2017) for Bangla and Hindi-Urdu, Aboh (2006) for Aghem, Sinopoulou (2008) for Greek, and Kahnemuyipour (2001) for Persian.

These works constitute the basis of the analysis of focus-driven Wh-to-Foc that I develop here.

## Organisation of this chapter

The chapter opens with an overview of instances of Wh-to-Foc attested outside of the Romance family in $\S 3.1$ : I shall discuss, in turn, Malayalam (\$3.1.1), Bangla and Hindi-Urdu (\$3.1.2), Bantu (\$3.1.3), Greek (\$3.1.4), and Persian (\$3.1.5). This section is significantly inspired by Cheng \& Bayer's (2017) discussion, which to the best of my knowledge is the most detailed existing overview of languages with TP-internally moved clause-internal wh-elements. Then, in $\S 3.2$, I present and discuss Kahnemuyipour's (2001) claim in favour of non-wh-movement of clause-internal wh-elements in Persian (\$3.2.1), which I then extend to Trevisan (\$3.2.2). This approach will have interesting consequences for the theory of Northern Italian wh-in situ, as I argue in Chapter 5.

### 3.1 A typologically interesting type between full moving and in situ languages

In their overview of current approaches to wh-in situ theories, Cheng and Bayer (2017) discuss a number of proposals that argue that, in some languages, what has been taken to be wh-in situ is actually overt wh-movement, albeit not into a Spec in C, but to a lower position to the left of $v \mathrm{P}$. These works, which I shall survey in what follows, were developed in the spirit of Kayne's (1994) theory of a universal base whereby all languages are underlyingly head-initial, hence linear OV-orders are always derived.

### 3.1.1 Malayalam

Malayalam is a Dravidian SOV-language. Assuming an underlyingly head-initial vp directly dominated by a focus projection (FocP in his terms, very plausibly Belletti's $2004 \mathrm{Foc}_{\text {Low }}$ ), Jayaseelan (1996) argues for overt clause-internal wh-movement in this language. His discussion takes on Kayne's (1994) universal 'head > complement' order and assumes that the wh-elements of Malayalam are first-merged in a post-verbal position, where only non-focused elements can appear at Spell-Out. Since wh-elements are intrinsically focused, they must undergo movement into the Spec of FocP to check the relevant [foc]-feature. According to Jayaseelan, the resulting structure in which the wh-element occurs to the immediate left of the verb, as in (1), looks like proper wh-in situ because the rest of the vp-internal material must be evacuated from vp:
(1) Malayalam (adapted from Jayaseelan 1996: 7(1-2))
a. nin-ne ${ }_{\text {Do }} \underline{\text { aar }}_{\text {wh-s }} \underline{\text { talli }}_{\mathrm{v}}$ ?
you=ACC who beat ${ }_{\text {past }}$
'Who beat you?'
b. $\underline{\text { awan }}_{s}$ ewiDe $_{\text {wh-ADV }}$ pooyi ${ }_{v}$ ?
he where went
'Where did he go?'
According to Jayaseelan, a strong empirical motivation for his claim is that the unmarked word order SOV changes into OSV iff the subject is a wh-element. Observe the ungrammaticality of SOV in the presence of a wh-subject in (2):
(2) Malayalam (adapted from Jayaseelan 1996: 7 (1))
${ }^{*} \underline{\text { aar }}_{\text {wh-s }} \underline{\text { nin-ne }}_{\text {Do }} \underline{\text { talli }}_{\mathrm{V}}$ ?
who $y o u=A C C$ beat $_{\text {past }}$
On this account, the wh-subject moves to the clause-internal SpecFocP while the object must move higher (Jayaseelan calls this a 'vp-vacating movement'). The example in (1a) is derived along the lines of (3):
(3) Malayalam (Jayaseelan 1996: 9 (8))


For Jayseelan, the question of whether the underlying order is Head-Complement or Complement-Head is actually irrelevant: in either case, VP-vacating movements and a FocP higher than VP are needed to derive the Malayalam facts. Other South Asian SOV-languages seem to be less strict than Malayalam. Nonetheless, most of them display a strong tendency to keep the wh-element to the immediate left of the verb at Spell-Out.

### 3.1.2 Bangla and Hindi-Urdu

According to work by Mahajan (1990), and more recently Dayal (2017), the word order for wh-elements in SOV Hindi-Urdu is not as strict as in Malayalam. Malayalam shows no indication of any activation of the left cP-edge in extraction: if wh-elements do move, they usually stop at SpecFoc $_{\text {Low }}$, but never at a left-peripheral Spec.

In Hindi-Urdu, finite complements often come to the right of the verb, as in the examples in (4):
(4) Hindi-Urdu (adapted from Dayal 2017: 159 (1a))
a. anu-ne kalam khariidaa
a-erg pen bought
'Anu bought a pen'
b. anu-ne kyaa khariidaa
a-ERG what bought
'What did Anu buy?'
There is evidence that wh-elements can move higher than the pre-verbal position. Consider the following cases, where the wh-element is in pre-verbal position in the (a) examples, but in the neutral position in the (b) examples for subjects and indirect objects:
(5) Hindi-Urdu (adapted from Dayal 2017: 160 (2))
a. yeh kavitaa kis-ne likhii?
this poem who-erg wrote
'Who wrote this poem?'
b. kis-ne yeh kavitaa likhii?
who-erg this poem wrote
(6) Hindi-Urdu (adapted from Dayal 2017: 160 (3))
a. tum-ne paisaa kis-ko diyaa
you-erg money who-dat gave
'Who did you give the money to?'
b. tum-ne kis-ko paisaa diyaa
you-erg who-dat money gave
According to Dayal (2017), in the orders in (a) and (b) are both acceptable, with a preference for the pre-verbal position. It has been claimed that the pre-verbal position is a focus position to which wh-elements move (Kidwai 2000; Manetta 2010), with the alternative orders being derived through scrambling. Manetta posits the derivations in (8) and (10) for simple mono-clausal interrogatives questioning over subject and object positions, such as (7) and (9):
(7) Hindi-Urdu (Manetta 2010: 8 (27))
hamid-ko kis-ne ma:ra:
hamid-ACC who-ERG hit
'Who hit Hamid?'
(8) DERIVATION of hindi-urdu subject questions (adapted from Manetta 2010: 8 (28))


Note that in (8) a minimalist distinction between two types of features is made, namely the interpretable $(i)$ and uninterpretable $(u)$ features. This classification, introduced in Chomsky (1995), distinguishes between features that have semantic content and those that do not. What happens in derivations such as (8) is that $\mathrm{v}^{\circ}$ probes its domain, which includes its Spec, and values its uninterpretable [wh]-feature and EPP-feature via interaction with the moved wh-element in SpecvP ('Move', in minimalist terms). $\mathrm{C}^{\circ}$ then probes its domain and values its uninterpretable [wh]-feature via interaction with the wh-element at the leftmost edge of $v \mathrm{P}$, an operation called 'Agree'. This operation values the uninterpretable Q-feature of the wh-element, hence building a Logical Form that can be successfully interpreted as a direct question. The observed word order results from successive scrambling of the object, which allows the wh-element to surface in the pre-verbal position.

When the questioned element is the object, the derivation of the simple question follows the same path, except that the subject is to be scrambled to yield the right word order. Observe (9) and its derivation in (10):
(9) Hindi-Urdu (adapted from Manetta 2010: 8 (29))
hamid-ne kya: ci:z dekhi:
Hamid-erg what thing saw
'What thing did Hamid see?'
(10) Derivation of hindi-urdu object questions (adapted from Manetta 2010: 8 (30))


A similar claim has been made by Jayaseelan (2001), who argues that a Q-operator resides in the Left Periphery of the clause, more precisely in ForceP, the phrase that encodes the illocutionary force of the sentence. From Force, Q binds the wh-element moved into the Spec of $\mathrm{Foc}_{\text {Low }}$. For Cheng \& Bayer (2017), Q plausibly checks an uninterpretable counterpart of Q within the wh-element. Regardless of the precise role played by Q, according to Jayaseelan (2001) and importantly for the purposes of this book, wh-movement is split: the wh-element first moves to a low focal projection $\left(\mathrm{Foc}_{\text {Low }}\right)$, and then comes under the control of a Force head which is base-generated. Thus, in contrast to what I have claimed so far for Trevisan, there is no movement to SpecCP in Hindi-Urdu. I shall later claim that movement (rather than base-generation) of a silent Q-particle in Trevisan is indeed required. Note that works like Manetta's follow the Minimalist Program, where $v \mathrm{P}$ is considered a phase-head, and is hence a good candidate to host clause-internally moved wh-elements. I would suggest that $\operatorname{Spec} v \mathrm{P}$ is the Minimalist counterpart of the SpecFoc $_{\text {Low }}$ position adopted in non-minimalist works such as this book.

For Cheng and Bayer (2017), the evidence discussed so far means that South Asian wh-in situ is actually an instance of overt movement to the left edge of $v \mathrm{P}$. There is in fact no evidence for wh-movement to the cp-domain in these languages, with the sole exception of the V2-language Kashmiri. Consequently, the South Asian languages under investigation are argued to form a "typologically interesting and significant type between full moving and in-situ languages" (p. 21). In this regard, Trevisan appears to be the Romance counterpart of these languages.

### 3.1.3 Bantu languages

A similar discussion of proper wh-in situ as opposed to clause-internal wh-elements moved to $\mathrm{Foc}_{\text {Low }}$ has also been carried out in the Bantu linguistics literature. It has indeed been claimed for many Bantu languages that non-subject wh-elements surface immediately after the verb. In Zulu, as in other Bantu languages, the word order in the unmarked case is $(\mathrm{S})>\mathrm{V}>(\mathrm{IO})>(\mathrm{DO})$, with locative and temporal adjuncts following the arguments, as in (11):
(11) Zulu(Cheng \& Downing 2012: 247 (1) $)^{23}$
ú-Síph' ú-phék' ín-ku:khu) kwá-m' ízo:lo)
1-Sipho 1subj-cooked 9-chicken 17-1sG yesterday
'Sipho cooked chicken at my place yesterday'
Nonetheless, word order is often flexible, and information structure plays a central role in licensing alternative word orders. For example, since early works on Aghem such as Hyman (1979) and Watters (1979), it has been known that in many Bantu languages certain focused elements must occur Immediately After the Verb (in so-called IAV-position). In Zulu, according to Cheng \& Downing (2012), this requirement holds for new information focus (à la Belletti 2004): both question words and answers corresponding to the question words need to appear in IAV position, as in (12):
(12) Zulu (Cheng \& Downing 2012: 248 (3)) ${ }^{24}$
a. Canonical order: V > IO > Do bá-níké ú-Síphó í-mà:li)
2subj-give 1-Sipho 9-money 'They gave Sipho money'
b. Non-canonical order showing obligatory IAV focus: $\mathrm{V}>\mathrm{DO}>\mathrm{IO}$ Question: bá-m-níké:-ni) ú-Sî:phó)? 2subj-1Obj-give-what 1-Sipho 'What did they give to Sipho?'
c. Answer: bá-m-níké: í-ma:li) ú-Si:pho) 2subj-lobj-give 9-money 1-Sipho 'They gave money to Sipho'

Aboh (2006), published as Aboh (2007), argues for a focus-movement analysis of non-subject wh-elements in Aghem: in his account, the 'immediately after the verb' position is the low focus position $\left(\mathrm{Foc}_{\text {Low }}\right)$. Much of the literature (Hyman 1979; Watters 1979, a.o.) has argued that focused constituents and wh-elements must occur in a position right-adjacent to the verb in Aghem. The position, which has been argued to be unrelated to Case, can host any focused category or wh-element. The unmarked declarative order in Aghem is provided in (13):

[^13](13) Aghem (adapted from Aboh 2007: 89 (23), originally in Hyman 2005: 1) ${ }^{25}$

Tí-bvú tì-bìghà mô zì kí-bé né
dogs two P1 eat fufu today
'The two dogs ate fufu today'
From (13) it follows that the unmarked declarative order in Aghem is $S>$ Aux $>$ $\mathrm{V}>$ (Focus) $>\mathrm{O}>$ Adj. Now observe the position occupied by the focused constituents in (14):
(14) Aghem (adapted from Aboh, 2007: 90 (24), originally in Hyman, 2005: 1 \& Biloa 1997: 46)
a. Énáo mò án 'sóm zi [bé-kó]

Inah Past in farm eat fufu
'Inah ate FUFU in the farm'
b. Á mò zi [énáo] bé-kó án 'sóm
expl Past eat Inah fufu in farm
'INAH ate fufu in the farm'
c. Tí-bvú tì-bìghà mô zì [né] bé-kó
dogs two Past eat today fufu
'The two dogs ate fufu today'
d. Fil a-mo-zi [ang wo] be'-ko
friends SM-P2-eat with hand fufu
'It was WITH (THEIR) HANDS that the friends ate fufu'
Compared to its unmarked counterpart in (13), Example (14a) illustrates that a contrastively focused object (bé-kó) needs to follow the verb (zi). The subject occurs in the canonical pre-verbal position, while the locative adjunct án 'sóm ('in the farm') is displaced to a pre-verbal position, which forces the object to occur last in the sentence. In contrast, the position of the focused subject in (14b), following the verb and preceding both the theme (bé-kó) and the locative pp (án 'sóm), indicates that the focus position is non-sentence-final. Note also that the canonical subject position is filled by an expletive (á), which is never realised when a proper subject occupies this position. Similarly, the examples in (14c) and (14d) respectively show that a focused adjunct or PP immediately follows the verb. In both cases, the focused constituent occurs in a different position than the one it occupies in the unmarked case. Interestingly, Hyman (2005) argues that Aghem wh-elements occur in the same focus position as the focused constituents in (14), i.e. immediately after the verb (IAV). Observe the examples in (15):

[^14](15) Aghem (adapted from Aboh 2007: 90 (25))
a. Tí-bvú tì-bìghà mô zì [zín] bé-kó?
dogs two Past eat when fufu
'When did the two dogs eat fufu?'
b. À mò zì [ndúghó] bé-kó né à? EXPL Past eat who fufu today QM 'Who ate fufu today?'

Aboh explains that unlike other Bantu languages, Aghem excludes both total whfronting, as in (16a), and proper wh-in situ, i.e. clause-internal wh-elements in their first-merge position, as in (16b):
(16) Aghem (adapted from Aboh 2007: 90 (26), originally in Biloa 1997: 48)
a. *[Ndugho] a-mo zi ki-be?
who sm-P2 eat fufu
'Who ate fufu?'
b. *Fil a-mo-zi ki-be [enzin]?
friends sm-P2-eat fufu how
Aghem therefore resembles Trevisan to a significant degree, with the exception of wh-fronting, which is felicitous in the latter but not in the former. Along the same lines as my own conclusions for Trevisan, the Aghem data lead Aboh to conclude that there is a fixed position immediately after the verb that unambiguously marks focus. This is further confirmed by data reported in Hyman (2005), who claims that Aghem has an optional focus marker, nó, which realises the post-verbal focal head $\left(\mathrm{Foc}_{\text {Low }}{ }^{\circ}\right)$ and scopes over the element immediately to its left, in $\operatorname{SpecFoc}$ Low. Observe the examples in (17), where the low focus marker nó scopes over the verb and the object, respectively:
(17) Aghem (Aboh 2007: 91 (29), originally in Hyman 2005: 1)
a. Tí-bvú tì-bìghà mô zì nó bé-kó
dogs two Past eat Foc fufu
'The two dogs ate fufu'
b. Zì bé-kó nó
eat fufu Foc
'Eat fufu'
Unlike in Trevisan, the Bantu verb precedes the focused element. Aboh (2007) proposed that in Bantu, verb movement past the focal projection is motivated by the requirement for the verb to raise to an aspect position. That the verb necessarily precedes constituents or wh-elements moved to the $v \mathrm{P}$-peripheral position is, in his account, a consequence of verb movement, as illustrated in (18). Note that
according to Aboh, the fact that the verb moves across the focus marker in $\mathrm{Foc}^{\circ}$ is not theoretically problematic, since Foc $_{\text {Low }}$ is not an appropriate landing site for a verb that is probed by the aspectual head, hence it does not count as a proper intervener.
(18) Derivation of example (17b) (Aboh 2007: 94 (36a))


With regard to questions, Aboh's representation of the subject-question in (19), which I reproduce in (20), provides a useful summary of what has been claimed so far. Note that the subject checks the [foc]-feature under the low Foc head (not realised here), while an expletive in SpecTP checks the EPP-feature in $\mathrm{T}^{\circ}$ :
(19) Aghem (Aboh 2007: 99 (45a), originally in Biloa 1997: 48)

À mò zì ndúghó bé-kó?
Expl Past eat who fufu
'Who ate fufu?'
(20) Derivation of aghem subject questions (adapted from Aboh 2007: 99 (45b))


Contrary to Aboh, Cheng and Downing (2012) actually argue in favour of a 'nonFocusP analysis' for Bantu: they claim that everything in the verb phrase except for the wh-element must be evacuated, which makes Bantu languages similar to Malayalam at the descriptive level. In other words, although wh-elements in some Bantu languages are associated with focus, they are nonetheless in situ. However, the data discussed in Aboh (2007) undeniably suggest that $\mathrm{Foc}_{\text {Low }}$ is indeed at play, at least in Aghem.

### 3.1.4 Greek (multiple wh-questions)

Clause-internally moved wh-elements also exist in non-Romance languages other than those discussed in Cheng \& Bayer (2017). Sinopoulou (2008) proposed an account of Greek multiple wh-questions where the clause-internal wh-element targets Belletti's (2004) FocP. In Greek, wh-elements can be fronted, as in (21a), or can surface clause-internally, as in (21b):
(21) Greek (adapted from Chiou \& Vlachos 2017: 1 (1))
a. Ke pja nomizis oti idhe?
and who-ACC think-2sG that saw-3sG
'And, whom do you think s/he saw?'
b. Ke nomizis oti idhe pJa? and think-2sG that saw-3sG who-ACC

Greek wh-fronting has been argued to give rise to information-seeking questions, i.e. questions in which the value of the variable discharged by the wh-element is not known to the utterer of the question. This reading contrasts with that of in situ wh-questions such as (21b), which are usually analysed as facilitating the echo interpretation, i.e. one where the utterer is not seeking information, but rather a confirmation of something that has already been said (Tsimpli 1998; Carnie 2006, a.o.). More recently, although Roussou et al. (2013) have claimed that both configurations are felicitous with either the information-seeking or echo-question reading, Vlachos (2014) maintains that it is not syntax that distinguishes between the two readings, but Phonological Form, which assigns a distinct prosody to each interpretation. For this reason, I shall not discuss wh-in situ in Greek single wh-questions, focusing instead solely on multiple wh-questions.

Sinopoulou (2008) argued that Greek is an English-type language in that in multiple wh-questions one wh-element must be fronted while the other remains clause-internal, as in (22), in the position where the corresponding DP would appear in a single question, as in (23):
(22) Greek (adapted from Sinopoulou 2008: 224 (6))
a. Pjos agorase ti?
who. nom bought.3Rd.SG what.ACC
'Who bought what?'
b. ${ }^{*}$ Pjos ti agorase?
who. nom what.ACC bought.3Rd.sG
c. *Agorase pjos ti? bought.3RD.SG who.nom what.ACC
(23) Greek (Sinopoulou 2008: 224 (7))

Pjos agorase to vivlio?
who. NOM bought.3RD.SG the book.ACC
'Who bought the book?'
Moreover, Sinopoulou claims that non-fronted wh-elements in matrix multiple questions do not remain in situ, but move to a higher structural position. Assuming that the canonical subject position is $\mathrm{Spec} v \mathrm{P}$, and given the linear orders observed in (24), Sinopoulou claims that the clause-internal wh-elements in Greek multiple questions must precede all $v \mathrm{P}$-internal constituents:
(24) Greek (adapted from Sinopoulou 2008: 225 (8-11))
a. Pote agorase $t i \quad o \quad$ Janis?
when bought.3RD.sG what.ACC the Janis.nom 'When did John buy what?'
b. Tinos edose $t i \quad o$ Janis?
who. GEN gave.Rd.SG what.ACC the Janis.nom 'Who did John give what?'
c. Pote doulepse pou i Anna?
when worked.3RD.sG where the Anna.nom 'When did Anna work where?'
d. Pjos ide pou tin tenia? who. nом watched.3RD.sG where the movie.ACC 'Where did who watch the movie?'
e. Pjos estile $t i$ tis Marias? who. nom sent.3Rd.sG what.Acc the Mary.gen 'Who sent Mary what?'

On the basis of the similarities between focus and wh-constructions, it is proposed that clause-internal wh-elements move to $\mathrm{Foc}_{\text {Low }}$. Hence, multiple wh-questions are treated like clause-internal focus, which is just one of the three positions that focus can occupy in Greek, as illustrated in (25):
(25) Greek (Sinopoulou 2008: 229-230 (23-25))
a. Clause-initial focus
ton jani filise i Maria
the Janis.acc kissed.3rd.sg the Maria.nom
'Mary kissed Јонм'
b. Clause-internal focus

Filise ton jani i Maria
kissed. 3rd.sg the Janis.acc the Maria.nom
c. Clause-final focus
(I Maria) filise (i Maria) ton JANI
the Maria.nom kissed.3rd.sg the Maria.nom the Janis.acc

For Sinopoulou, the fact that clause-internal focus fails to exhibit the unmarked word order indicates that it is not literally in situ, i.e. in its first-merge position. She claims instead that these peculiar focused constructions display typical A'properties (weak cross-over effects and reconstruction effects, a.o.) and are pronounced with the main stress on the post-verbal focus, but without a prosodic break after it, which she takes as evidence that what follows the clause-internal focus is not right-dislocated but rather occupies a $v \mathrm{P}$-internal position.

The same derivation is posited for clause-internal wh-elements in multiple wh-questions, for reasons that I shall briefly outline in what follows. In Sinopoulou's analysis, given Rizzi's (1997) claim that one and only one focus can appear within the same clause, the fact that the presence of a focused constituent in a multiple wh-question gives rise to ungrammaticality in Greek, as in (26), constitutes clear evidence that the lower wh-element undergoes focus-movement:
(26) Greek (adapted from Sinopoulou 2008: 234 (34))

* O Janis pote pige pou?
the Janis.nom when went.3Rd.sg where
'When did joнn go where?'
Sinopoulou argues that the same ungrammaticality arises in the case of single wh-in situ. A second, more convincing argument comes from Tsimpli's (1998) work, where the conclusion that wh-in situ is focused is based strongly on the observation that clause-internal wh-elements are not permitted within embedded interrogatives. She claims that wh-elements introducing embedded questions are not focused in Greek, as illustrated by their felicitous coexistence with a focused constituent, as in (27):
(27) Greek (adapted from Tsimpli 1998: 235 (35))
o janis anarotjeme ti tha kani
the Janis.nom wonder.1st.sg what.ACC will do.3rd.sg
'I wonder what JoHn will do'
Similarly, Tsimpli claims that the reason why in situ wh-elements cannot be licensed within embedded questions, as in (28), is that wh-in situ cannot satisfy the wh-selectional requirements of verbs like 'wonder', clearly indicating that Greek wh-in situ does not involve simple [+wh] elements but rather [+wh;+foc] phrases. Therefore, Greek wh-in situ must necessarily be focused.
(28) Greek (adapted from Tsimpli 1998: 235 (36))
*Anarotjeme tha kani ti
wonder. 1st.sG will do.3RD.sG what.ACC
'I wonder what he/she will do'

This argument will fit neatly into the theory of embedded wh-in situ that I develop in Chapter 4, where I argue that [wh] is the feature to be checked by fronted wh-elements in embedded environments. To conclude, Sinopoulou's claim is further supported by the prosodic properties of multiple questions, where the clause-internal wh-element bears focal stress, while the fronted wh-element is pronounced with a flat intonation. In contrast, fronted wh-elements in single wh-interrogatives are claimed to carry the nuclear pitch accent of the sentence.

The hypothesis that the clause-internal wh-element moves overtly to $\mathrm{Foc}_{\text {Low }}$, just as focused elements do, is compatible with the arguments laid out so far. Consequently, a derivation along the lines of (30) is proposed for the matrix multiple wh-question in (29):
(29) Greek (Sinopoulou 2008: 238 (44))

Pjos agorase ti?
who. nom bought.3Rd.sG what.Acc
'Who bought what?'
(30) Derivation of greek multiple wh-questions (adapted from Sinopoulou 2008: 239 (45))


The fronted and clause-internal wh-elements differ in that only the latter bear a focus-feature, which checks the uninterpretable [foc]-feature in Foc ${ }^{\circ}$. According to Sinopoulou, it is the EPP-feature in Foc ${ }^{\circ}$ that triggers overt movement of the clause-internal wh-element into SpecFocP. Similarly, $\mathrm{C}^{\circ}$ probes the wh-subject pjos, with which it agrees. As a consequence, the wh-element undergoes wh-movement into SpecCP, in turn probed by the EPP-feature in $\mathrm{C}^{\circ}$.

### 3.1.5 Persian

Mirdamadi (2018) explores the syntax of wh-interrogatives in Persian and, in the spirit of Kahnemuyipour (2001), argues in favour of the movement of clause-internal wh-elements into $\operatorname{SpecFoc}_{\text {Low }}$. I shall present Mirdamadi's data and analysis here, and leave the discussion of Kahnemuyipour (2001) for $\$ 3.2$, which will constitute the basis of my discussion of the nature of Trevisan Wh-to-Foc.

Mirdamadi argues that in Persian, an SOV language, wh-elements can fairly freely appear in three domains in the hierarchical structure, namely the pre-verbal position, the position between the subject and the complementiser ke ('that'), and the clause-initial (scope) position. All three positions can be exploited in long-distance construals, such as those in (31):
(31) Persian (Mirdamadi 2018: 40 (2))
a. Pre-verbal position

Fekr mikoni (ke) Hasan chi kharid?
think. 2sG that Hasan what bought.3sG
'What do you think that Hasan bought?'
b. Under-ke position

Fekr mikoni (ke) chi $i_{\mathrm{i}}$ Hasan <i> kharid?
think. 2sG that what Hasan bought.3sG
c. Scope position

Chi $i_{\mathrm{i}}$ fekr mikoni (ke) Hasan <i> kharid?
what think.2sG that Hasan <i> bought.3sG
Mirdamadi's main concerns are how optional wh-movement from one domain to another can be accounted for, as well as how selection is satisfied so that wh-elements are correctly assigned scope regardless of the position that they occupy in the clause. He compares the position occupied by the PP in double object declarative constructions, such as those in (32), with their position in wh-interrogatives, such as those in (33):
(32) Persian (Mirdamadi 2018: 55 (26)) ${ }^{26}$
a. Hasan ketab-ra gozasht ru miz Hasan book-ra put.3sg on table 'Hasan puts the book on the table'
b. Hasan ketab-ra ru miz gozasht

Hasan book-rA on table put.3sG
(33) Persian (Mirdamadi 2018: 55 (27))
a. *Hasan ketab-ra gozasht koja?

Hasan book-ra put.3sg where
'Where did Hasan put the book?'
b. Hasan ketab-ra koja gozasht?

Hasan book-ra where put.3sG
In the declaratives in (32), the PP can surface either before or after the verb. In contrast, in interrogatives such as those in (33), wh-adverbial koja ('where') cannot occur post-verbally. Along the same lines as Kahnemuyipour (2001), Mirdamadi proposes that wh-elements are first-merged post-verbally, then obligatorily moved into the Spec of a functional projection to the left of the verb, SpecFocP. If wh-elements move from the post-verbal position to the pre-verbal position, one might wonder why wh-elements do not always remain in the low Foc position. In fact, as Mirdamadi correctly points out, if the movement to the low focal projection is triggered by a [foc] or [wh] feature, it must be subject to Criterial Freezing. As such, it must be inactivated in SpecFoc, hence becoming unable to move further into the Spec of any higher criterial projection. As a solution, Mirdamadi proposes that wh-movement to the Left Periphery of the clause does not pass through an intermediate step in the low FocP: in his analysis, FocP is not merged in these cases, and wh-elements move straight to the Left Periphery. Subsequently, building on Karimi and Taleghani (2007), he posits the existence of a wh-operator in C, with which wh-elements enter an Agree relation through feature movement; wh-elements inherently contain two features, [foc] and [wh]: the former is responsible for triggering wh-movement into the Spec of a criterial focus head, and the latter establishes the Agree relation with the operator in C. To conclude, Mirdamadi tentatively analyses the cases in which the wh-element appears between the subject and the complementiser ke, such as (31b), as cases of German-like partial wh-movement where wh-elements are scrambled to an intermediate position in the hierarchical structure.

[^15]Mirdamadi's theory of Foc $_{\text {Low }}$ being only optionally merged unfortunately does not really hold from a theoretical point of view; a theory à la Karimi \& Taleghani, where the peculiar movement properties of the wh-elements that are first-merged post-verbally are attributed to their specific lexical properties seems much more convincing. Moreover, Mirdamadi regrettably does not develop Kahnemuyipour's (2001) theory of focus movement of clause-internal wh-elements; this approach is central to the theory of Wh-to-Foc developed in this book, and is outlined in $\$ 3.2$.

### 3.2 The short movement of clause-internal wh-elements is focus-movement

Building on published works on Serbo-Croatian, Hungarian, Basque, Aghem and Kirundi (Horvath 1986; Rochemont 1986; É. Kiss 1995; Bošković 1997; Ndayiragije 1999; Stjepanovic 1999, a.o.), Kahnemuyipour (2001) argues in favour of focus movement of clause-internal wh-elements in Persian. I discuss this movement, which in Kahnemuyipour's account targets $\operatorname{Spec} v \mathrm{P}$, in $\S 3.2 .1$ and extend the analysis to Trevisan Wh-to-Foc in §3.2.2.

### 3.2.1 Kahnemuyipour's (2001) work on Persian focus-movement

Kahnemuyipour (2001) suggests that Persian should not be analysed as either a language with syntactic wh-movement to the Spec of CP or a proper wh-in situ language. He claims instead that Persian ought to be classified with languages in which wh-elements are argued to undergo focus movement (especially Serbo-Croatian, for which Bošković 1997, 2000 has argued that wh-elements undergo what he calls 'non-wh-movement'). For him, this focus position coincides with the position targeted by contrastively focused elements, i.e. 'directly above $v P$ ' (p. 41).

Kahnemuyipour (2001) explains that at first glance wh-elements in Persian might seem to be located in the position in which they are first-merged, as in (34a):
(34) Persian (adapted from Kahnemuyipour 2001: 46 (6))
a. Declarative linear order

Æli ye ketab xær-id
Ali a book bought
'Ali bought a book'
b. Interrogative linear order

Æli $c i \quad$ xær-id?
Ali what bought
'What did Ali buy?'

However, the situation changes when it comes to wh-adverbials, similarly to what we saw in Trevisan. Compare the declarative in (35a) with its interrogative counterparts in (35b)-(c):
(35) Persian (adapted from Kahnemuyipour 2001: 46 (7))
a. Declarative linear order

Æli ye saæt pis ræft xune
Ali an hour ago went home
'Ali went home an hour ago'
b. Interrogative linear order: $\mathrm{ADV}_{\text {Time }}$

Æli key ræft xune?
Ali when went home
'When did Ali go home?'
c. Interrogative linear order: ADV $_{\text {Place }}$

Æli ye sảæt pis koja ræft?
Ali an hour ago where went
'Where did Ali go an hour ago?'
While a pre-verbal wh-adverbial of Time also occupies a pre-verbal linear position in declaratives, a wh-adverbial of Place appears to be first-merged post-verbally, before surfacing pre-verbally, as in (35c): wh-adverbials of Place must undergo movement, as shown in (36):
(36) movement of clause-internal wh-adv of place (as in 35c)

Æli ye sảæt pis koja reft $\qquad$ ?


In fact, an in situ counterpart of questions such as (35c) exists, which receives an echo reading. Again, this very much resembles the Trevisan data previously discussed.

The movement observed for the wh-adverbial of Time is also present in the case of post-verbal arguments. Observe the distribution of the indirect object of a ditransitive verb in (37a), with respect to its interrogative counterpart in (37b):
(37) Persian (Kahnemuyipour 2001: 47-48 (10))
a. Declarative linear order

Hæsæn ketab-o dad (be) æli
Hassan book-om gave (to) Ali
'Hassan gave the book to Ali'
b. Interrogative linear order

Hæsæn ketab-o be ki dad?
Hassan book-om to who gave
'Who did Hassan give the book to?'
Because of the movement pattern of wh-elements that are first-merged post-verbally, Kahnemuyipour argues in favour of generalised movement of wh-elements to a pre-verbal position, even when that movement is not detectable in the phonetic string, such as the wh-direct object in (38):
(38) MOVEMENT OF CLAUSE-INTERNAL WH-DIRECT OBJECT (as in 34b)


For Kahnemuyipour, in all Persian wh-questions the wh-element undergoes syntactic movement to a focus position above $v \mathrm{P}$, Spec $v \mathrm{P}$, as shown in (39):
(39) MOVEMENT OF PERSIAN CLAUSE-INTERNAL WH-ELEMENTS (as in 34b)


Note that Kahnemuyipour takes the direct object to be first-merged pre-verbally, contra Kayne's (1994) claim that all languages are underlyingly SVO. Moreover, for the correct 'wh-element > verb' order to be derived, it must be assumed that Persian finite verbs do not move higher than $v^{\circ}$. The presence of both the trace of the subject and the moved wh-element in SpecvP, the theta-position where subjects are externally-merged, is also not theoretically desirable. Therefore, in my theory of Trevisan wh-in situ I shall instead assume that the periphery of $v \mathrm{P}$ is the landing site for movement of clause-internal wh-elements.

Assuming that the short movement of clause-internal wh-elements shown in (39) does take place, Kahnemuyipour then proceeds to prove that the movement under consideration is indeed triggered by a focus feature (as opposed to a whfeature, which he claims is responsible for total fronting to the CP), and that the functional projection involved is $v \mathrm{P}$, and not a higher one.

### 3.2.1.1 Arguments in favour of focus movement

With the unmarked declarative order in (37a), repeated here as (40), in mind, observe (41), where the indirect object be celi ('to Ali') is contrastively focused:
(40) Persian (adapted from Kahnemuyipour 2001: 47 (10))

Hæsæn ketab-o dad (be) æli
Hassan book-om gave (to) Ali
'Hassan gave the book to Ali'
(41) Persian (adapted from Kahnemuyipour 2001: 49 (12b))

Hæsæn ketab-o (be) æli dad
Hassan book-om (to) Ali gave
'Hassan gave the book to ali (and not, for example, to Hossein)'
The contrast between (40) and (41) illustrates that contrastively-focused indirect objects move from the post-verbal position in which they are first-merged to the pre-verbal position, exactly as wh-indirect objects do. On this basis, Kahnemuyipour maintains that it is reasonable to propose that movement of wh-elements in Persian is indeed focus movement. Similar approaches whereby wh-elements undergo focus movement had been proposed previously, more specifically for languages such as Serbo-Croatian (Stjepanovic 1999), but also Hungarian, Basque, Aghem and Kirundi (Horvath 1986; Rochemont 1986; É. Kiss 1995; Ndayiragije 1999, a.o.). For these authors, the parallelism between the movement of focused elements and wh-elements indicates that the latter must be inherently focused and must undergo movement for focus purposes. For Horvath, for instance, whenever languages have a special position for contrastively-focused constituents, this should also be available for wh-elements. She explains this property by building on the interpretational similarities displayed by focus and wh-elements: in contrast to simple new informational focus, contrastive focus operates over a closed set; similarly, the value of wh-elements is drawn from an inferable set of items, inherently delimited by the truth value of the question itself. I shall return to Horvath's claim in §3.2.2.

### 3.2.1.2 Arguments in favour of movement to specvp

To understand how far above the finite verb the projection targeted by focus movement lies, Kahnemuyipour (2001) observes the position(s) occupied by manner adverbs, on the assumption that these adjoin to $v \mathrm{P}$. He argues that sentences such as those in (42) and (43), where a manner adverb (the counterparts of 'quickly' and 'gently', respectively) co-exists with a clause-internal wh-element, provide a way to determine the exact landing site of the focus movement under investigation:
(42) Persian (adapted from Kahnemuyipour 2001: 50 (13))
a. Declarative order

Æli ba sor'æt ræft mædrese
Ali with speed went school
'Ali went to school quickly'
b. Interrogative order (i)

Æli ba sor'æt $_{\text {ADv }}$ koja ræft?
Ali with speed where went
'Where did Ali go quickly?'
c. Interrogative order (ii)
?? Æli koja ba sor'æt ${ }_{\text {ADV }}$ ræft?
Ali where with speed went
(43) Persian (adapted from Kahnemuyipour 2001: 50 (14))
a. Declarative order

Æli ketab-o arum gozast ru miz
Ali book-om gently put on table
'Ali gently put the book on the table'
b. Interrogative order (i)

Æli ketab-o arum ${ }_{\text {adv }}$ koja gozast
Ali book-om gently where put
'Where did Ali gently put the book?'
c. Interrogative order (ii)

Æli ketab-o koja arum $_{\text {ADV }}$ gozast
Ali book-om where gently put
According to Kahnemuyipour, the movement of the wh-element to a position between the manner adverb and the verb, as in the (b) example, is a clear indication that focus movement targets a Spec of $v \mathrm{P}$. The acceptability of the question decreases if the wh-element is moved higher than the position occupied by the manner adverb, as in the (c) examples. Given that Persian has massive scrambling and relatively free word order, Kahnemuyipour takes this fact as evidence that the position occupied by the manner adverb might constitute a sort of barrier to focus
movement of the wh-element. This account clearly falls within a decades-long tradition that takes adverbs to be adjuncts (Pollock 1989; Iatridou 1990; Johnson 1991; Bowers 1993; Ernst 2002; Fowlie 2013, 2014).

Cinque (1999) actually provided robust empirical evidence in favour of the idea that adverbs are directly merged in specialised, hierarchically-ordered functional projections within the domain of inflection. Cinque presented an elaborate functional structure for the clause which I reproduce in (44):
(44) the fine structure of tp (from Cinque 1999: 90 (106))

$$
\begin{aligned}
& {\left[\operatorname { M o o d } _ { \text { SpeechAct } } \left[\operatorname { M o o d } _ { \text { Evaluative } } \left[\operatorname { M o o d } _ { \text { Evidential } } \left[\operatorname{Mod}_{\text {Epistemic }}[\mathrm{T} \text { (Past) }\right.\right.\right.\right.} \\
& \text { [ T(Future) }\left[\operatorname { M o o d } _ { \text { Irrealis } } \left[\operatorname { M o d } _ { \text { Necessity } } \left[\operatorname{Mod}_{\text {Possibility }}[\text { Asp } \text { Habitual }[ \right.\right.\right. \\
& \text { Asp }_{\text {Repetitive(I) }}\left[\text { Asp } _ { \text { Frequentative(I) } } \left[\operatorname { A s p } _ { \text { Celerative(I) } } \left[\operatorname { M o d } _ { \text { Volitional } } \left[\operatorname{Mod}_{\text {Obligation }}\right.\right.\right.\right. \\
& \operatorname{[~Mod}_{\text {Ability/Permission }}\left[\text { Asp }_{\text {Celerative(I) }} \text { [ T(Anterior) [ } \operatorname{Asp}_{\text {Terminative }}[ \right. \\
& \text { Asp }_{\text {Continuative }}\left[\operatorname { A s p } _ { \text { Perfect } } \left[\operatorname { A s p } _ { \text { Retrospective } } \left[\operatorname{Asp}_{\text {Proximative }}[\text { Asp } \text { Durative }\right.\right.\right. \\
& {\left[\text { Asp } _ { \text { Generic/progressive } } \left[\text { Asp } _ { \text { Prospective } } \left[\text { Asp }_{\text {SgCompletive(I) }}[\text { Asp } \text { PICompletive } \text { [ Voice }\right.\right.\right.} \\
& {\left[\operatorname { A s p } _ { \text { Celerative(II) } } \left[\operatorname { A s p } _ { \mathrm { sgCompletive } _ { \text { III } } } \left[\operatorname { A s p } _ { \text { Repetitive(II) } } \left[\operatorname{Asp}_{\text {Frequentative(II) }}\right.\right.\right.\right.}
\end{aligned}
$$

The evidence for this hierarchy, further developed in Cinque (2006), came from converging facts regarding the cross-linguistic ordering of adverbs, auxiliaries, particles and suffixes. Cinque's treatment of adverbs expresses important properties of adverbial syntax better than most competing approaches, so I take it to be correct for the purposes of my analysis. In light of the large body of literature on what was formerly called the IP (Pollock 1989; Chomsky 1989; Belletti 1990; Cardinaletti 2004, a.o.), I assume that the clausal domain contains (at least) the FPs in (45):
(45) the fine structure of the split-ip

$$
\left[\text { subjp } \text { Subjb }^{\circ}\left[_{\mathrm{TP}} \mathrm{~T}^{\circ}\left[{ }_{\text {Agrop }} \text { AgrO }^{\circ}\left[{ }_{\nu \mathrm{VP}} \mathrm{v}^{\circ}\left[{ }_{\mathrm{vP}} \ldots\right]\right]\right]_{]}\right]\right.
$$

In (45), the vp and $v \mathrm{P}$ are the loci where verb-selected arguments are first-merged, and they are responsible for theta-role assignment. Nominative Case is assigned in SpecSubjP to the subject (which also moves there for the EPP, the principle according to which all clauses must contain a subject, be it phonetically realised or not), while accusative Case is checked covertly in SpecAgrOP. TP is the layer where all the functional structure posited by Cinque (1999) lies. According to Kahnemuyipour, the position targeted by clause-internally moved wh-elements is the Spec circled in (46):


An analysis whereby clause-internally moved wh-elements target the position in (46) is therefore also tenable in a framework where adverbs are not adjuncts. In addition, $\operatorname{Spec} \nu \mathrm{P}$ is undeniably a good candidate to host movement of the wh-element, since in phase theory (Chomsky 1998 and related work) it is taken to be a phase-edge, i.e. a Spec targeted by wh-elements in their successive-cyclic movement to the cp-domain.

Nonetheless, more recent theoretical developments strongly suggest that a refinement of Kahnemuyipour's theory is in order. There are at least two of these developments: first, under Criterial Freezing (Rizzi 2006 and related work), a projection where a relevant feature is checked, here [foc], is a criterial one, and therefore one from which a goal, once probed and 'frozen-in-place', cannot escape (contra Kahnemuyipour, which takes focus movement into SpecvP to be merely an intermediate step on the way to Rizzi's (1997) Focus HіGн ); second, we now know that there is a periphery above $v \mathrm{P}$, as posited in Belletti (2004), which contains a focal projection. Furthermore, it seems rather implausible for $\operatorname{Spec} v \mathrm{P}$, which hosts the trace of the moved subject, to be able to host wh-elements simultaneously, and even more implausible for it to be the target of focus movement. Making Foc Low the actual target of Kahnemuyipour's focus movement makes more sense than having [foc] checked in the Spec of a theta-role assigning projection, $v \mathrm{P}$.

Note that I shall not discuss another test for focus-hood of moved wh-elements that was used by Kahnemuyipour, namely their ability to violate Superiority, because it is only relevant for multiple wh-questions, which are ruled out in Trevisan. Superiority is a condition on the application of transformations, first formulated in Chomsky (1973), which states that a transformation which in principle can apply to two constituents in the structure has to apply to the one that is structurally superior, i.e. subject over all other verbal arguments, verbal arguments over non-selected arguments.

### 3.2.2 The role of [foc] in Trevisan fake wh-in situ

In this section, I shall provide evidence to show that Wh-to-Foc should be treated as focus movement (as opposed to proper wh-movement), before showing how Trevisan moved wh-in situ is derived.

There are two major arguments in favour of focus-driven movement of clauseinternal wh-elements. The first comes from the distribution of wh-adverbials and wh-indirect objects which, as I claimed in Chapter 2, do not surface in their firstmerge site, but instead after the linear position targeted by the active past participle (see $\S 2.1 .2$ ). A second argument in favour of focus movement is linked to Horvath's (1986) claim that the parallelism between the movement of focused elements and wh-elements indicates that the latter must be inherently focused. I develop this argument in what follows, claiming that Trevisan contrastive focus displays the same clause-internal movement patterns as wh-elements.

### 3.2.2.1 The parallelism between contrastive focus and clause-internally moved wh-elements

In languages like Standard Italian, a focused constituent naturally occupies a low position in the clause, where the sentence stress falls. However, it is also possible for focused elements to move and fill a high left-peripheral position, where they bear a particular pitch accent. This is illustrated in (47):
(47) Standard Italian (adapted from Bianchi 2013: 193 (1))
a. A: Gianni ha invitato Lucia

John has invited Lucy
'John invited Lucy'
b. B: pro ha invitato [MaRIna] ${ }_{F}$ pro has invited Marina 'He invited Marina'
c. B: [MaRIna] ${ }_{F}$ pro ha invitato

Marina pro has invited
'Marina he invited'
It is commonly assumed that focus in the low position, as in (47b), can either carry new information or be used in contrast/correction contexts, while the high position in (47c) can only be used in contrast/correction contexts. Since Jackendoff (1972) and Chomsky (1976), it has been assumed that the factor that triggers movement of a constituent to the CP of the clause is focus itself, and that this movement may be delayed until after Spell-Out in the case of clause-internal focus. The strongest piece of evidence in favour of covert focus movement was the observation that it gives rise to so-called 'Weak Crossover effects'. In generative syntax, crossover is
the term used to refer to a relation between two elements across another element that interferes with their relation, as in (48):
(48) WEAK CROSSOVER EFFECTS IN FOCUS FRONTING
a. ${ }^{\star}$ His $_{\mathrm{i}}$ wife loves $\mathrm{JOHN}_{\mathrm{i}}$
b. LF: ${ }^{*}$ Jонл $_{\mathrm{i}}\left[\right.$ his ${ }_{\mathrm{i}}$ wife loves $\qquad$ ${ }_{i}$ ]
(48) is an instance of weak crossover that appears at Logical Form: the focused element is moved across the pronoun 'his', and co-indexation between the two is impossible, which cannot be due to a violation of Condition C, namely that an R -expression is free. In fact, binding theory has nothing to say about the possibility of co-reference between a fronted focus and a personal pronoun. Since јонл is moved to an A'-position, 'his' cannot be A-bound by it. Moreover, since 'his' does not c-command the trace of the focused element, 'his' cannot bind it. Still, co-reference between the two is impossible. This case is different from that of strong crossover, which occurs in configurations where a wh-element or quantificational NP undergoes A-movement across a pronominal that c-commands the extraction site. However, as Bianchi (2013) observes, the alternation between focus in situ and focus fronting raises a serious problem for the feature-driven approach to movement on which this book is based. In fact, it is not clear why the [foc]-feature triggers overt movement in only a subset of cases. This problem is particularly pertinent in cartographic studies, whereby each aspect of interpretation has a dedicated syntactic configuration, in which Criteria (in the sense of Rizzi 1996 and much related work) are met. For instance, we systematically expect a constituent bearing the [foc]-feature to move into the Spec of a dedicated Focus projection, where it satisfies the Focus Criterion. According to Rizzi (1997), in the resulting structure the moved constituent in Spec constitutes the focus, while the complement of Focus ${ }^{\circ}$ is the presupposition, as illustrated in (49):
(49) THE FOCUS-PRESUPPOSITION CONFIGURATION


It is precisely this Focus projection that implements the proper focus-presupposition partition, more precisely Focus HIGH . This projection, according to studies such as Belletti (2004), Rizzi (2006) and Bocci (2013), is only able to host constituents that are focused contrastively. A contrastively-focused element is one that is contrasted with at least one distinct and contextually salient alternative (such as in

Example (47c)). Conversely, Focus ${ }_{\text {HIGH }}$ cannot host constituents that bear new information focus. This second type of focus, as already discussed in Chapter 2, is encoded in Belletti's (2004) $v$ P-peripheral Foc ${ }_{\text {Low }}$. According to Belletti, the $\nu$ P-periphery is typically activated in Italian subject inversion structures, which display the non-canonical VS order, such as those in (50):
(50) Standard Italian
a. Question: Chi è partito / ha parlato? who is left / has spoken 'Who left / spoke?'
b. Answer: È partito / ha parlato Gianni is left / has spoken Gianni
‘Gianni left / spoke’
The most restrictive hypothesis that has been adopted in the literature is that this association is bi-directional: whenever a constituent is contrastively-focused, as in (47), it is licensed in the dedicated left-peripheral projection, Focus ніGн. . This hypothesis, which pursues the aim of a fully transparent mapping at the interface whereby one position is associated with one and only one interpretation, was adopted in Belletti (2004). Belletti proposed that the cases of clause-internal contrastive focus are actually fake instances of wh-in situ. In her analysis, the focused constituent is indeed raised to $\mathrm{Focus}_{\mathrm{HIGH}}$, but its movement is masked by movement of the remnant-IP to a higher topic position, as in (51):
(51) FOCUS-MOVEMENT + REMNANT-IP MOVEMENT (adapted from Bianchi 2013: 194 (3))


Regardless of the status of the derivation in (51), it must be emphasised that the debate concerning the optionality of focus movement crucially rests on the assumption that the fronted and in situ focus positions are semantically equivalent. Interestingly, Bianchi (2013) provided evidence that the availability of the fronted focus position is actually more constrained than the in situ position, as exemplified by a specific use of contrastive focus, namely corrective focus. An example thereof is provided in (52):
(52) Standard Italian (adapted from Bianchi 2013: 197-8 (7))
a. A: Gianni è andato a Londra?

Gianni is gone to London
'Did Gianni go to London?'
b. B: No, pro è andato a Berlino (non a Londra) no pro is gone to Berlin (not to London) 'No, he went to Berlin (not to London)'
c. B': \# No, a Berlino pro è andato (non a Londra)
no to Berlin pro is gone (not to London)
In the answer to a 'yes-no question', only an in situ focus is possible, while a fronted focus is inappropriate. For Bianchi, the crucial factor is whether the corrected proposition has already been introduced in the conversational common ground: if not, fronted focus is not appropriate. In light of the empirically-motivated distinction between merely contrastive and corrective focus, Bianchi argues that what Italian focus movement displays is restricted optionality. The major consequence of this analysis is that the less restricted interpretation of the in situ focus position undermines the idea that a clause-internal focus actually involves focus fronting to the Left Periphery of the clause followed by movement of the remnant-IP. We thus appear to be forced to abandon the ideal bi-directional 'one position - one interpretation' mapping, and we are confronted, once again, with real (yet restricted) optionality.

The Trevisan situation is even more complex. On the whole, with regard to the distribution of new information, contrastive and corrective focus, Trevisan resembles Standard Italian, as described in Bianchi (2013): only the clause-internal position is available for new information and corrective focus, while both wh-in situ and fronting are possible with contrastively-focused constituents. However, in Trevisan, not only can both new information (53) and contrastive focus (54) be expressed clause-internally, but both can (but do not have to) appear moved from their first-merge position. ${ }^{27}$ Observe the movement of a contrastively-focused indirect object and of an adverbial in (55b) and in (56b), respectively:
(53) Trevisan
a. A: Chi ze-o che te gà ciamà ae dieze de sera? who is=expl that you= has called at.the ten of evening 'Who called you at 10 p.m?'
b. B: Me gà ciamà Toni me= has called Toni
'Toni called me'

[^16](54) Trevisan
a. A: Go sintio che Giani el gà invità a Marina have $_{1 \text { ps }}$ heard that John he= has invited the Mary 'I heard that John invited Mary'
b. B: No, el ga invità A MARIA, no a Marina! neg he= has invited the Mary neg the Marina 'No, he invited mary, not Marina'
(55) Trevisan
a. A: I me gà dito che te ghe gà prestà el to libro they $=$ me $=$ have told that you $=$ Dat have lent the your book
a Piero
to Piero
'I've been told you lent your book to Piero'
b. B: No, ghe gò prestà A TONi el libro, no a Piero neg dat have ${ }_{1 \mathrm{ps}}$ lent to Toni the book neg to Piero 'No, I lent the book to toni, not to Piero'
c. B': No, ghe gò prestà el libro A toni, no a Piero neg dat have ${ }_{1 p s}$ lent the book to Toni neg to Piero
(56) Trevisan
a. A: I me gà dito che te si ndaa al circo jeri they $=$ me have told that you= are gone to.the circus yesterday 'I've been told you went to the circus yesterday'
b. B: No, son daa sabo al circo, no jeri NEG am gone ${ }_{F}$ Saturday to.the circus NEG yesterday 'No, I went to the circus on saturday, not yesterday'
c. B': No, son daa al circo sabo, no jeri NEG am gone $_{\mathrm{F}}$ to.the circus Saturday NEG yesterday

The first hypothesis raised by the movement in (55b) and (56b) is that Trevisan contrastive focus is able to target SpecFoc $_{\text {Low }}$, like new information focus can, as shown in (57):

CLAUSE-INTERNAL FOCUS MOVEMENT


At first glance, this hypothesis might appear theoretically undesirable, since one consequence would be that the $v \mathrm{P}$-peripheral focus projection can encode both types of focus. However, remember that the evidence provided in Bianchi (2013) and discussed above crucially fails to support a deterministic mapping of the 'one position-one interpretation' type for focus: if in Italian $\mathrm{Foc}_{\text {Low }}$ encodes new
information focus, Focus $_{\text {HIGH }}$ contrastive focus and the in situ position both contrastive and corrective focus, nothing rules out the possibility that some languages might be able to encode both new information and contrastive focus in $\mathrm{Foc}_{\text {Low }}$. In fact, in Trevisan total fronting of contrastive foci is not very productive and somewhat marginal, as in (58), and in non-matrix environments must be construed with a clause-internal 'resumptive clitic' (when available) coindexed with the fronted element, i.e. somewhat 'topicalised'. Observe the contrast between focus fronting and clause-internal focus in the indirect question in (59):
(58) Trevisan
a. ? GIANI go visto, no Toni!

John have $_{\text {lps }}$ seen neg Toni
'I saw john, not Toni!'
b. Go visto giani, no Toni!
have $_{\text {lps }}$ seen John, NEg Toni
(59) Trevisan
a. Me domando sto libro chi che *(o) gà leto Refl ask $_{\text {IPs }}$ this book who che it has read 'тнis book I wonder who read'
b. Me domando chi che (*o) gà leto sto Libro Refl ask ${ }_{1 \text { ps }}$ who that it has read this book

What constructions like (58) suggest is that the functional projection relevant to focus of any type is actually always $\mathrm{Foc}_{\text {Low }}$ in Trevisan. Some data are discussed in Chapter 4 of this monograph; for a detailed discussion of the mechanism of focus fronting in Trevisan, refer to Bonan (2020). However, regardless of the precise analysis of (58), what is important for the aims of the theory developed in this book is that the possibility for $\mathrm{Foc}_{\text {Low }}$ to encode different types of focus is well justified cross-linguistically, and does not constitute a problem for the deterministic mapping of the 'one position-one interpretation' type adopted in this book, at least not empirically.

In fact, the hypothesis that Trevisan clause-internal contrastive focus might target SpecFoc $_{\text {Low }}$, as clause-internally moved wh-elements do, also appears well justified semantically. As mentioned previously, Horvath (1986) argues that whenever a language has at its disposal a specialised projection for contrastively-focused constituents, this projection is also available for wh-elements. She explains this property on the basis of the interpretational similarities displayed by focus and wh-elements. In contrast to simple new information focus, in fact, contrastive focus operates over a closed set and, in a similar fashion, the value of wh-elements is drawn from an inferable (hence closed) set of items, inherently delimited by the semantics of the question itself. The fact that Trevisan can make use of SpecFoc ${ }_{\text {Low }}$ to derive contrastive focus constitutes further evidence for the idea
that clause-internal wh-elements undergo focus movement. Data similar to the patterns found in Trevisan have already been discussed in Sinopoulou (2008) for Greek multiple wh-questions, in which both wh-elements and focused constituents can move to $\mathrm{Foc}_{\text {Low }}$, as seen in $\$ 3.1$.

### 3.2.2.2 Trevisan wh-in situ and the roles of [foc], [q], and [wh]

Chomsky (2000) argues that overt fronting of wh-elements is triggered by an EPP feature in the interrogative C. In this version of the theory, Chomsky rejects his previous feature-based theory (Chomsky 1995), to the point that he rejects feature-based movement altogether. Feature-checking via movement is replaced by a relationship of long-distance agreement, called Agree. Consequently, the EPP ceases to play a role in feature-checking, as it did in the preceding development of the theory; instead, this approach goes back to the early days of the theory, when it was simply the case that certain heads were required to have a Spec. What happens in the derivation of interrogatives is that the functional head, $\mathrm{C}^{\circ}$, carries an uninterpretable Q -feature, $u[\mathrm{Q}]$, and probes for a matching goal. The wh-element carries an interpretable Q-feature, $i[\mathrm{Q}]$, which checks the uninterpretable feature of $\mathrm{C}^{\circ}$. Consequently, the $\mathrm{C}^{\circ}$ and the wh-element enter an Agree relation, and the wh-element is attracted into $\operatorname{Spec} C P$, as in (60):
(60) Q-AGREEMENT LEADING TO WH-FRONTING


Focus movement to $\mathrm{Foc}_{\text {Low }}$ can be treated in an analogous way. Let us imagine that $\mathrm{Foc}^{\circ}{ }_{\text {Low }}$ carries an uninterpretable focus feature, $u[\mathrm{foc}]$. This Agrees with the interpretable focus feature of the focused phrase, $i[f f o c]$. As such, Focus-agreement is correctly created, as in (61):
(61) FOCUS-AGREEMENT LEADING TO FOCUS-MOVEMENT OF THE WHP


The [foc]-feature on the wh-element is activated because it is relevant in the computation: I shall later argue that, in a number of limited cases, the feature that is activated on wh-elements is [wh] instead. The presence of an uninterpretable [foc]-feature in the $v \mathrm{P}$-peripheral focus head is very plausible, given my previous discussion of low focus movement in Trevisan. Furthermore, since focus movement of the clause-internal wh-element is compulsory in Trevisan, there must also be an EPP-feature in $\mathrm{Foc}^{\circ}{ }_{\text {Low }}$.

A derivation of Trevisan short movement of clause-internal wh-elements as shown in (61) might seem fallacious. In fact, it is not clear how the relevant feature(s) in the interrogative $C$ is checked in such cases, nor why wh-elements might carry a [q]-feature in the case of wh-fronting and a [foc]-feature in the case of focus-movement. However, I think there is a straightforward way to reconcile this with the theory developed so far. Remember the structure of Q-adjoining wh-elements, proposed in Cable (2010) for some in situ languages. I adapt it in (62), in light of my claim that the wh-element carries a [foc]-feature; since the [wh]-feature is not relevant here, I take it to be unvalued:

Q-ADJOINING WHPS


The role of the unvalued [wh]-feature might seem trivial here, but evidence to support its presence comes from the Northern Italian mechanism of wh-doubling. Q-particles do not usually undergo morphological changes depending on the wh-element with which they interact. In contrast, the higher elements of wh-doubling do change depending on the doubled wh-element, as in (63), except with Type C doubling, in which the doubling is carried out by an operator, as in (64):
(63) Monnese (Poletto \& Pollock 2004: 284 (2))
a. Ch'et fat què?
what'have=you done what 'What have you done?'
b. Ngo fet majà ngont?
where do=you eat where
'Where do you eat?'
(64) Passiranese (Manzini \& Savoia 2005: 190 (154))
a. ke ma 'portet ki?
ke to.me bring ${ }_{2 \mathrm{pp}}$ what
'What are you bringing to me?'
b. ke ni:-f $\quad$ n'do $\varepsilon$ 'oter?
ke come=you where you
'You, where are you going?'
Wh-doubling of the type in (63) could be treated as an instance of a Q-particle carrying overt [wh]-features inherited from the wh-element itself, while doubling as in (64) is merely an overt realisation of the Q-particle, with inaudible [wh]-features: plausibly, in this type of wh-doubling the [wh]-feature fails to be realised phonetically at Spell-Out. For now, let us posit that the [wh]-feature somehow percolates onto the Q-particle, under c-command, and then the possibility of realising it phonetically is parametrised at Phonological Form.

One might argue that it is implausible for a language to have both silent and phonetically-realised instances of both the Q-particle and the [wh]-features. However, given that matrix wh-doubling is always optional and is not compatible with all types of wh-elements, the languages that permit this strategy are clearly at an intermediate step in their evolution towards generalised single wh-in situ and single wh-fronting, hence it is not implausible that overt [wh]-features on the Q-particle might be undergoing the same process. If my intuition is correct, then Q-adjoining wh-elements must actually have the feature specifications in (65):

Q-ADJOINING WHps (ii)


In Chapter 4, I shall claim that [wh] plays a crucial role in the felicity of doubled wh-in situ in indirect wh-questions, and that it only gets valued if the context requires it. Following the discussion presented so far, the derivation of clause-internal focus movement of wh-elements must take place in two different steps, namely:

Step 1. Wh-to-Foc: the uninterpretable [q]-feature in $\mathrm{Foc}_{\text {Low }}{ }^{\circ}$ probes for a matching goal. The Q-adjoining wh-element carries an interpretable [wh]-feature, hence an agreement relation is created with the focus head, via the mechanism of Agree. The EPP-feature in $\mathrm{Foc}_{\text {Low }}{ }^{\circ}$ attracts the matching wh-element into its Spec, via Move. A proper spec-head configuration is created and the Focus Criterion is satisfied. Therefore, the WhP is frozen. This is illustrated in (66):
(66) FOCUS-AGREEMENT LEADING TO FOCUS FRONTING OF THE WHP (ii)


Step 2. Checking [q] in C: the uninterpretable [q]-feature in Focus ${ }_{\text {HIGH }}$ probes for a matching goal. The silent Q-particle of the Q-adjoining wh-element carries an interpretable [q]-feature, hence an agreement relation is created with the focus head, via the mechanism of Agree. The same process cannot be posited between Focus ${ }_{\text {HIGH }}$ and the [wh]-feature that the Q-particle has inherited from the wh-element: according to Cinque and Rizzi's (2010) 'One feature-One head' principle, each morphosyntactic feature corresponds to an independent syntactic head with a specific slot in the functional hierarchy. Consequently, only [q] needs to be checked in C, while [wh] is present yet not valued because it is irrelevant (at least in this context). Subsequently, the EPP-feature in Focus ${ }_{\text {HIGH }}$ attracts the matching Q-particle into its Spec, via Move. A proper spec-head configuration is created and the Q-Criterion (or Wh-Criterion in Rizzi (1996)) is satisfied. I illustrate step (2) in (67). Note that Move out of the frozen-in-place WhP, as in (67), is possible under Criterial Freezing because it is an instance of sub-extraction. In addition, it is possible that not only [wh] but also [foc] is transmitted to the Q-particle, which first checks the low [foc] feature and then the highest feature, [q]. This would make the attracted element the highest in the complex structure, which is possibly more desirable theory-wise. I am afraid I do not have a definite answer at present; however, and rather luckily, this would only require a minor modification of the theory. Finally, the implementation of the [wh]-feature, transmitted to the Q-particle and valued only if necessary, reconciles the theory of Wh-to-Foc with much generative work that assumes that wh-elements carry both [q] and [wh]-features.

CHECKING [Q] IN C FOLLOWING WH-TO-FOC


I am aware that the need for features to have an output effect à la Chomsky (1995) could constitute an argument against the extension of Cable's (2010) grammar of Q to Northern Italian dialects: the mere insertion or exclusion of the [foc]-feature on wh-elements might be enough to justify their total fronting or TP-internal movement, respectively. Under such assumptions, a wh-element associated to [foc;wh;q] would undergo focus movement to SpecFoc $_{\text {Low }}$, while a [wh;q] wh-element would move all the way to SpecFocus HIGH. . Positing that the EPP-feature is realised only in $\mathrm{Foc}^{\circ}{ }_{\text {Low }}$ in the first case and only in Focus ${ }_{\text {ниян }}$ in the second case would probably be enough to account for the way in which the relevant feature in C is checked in the absence or presence of overt movement. Nonetheless, I am convinced that the phenomenon of wh-doubling is not trivial and clearly suggests that wh-elements are not inserted in the structure in their bare form, but rather integrated within more complex projections, whose features undeniably play a major role in the derivation of wh-questions, as I shall discuss further in Chapter 4.

I briefly discuss the case of QP-fronting in what follows.

### 3.3 Intermediate conclusions

In this chapter, I have provided robust cross-linguistic evidence showing that in some languages clause-internal wh-elements are able to move to Belletti's (2004) $\nu$ P-peripheral focal projection, which I call Foc ${ }_{\text {Low }}$. I have also shown that an analysis in these terms is supported by the movement properties of Trevisan clause-internal wh-elements and also by the availability of SpecFoc $_{\text {Low }}$ for con-trastively-focused constituents in Trevisan. Subsequently, on the basis of my claim that Trevisan clause-internal wh-elements are Q -adjoining structures à la Cable (2010), I argued that the derivation of Trevisan 'wh-in situ' is composed of two main stages: low Focus-agreement and attraction of the complex WhP into SpecFoc $_{\text {Low }}$, followed by high Q-agreement and attraction of the silent Q-particle into SpecFocus HIGH .

Although it is not the main focus of this book, I would like to briefly address the case of total wh-fronting, or rather QP-fronting, here. In Chapter 2, I argued that the 'in situ/ex situ alternation' observed in Trevisan is better captured if we assume that this language has both of Cable's (2010) strategies to unite the silent Q and wh-elements: Q-adjunction, leading to (moved or unmoved) wh-in situ, and QP-projection, which leads to QP-fronting. In light of the discussion presented in this chapter, I wish to suggest that Trevisan QP-projections have the refined structure in (68). Remember Chomsky's (1995) assumption that the insertion of formal
features must have some output effect. Since I have been claiming that Focus HIGH is only associated to an EPP and [q]-features, an output effect is clearly unavailable for [foc], hence the impossibility of inserting/valuing [foc] on the wh-element follows logically. The same observation applies to [wh], and its absence from the Q-particle is demonstrated by the fact that wh-doubling is always of the Q -adjoining type: to the best of my knowledge, no case of fronted overt doubling is in fact attested in the literature.

Q-PROJECTION


To assume that Focus ${ }_{\text {HIGH }}$ is merely associated to a [q]-feature is in keeping with a great deal of existing literature which, starting from Rizzi (1997), has taken wh-elements to be incompatible with focused constituents because these are in competition for the same structural position, SpecFocus ${ }_{\text {HIGH }}$. Indeed, if we assume that the left-peripheral focus-head is associated with a [q]-feature in matrix interrogatives and a [foc]-feature in embedded interrogatives, the complementary distribution of fronted wh-elements and focus in the former is predicted.

The consequence of a structural analysis of fronted wh-elements such as that shown in (66) is that QP-fronting must be derived as in (69):


The uninterpretable [q]-feature in the interrogative Focus ${ }_{\text {HIGH }}^{\circ}$ probes for a matching goal. QP carries an interpretable [q]-feature, hence an Agree relationship between the two is established. As a consequence of the EPP-feature in Focus ${ }_{\text {HIGH }}$, QP is attracted into SpecFocus HIGH. . A proper spec-head configuration is hence created, and the $\mathrm{Q}(/ \mathrm{Wh})$-Criterion is satisfied. Needless to say, the movement under consideration proceeds successive-cyclically, passing through the edge of each relevant phase it encounters, namely $v \mathrm{Ps}$ and (when relevant) CPs.

To conclude, note that Kotek (2014), in a study of English and German simple and multiple wh-questions based on an adaptation of Cable's (2010) theory of QP, argues that the previously-assumed strict correlation between intervention and superiority in English, à la Pesetsky (2000), is incorrect. In her account, intervention occurs whenever the relation between a wh-word and the Q-particle associated to it is disrupted at Logical Form. This happens for example in superiority-violating questions, inside overt and covert pied-piping constituents, and in superiority-obeying questions whenever covert wh-movement is restricted to a position below an intervener. Furthermore, in Kotek's words, intervention can be avoided in superiority-violating questions when the in situ wh-element is
given wide scope above an intervener through non-interrogative movement. This non-interrogative movement is very similar to Wh-to-Foc, first and foremost in its targeted position: the edge of $v \mathrm{P}$ (or a higher Spec, in case of Wh-to-Foc). In a way, Kotek requires short non-wh-movement to derive the semantics of wh-in situ. I believe that the evidence from Trevisan provides further support for her claim.

## CHAPTER 4

## More on Trevisan wh-in situ

In this chapter, I shall explore some properties of Trevisan wh-in situ that go beyond the central topic of this book, but are nonetheless worth discussing: the case of wh-in situ in indirect wh-questions, and the morphosyntax of wh-in situ inside (and outside) of islands for extraction. Although here I shall only discuss the data and provide some provisional answers, I believe that the phenomena described in this chapter do in fact provide further evidence in support of the theory of Trevisan wh-in situ that I have developed in the previous chapters. Note that the two sections of this chapter are self-contained and can be read in any order.

Before beginning this discussion, I shall provide an overview of the analysis of Trevisan nominative clitics as inflectional phi-elements that I developed in Bonan (2019). This analysis will prove extremely relevant in the discussions of the mechanisms behind T-to-C, especially in the context of extraction out of syntactic islands (\$4.2). One of the main claims related to the phenomenon of subject-clitic inversion in Trevisan made in Bonan (2019) is that the clause-internal movement of wh-elements discussed in the previous chapters clearly rules out the possibility that Trevisan derives wh-in situ in terms of wh-movement to the CP followed by further movements of all IP-internal constituents, as in the 'remnant-IP movement analysis' (see Chapter 5 for further details). On these assumptions, contra Poletto \& Pollock (2000) and many related works, I argued that subject-clitic inversion cannot be movement of phrasal chunks, and must rather be the result of head movement of the verb. The verb, I claimed, moves along with non-nominative clitics. Indeed, contra Kayne (1991), I claimed that non-nominative clitics do adjoin to the finite verb, unlike nominative clitics: while the latter are externally-merged within $v \mathrm{P}$ and then moved along with the verb to IP (and further to CP in interrogatives), declarative nominative clitics are realised directly in the head of Cardinaletti's (2004) SubjP and are (syntactically) independent from the verb. Observe (1), in which I suggest that the verb is not structurally conjoined to nominative clitics and moves to C as a complex head along with non-nominative clitics:
(1) COMPLEX VERBAL HEAD
a. Declarative: $\mathrm{cl}_{\mathrm{NOM}}>\mathrm{cl}_{\mathrm{DAT}}>\mathrm{cl}_{\mathrm{ACC}}>\mathrm{V}$

Te [v ghe [o [ gà ]]] za dato
you $=\quad$ DAT $=A C C=$ have already given
'You've already given it to him/her'
b. Interrogative: $\mathrm{cl}_{\mathrm{DAT}}>\mathrm{cl}_{\mathrm{ACC}}>\mathrm{V}>\mathrm{cl}_{\mathrm{NOM}}$
[v Ghe [o [ gà]]] tu za dato? DAT $=\quad$ ACC=have $=$ you already given
'Have you given it to him/her already?'
The main peculiarities of Trevisan nominative clitics are that, at least superficially, they are proclitic in declaratives and enclitic in interrogatives (as in 1), and that in enclisis they display morphological variations and are greater in number. I have argued that these facts cannot be trivial and clearly suggest that we are dealing with two different series. The two series of Trevisan nominative clitics are repeated in (2):
(2) TREVISAN NOMINATIVE CLITICS

|  | 1 PS | 2 PS | 3 PS | 1 PP | 2 PP 3 PP |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Declarative: | $\varnothing$ | te | $\mathrm{el}_{\mathrm{M}} / \mathrm{a}_{\mathrm{F}} / \emptyset_{\text {EXPL }}$ | $\varnothing$ | $\varnothing$ |
| $\mathrm{i}_{\mathrm{M}} / \mathrm{e}_{\mathrm{F}}$ |  |  |  |  |  |
| Interrogative: (io) | tu | $\mathrm{o}_{\mathrm{M}} / \mathrm{a}_{\mathrm{F}} /\left(\mathrm{o}_{\text {EXPL }}\right)$ | $\varnothing$ | $\varnothing$ | $\mathrm{i}_{\mathrm{M}} / \mathrm{e}_{\mathrm{F}}$ |

That Northern Italian dialects can have two incomplete nominative paradigms has been known for decades (Renzi \& Vanelli 1983; Poletto 2000, a.o.) and, while incomplete pronominal series are uncommon, deficient inflectional classes are unsurprising. Following Rizzi (2016), I assumed that Trevisan declarative nominative clitics realise the head of Cardinaletti's (2004) SubjP, and argued in favour of a treatment of Trevisan as systematically pro-drop. Crucially, I claimed that nominative clitics are a phi-subset in Subj${ }^{\circ}$, which is realised phonetically at Spell-Out in the presence of a relevant spec-head configuration in SubjP, along the lines of (3):
(3) SPEC-HEAD CONFIGURATIONS WHICH ACTIVATE DECLARATIVE NOMINATIVE CLITICS
a. Configuration I: lexical category in SpecSubjP:
$\left[_{\text {SubjP }}\right.$ XP [ Subj ${ }_{[+ \text {phi] }} \Rightarrow \mathrm{cl}_{\text {NOM }}$ ]]
b. Configuration II: pro in SpecSubjP:
$\left[_{\text {Subjp }}\right.$ pro $\left[\right.$ Subj $\left.^{\circ}{ }_{[+ \text {phi] }} \Rightarrow \mathrm{cl}_{\text {NOM }}\right]$ ]
A similar proposal (modulo the spec-head activation analysis in (3)) had already been made for French enclitics in Roberts (2007a): he takes these to be phi-features that the 'residual V2' CP of interrogatives does not pass to T (à la Chomsky 2005). Consequently, I argued that the interrogative nominative clitics of Trevisan are a [phi;q] featural bundle in Focus ${ }_{\text {HIGH }}$, activated following interrogative movement of overt (= wh-elements) or covert (= Q-particles) operators into SpecFocus ${ }_{\text {HIGH }}$.

I therefore proposed that the featural specifications of the nominative clitics are as in Table 4.1, with all differences observed in the interrogative series linked to the presence of the [q]-feature:

Table 4.1 Featural specifications of trevisan nominative clitics

| Declarative series | Interrogative series |
| :---: | :---: |
| [+1; -2; -PL; +REF] $\Rightarrow \varnothing$ | [+1; -2; -PL; +REF; +Q ] $\Rightarrow$; (/jo/) |
| [-1; +2; -PL; +REF] $\Rightarrow / \mathrm{te} /$ | $[-1 ;+2 ;-\mathrm{PL} ;+\mathrm{REF} ;+\mathrm{Q}] \Rightarrow / \mathrm{tu} /$ |
| [-1;-2; -PL; -F; +REF] $\Rightarrow /(\mathrm{e}) \mathrm{l} /$ | [-1;-2; -PL; -F; +REF; +Q] $\Rightarrow /(\mathrm{e}) \mathrm{o} /$ |
| [-1;-2;-PL; +F; +REF] $\Rightarrow / \mathrm{a} /$ | $[-1 ;-2 ;-\mathrm{PL} ;+\mathrm{F} ;+\mathrm{REF} ;+\mathrm{Q}] \Rightarrow /(\mathrm{e}) \mathrm{a} /$ |
| [-1;-2;-PL; -REF] $\Rightarrow \emptyset$ |  |
| $[+1 ;-2 ;+$ PL; +REF $] \Rightarrow \emptyset$ | [ $+1 ;-2 ;+$ PL; +REF; +Q ] $\Rightarrow \varnothing$ |
| $[-1 ;+2 ;+$ PL; +REF $] \Rightarrow \emptyset$ | $[-1 ;+2 ;+$ PL; +REF $;+\mathrm{Q}] \Rightarrow /(\mathrm{e}) \mathrm{o} /$ |
| $[-1 ;-2 ;+$ PL; -F; +REF $] \Rightarrow / \mathrm{i} /$ | [-1; -2; +PL; -F; +REF; +Q] $\Rightarrow /(\mathrm{e}) \mathrm{i} /$ |
| $[-1 ;-2 ;+\mathrm{PL} ;+\mathrm{F} ;+\mathrm{REF}] \Rightarrow / \mathrm{e} /$ | $[-1 ;-2 ;+\mathrm{PL} ;+\mathrm{F} ;+\mathrm{REF} ;+\mathrm{Q}] \Rightarrow / \mathrm{e}(:) /$ |

My treatment of Trevisan nominative clitics as inflectional classes activated under proper Spec-head agreements, along with the claim that the inflected verb adjoins to non-nominative clitics to move as a complex head to C , has at least two major advantages. First, the presence of a residual V2 environment in the LP of matrix questions, but not in that of embedded questions, successfully accounts for the matrix/embedded asymmetry observed with subject-clitic inversion. Then, assuming that nominative clitics are inflectional classes correctly predicts that it is possible for these to have incomplete paradigms, while also accounting for the morphological alternations observed, which I attributed to the exclusive presence of [q]-features in the interrogative series. Under the assumption that phi-features are not realised twice over, the complementary distribution of the two classes is expected.

The treatment of Trevisan nominative clitics presented in Bonan (2019) implies that (phonetically-realised or silent) interrogative material must move to SpecFocus ${ }_{\text {HIGH }}$ in overt syntax for subject-clitic inversion to happen. This assumption, as I shall argue extensively in $\S 4.2$, has serious consequences for the treatment of island-trapped wh-elements and, consequently, for the theory of islands itself.

## Organisation of this chapter

The chapter opens with a study of the morphosyntax of wh-in situ in indirect whquestions in Trevisan, which is licensed under what looks like a semantically-void if-complementiser, $\mathrm{se}_{\mathrm{wH}}$. Making systematic comparisons with the morphosyntax of overt wh-doubling, which is another strategy for the felicitous licensing of wh-in situ in embedded environments (\$4.1.1), I claim that $\mathrm{se}_{\mathrm{wH}}$ is actually an interrogative head that licenses an interrogative operator in the specifier of Rizzi \& Bocci's (2017) QembP. The role of $\mathrm{se}_{\mathrm{wH}}$ is to ensure the correct setting of QembP as [+wh] in the absence of interrogative agreement with the clause-internal wh-element
(§4.1.3). In $\$ 4.2$, I claim that only strong islands are indeed islands for extraction in Trevisan (\$4.2.1), and adopt Cable’s claim that wh-in situ within a strong island is only felicitous if the whole island is selected by $\mathrm{Q}(\mathrm{P})$, while island-trapped wh-elements are bare (\$4.2.2). I then show that weak islands are actually neither islands for extraction nor for Q-agreement and can, but need not, adjoin to the silent Q-particle as a whole (\$4.2.3).

### 4.1 On wh-in situ in indirect wh-questions

Starting from van Riemsdijk \& Williams (1986), a great deal of work in formal grammar has assumed the existence of a 'Doubly-filled complementiser filter' in languages such as English. This filter is a grammatical tool that rules out the co-occurrence of a wh-element and a complementiser within the same projection of the CP domain, as in (4):
(4) Standard English
a. I wonder [CP who $\varnothing$ [ she saw ]]
b. ${ }^{*}$ I wonder [ ${ }_{\text {CP }}$ who that [ she saw ]]
c. ${ }^{*}$ I wonder [ ${ }_{\mathrm{CP}}$ who whether [ she saw ]]

The traditional account of examples such as (4) have been that complementiser deletion must obtain so as to satisfy the filter. Interestingly, however, some languages appear to violate the filter systematically, including most Northern Italian dialects. In Chapter 1, I claimed that one of the peculiarities of Trevisan is that it allows wh-in situ in indirect wh-questions, as shown in (5):
(5) Trevisan
a. Me domando [se te gà magnà cossa ] REFL ask $\quad \mathrm{se}_{\mathrm{wH}}$ you= have eaten what 'I wonder what you ate'
b. A se domanda [ sel vegnarà cuando ] she= REFL asks $\quad \mathrm{se}_{\mathrm{wH}}=$ he $=$ come $_{\mathrm{rut}}$ when
'She wonders when he's going to come'
Trevisan embedded wh-in situ is only possible in the presence of $\mathrm{se}_{\mathrm{wH}}$, which I have treated as a semantically-vacuous complementiser in the preceding chapters. In fact, unlike its 'yes/no' homophone, which has the same meaning as the English complementiser $i f, \mathrm{se}_{\mathrm{wH}}$ leaves intact the interpretation of the indirect wh-question. Nonetheless, despite its lack of semantic import, its absence unambiguously leads to ungrammaticality, as in (6):
(6) Trevisan
${ }^{*} \mathrm{Me}$ domando [ te gà magnà cossa ]
REFL ask ${ }_{1 p s} \quad y o u=$ have eaten what
'I wonder what you ate'
I therefore conclude that the role of $\mathrm{se}_{\mathrm{wH}}$ must be purely syntactic, and also that it cannot be the same if-complementiser that also introduces yes/no questions. I address the latter issue in $\S 4.2 .2$. Interestingly, and to the best of my knowledge, there are only two Northern Italian structures that license felicitously embedded wh-in situ: Trevisan $\mathrm{se}_{\mathrm{wH}}$, and Venetan/Lombard wh-doubling. Given the discussion of wh-in situ as involving overt movement of the Q-particle that I outlined in Chapters 2 and 3, one might think that $\mathrm{se}_{\mathrm{wH}}$ is in fact an overt realisation of the Trevisan Q-particle. However, in what follows I shall claim that such an analysis can only account for the data of wh-doubling, while the Trevisan facts are better explained by analysing $\mathrm{se}_{\mathrm{wH}}$ as an interrogative element first-merged directly in the head of QembP.

Interestingly, all varieties that have embedded wh-in situ have one major property in common: they systematically violate the doubly-filled complementiser filter, as illustrated by the Trevisan example in (7):
(7) Trevisan

Me domando [ $\operatorname{coss} a^{*}($ che $)$ te gà magnà ]
REFL ask ${ }_{1 \text { ps }}$ what that you= have eaten 'I wonder what you ate'

Note that a fronted wh-element is not possible when construed with $\mathrm{se}_{\mathrm{wH}}$, as in (8):
(8) Trevisan
${ }^{*} \mathrm{Me}$ domando [ cossa se te gà magnà ] REFL ask ${ }_{\text {lps }} \quad$ what $\mathrm{se}_{\mathrm{wH}}$ you= have eaten 'I wonder what you ate'

The varieties that allow both wh-doubling and single wh-in situ also systematically realise the embedded that-complementiser in constructions with single wh-fronting, as illustrated in (9). However, no complementiser is realised in case of doubling wh-fronting, as in (10):
(9) Strozzense (adapted from Manzini \& Savoia 2005: 593 (156))
a. di-m 'koza ${ }^{*}(\mathrm{ke})$ te 'fe
tell=me what that you do
'Tell me what you're doing / you do'

## b. me se do'mande n'do ${ }^{*}(\mathrm{k}) \mathrm{i}$ 'va

I myself ask where that they go
'I wonder where they're going / they go'
(10) Strozzense (adapted from Manzini \& Savoia 2005: 592 (156))
me se do'mande 'koza (*ke) i 'fa ko'ze
I myself ask what that they do what
'I wonder what they are doing / they do'
In what follows, I discuss how these data can be accounted for in light of my theory of wh-in situ.
4.1.1 Thoughts on the syntax of $\mathrm{se}_{\mathrm{wH}}$ and wh-doubling

In Chapter 3, I claimed that wh-doubling is an exceptional case of Q-adjunction with overtly-realised [q] and [wh]-features on the Q-particle. In contrast, I analysed all ordinary cases of single wh-in situ as instances of Q -adjoining wh-elements with silent [q]-features in Q , plus an unvalued (hence silent) [wh]-feature. I illustrate both cases in (11):
(11) a. Covert features in $\mathrm{Q}=$ no wh-doubling:
[WhP $\emptyset_{+q_{;}[] w h}$ [WhP wh-element ]]
b. Overt features in $\mathrm{Q}=$ overt wh-doubling:
[WhP $\mathrm{Q}_{+\mathrm{q} ;+\mathrm{wh}}$ [WhP wh-element ]]
My analysis, of course, entails that the varieties that display wh-doubling can also have a [wh]-feature to be checked in the matrix Left Periphery. In addition, the optional status of wh-doubling signals that the Left Periphery of these varieties is at an intermediate evolutionary stage in which [q] is not yet the sole feature responsible for wh-fronting.

The fact that embedded wh-doubling does not require the embedding complementiser to be overtly realised constitutes further evidence for my claim that the higher doubling elements of wh-doubling, despite their wh-like forms, are not proper wh-elements. In fact, in all the languages under consideration here a fronted wh-element is systematically construed with an overt complementiser. To analyse Trevisan $\mathrm{se}_{\mathrm{wH}}$ as an exceptional overt realisation of the [q] features on a Q-particle would incorrectly predict two facts: that QembP is endowed with a Q-feature, and that an overt realisation of Q is able to perform actions that its silent counterpart cannot. However, overt and silent realisations of the same element should never be expected to have different syntactic properties: it is therefore not clear how an overt realisation of the fronted Q could save an otherwise infelicitous structure, unless
we assume that the phenomenon is linked to a matrix/embedded asymmetry, as suggested by Ur Shlonsky (pc.). Indeed, whatever explanation we adopt for the phenomenon of wh-doubling, it is in fact extremely clear that while single wh-in situ is sufficient in matrix questions, as in (12), the same cannot be said of embedded wh-in situ, which must always be doubled, as in (13):
(12) Strozzense (Manzini \& Savoia 2005: 589 (154))
(ndo) l pur'ti:-f indo' $\varepsilon$ ?
where it bring=you where
'Where are you bringing it?'
(13) Strozzense (adapted from Manzini \& Savoia 2005: 593 (156))
'so 'mia *(se) por'ta-t (ko'zz)
know $_{\text {lps }}$ NEG what bring=you what
'I don't know what to bring you'
It is therefore tempting to suggest that an overt doubling element is actually somewhat different from what at first glance seems to be a phonetically-null doubling element. I discuss this in \$4.2.3.

To conclude, a note on embedded complementisers. Violation of the doublyfilled complementiser filter appears to be a necessary but not sufficient condition for a variety to be able to license embedded wh-in situ. This claim is confirmed by most Lombard varieties attested in Manzini \& Savoia (2005: 592-593), where an embedded that-complementiser is compulsory in the case of fronting, but no $\mathrm{se}_{\mathrm{wH}}$-like complementiser exists, hence indirect single wh-in situ is impossible. Further evidence comes from Contemporary Spoken French, as illustrated in (14):
(14) Contemporary Spoken French
a. Il veut savoir quand (*que) tu pars
he wants know when that you leave 'He wants to know when you're leaving'
b. *Il veut savoir tu pars quand he wants know you leave when
c. *Il veut savoir si/que tu pars quand he wants know si/que you leave when

Indirect wh-questions in Contemporary Spoken French are incompatible with an overt embedding complementiser, as in (14a). On the basis of the discussion so far, French would not be expected to be able to license indirect wh-in situ, as indeed confirmed by (14b)-(c). Predictably, the unavailability of a complementiser in cases of wh-fronting to the embedded Left Periphery, as in (14a), prevents the variety from having a complementiser associated with wh-in situ, as in (14c). As an aside,
observe that in rural French an embedded complementiser actually is available in the case of wh-fronting, as in (15):

## (15) Rural French

Il veut savoir quand que tu pars
he wants know when that you leave
'He wants to know when you're leaving'
If my approach is on the right track, the predictions that result from (15) are that either this variety does not have a $\mathrm{se}_{\mathrm{wH}}$-like element for indirect wh-in situ and fails to license it, or it does, and indirect wh-in situ is possible. Similarly, it has been claimed that Belgian French has an if-complementiser similar to the one found in Trevisan (Boeckx et al. 2000), as in (16):
(16) Belgian French (Boeckx et al. 2000: 60 (10))

Pierre a demandé si tu as vu qui
Pierre has asked si you have seen who
'Pierre asked who you saw'
Consequently, we expect this variety to have an overt complementiser in constructions involving fronting. I am not yet able to say whether this is indeed the case, though these predictions should certainly be tested further.

In Trevisan, $\mathrm{se}_{\mathrm{wH}}$ is homophonous with its yes/no counterpart, as in (17); similarly, the that-complementiser used in the case of wh-fronting in indirect questions is identical to the one used in long-distance construals, as in (18):
(17) Trevisan

Me domando sel me ciamarà
REFL wonder $i f=h e=$ me call ${ }_{\text {fUT }}$
'I wonder whether he'll call me'
(18) Trevisan

Penso chel me ciamarà
think $\mathrm{l}_{\text {PS }}$ that=he= me call ${ }_{\text {FUT }}$
'I think he's going to call me'
Data such as (17) and (18) raise a question about the structural position(s) occupied by the if-complementiser and the that-complementiser in the structure, and about whether or not these are the same element used in different contexts. In what follows, I shall argue that they are not the same, and that the structural position occupied by complementisers in indirect wh-questions is significantly lower than that posited for ordinary that- and if-complementisers in $\operatorname{Rizzi}(1997,2001)$.

### 4.1.2 Functional elements in the lower Left Periphery

$\mathrm{Se}_{\mathrm{wH}}$ is different from its high yes/no counterpart (henceforth, $\mathrm{se}_{\mathrm{Y} / \mathrm{N}}$ ), and appears to realise a low left-peripheral head: despite the morpho-phonological equivalence, the two are distinct complementisers that head two different functional projections in the Left Periphery of the clause. The same is true for che ('that'): even at first glance, it is clear that the che construed with wh-fronting in indirect wh-questions is located much lower than its declarative homophone. Recall the structure of the Left Periphery, which I repeat in (19):
(19) the left periphery (as in Rizzi \& Bocci 2017: 8 (29))
[ Force [ Top ${ }^{*}$ [ Int [ Top ${ }^{*}$ [ Focus [ Top* [ Mod [ Top* [ Qemb [ Fin
[ Ip ... ] ] ]]]]]]]]]
Rizzi (2001) argued that the interrogative head se ('if') in Standard Italian yes/no questions occupies the head of $\operatorname{Int}($ errogative)P. To understand where the two ifand that-complementisers sit in the structure in Trevisan, let us turn to their distribution(s) with respect to topics and focus. Observe the distribution of a topic like sto libro ('this book') with regard to $\mathrm{Se}_{\mathrm{Y} / \mathrm{N}}$, as in (20), and $\mathrm{se}_{\mathrm{WH}}$, as in (21):
(20) Trevisan
a. Me domando, [sto libro], se teo gà za leto REFL ask $_{\text {lps }}$ this book se you=it have already read 'This book, I wonder whether you've already read (it)'
b. Me domando se, [sto libro], teo gà za leto REFL ask $_{1 \text { ps }}$ se this book you=it have already read
(21) Trevisan
a. Me domando, [sto libro], se te ghe o gà regaeà a chi REFL ask ${ }_{1 \text { ps }}$ this book se you= DAT= it=have given to who 'This book, I wonder who you gave (it) to'
b. ?? Me domando se, [sto libro], te ghe o gà regaeà a chi REFL ask ${ }_{1 \mathrm{ps}}$ se this book you_ DAT= it=have given to who

From (20) and (21) it follows that topics can either directly precede or follow $\mathrm{se}_{\mathrm{Y} / \mathrm{N}}$, but only directly precede $\mathrm{se}_{\mathrm{wH}}$. If a topic is placed after $\mathrm{se}_{\mathrm{wH}}$, the sentence is degraded. This seems to suggest that, while se $\mathrm{Y} / \mathrm{N}$ might be the counterpart of Italian $s e, \mathrm{se}_{\mathrm{wH}}$ lies lower in the structure. The situation is summarised in (22):
(22) topic $>\mathrm{se}_{\mathrm{YN}}>$ topic $>\mathrm{se}_{\mathrm{wH}}>{ }^{*}$ topic

Similarly to what was observed in (21), in the presence of a fronted wh-element, a topical element can only directly precede the wh-element. If it is placed between the wh-element and the complementiser che ${ }_{\mathrm{wH}}$ or after the complementiser, the question is very degraded, as in (23):
(23) Trevisan
a. Me domando, [ sto libro], dove che teo gà leto REFL ask ${ }_{1 p s}$ this book where che you=it= have read 'This book, I wonder where (that) you read (it)'
b. ${ }^{? ?} \mathrm{Me}$ domando dove, [ sto libro], che teo gà leto REFL ask ${ }_{1 \mathrm{ps}}$ where this book che you=it= have read
c. ${ }^{?} \mathrm{Me}$ domando dove che, [ sto libro], teo gà leto REFL ask ${ }_{1 p s}$ where che this book you=it= have read

Consequently, che ${ }_{\mathrm{wH}}$ appears to occupy a position similar to that of $\mathrm{se}_{\mathrm{wH}}$, which is further confirmed by the fact that only $\mathrm{se}_{\mathrm{Y} / \mathrm{N}}$ can be surrounded by topics, while the complementisers of indirect wh-questions cannot, as in (24):
(24) Trevisan
a. Me domando, [sto libro], se, [jeri], teo gà leto REFL ask ${ }_{1 p s}$ this book $\mathrm{se}_{\mathrm{Y} / \mathrm{N}}$ yesterday you=it= have read 'This book, yesterday, I wonder if you read (it)'
b. ${ }^{*} \mathrm{Me}$ domando, [sto libro], se, [jeri], o gà leto chi REFL ask ${ }_{1 p s}$ this book $\mathrm{se}_{\mathrm{wH}}$ yesterday $\mathrm{it}=$ has read who 'This book, yesterday, I wonder who read (it)'
c. ${ }^{*} \mathrm{Me}$ domando, [sto libro], chi che, [jeri], o gà leto REFL ask ${ }_{1 p s}$ this book who che ${ }_{w H}$ yesterday $i t=$ has read

As predicted by the distribution of $\mathrm{se}_{\mathrm{Y} / \mathrm{N}}$ and se/che $\mathrm{wH}_{\mathrm{wH}}$ with regard to topics, a focused constituent can only follow $\mathrm{se}_{\mathrm{Y} / \mathrm{N}}$, as illustrated in (25), while it must precede $\mathrm{se}_{\mathrm{wH}}$ and the wh-element + che cluster, as in (26) and (27): ${ }^{28}$
(25) Trevisan
a. Me domando se sto libro teo gà leto (no staltro) REFL ask ${ }_{\text {lps }}$ se this book you=it= have read (NEG the.other) 'тHIS воок I wonder if you read (not the other one)'
b. ${ }^{*} \mathrm{Me}$ domando sto libro se teo gà leto (no staltro) REFL ask ${ }_{1 \text { ps }}$ this book se you=it= have read (NEG the.other)
(26) Trevisan
a. Me domando sto libro seo gà leto chi REFL ask ${ }_{\text {lps }}$ this book $s e=i t=$ has read who 'THIS BOOK I wonder who read'

[^17]b. ${ }^{*} \mathrm{Me}$ domando se sto libro o gà leto chi Refl ask ${ }_{\text {lps }}$ se this book it= has read who
(27) Trevisan
a. Me domando sto libro chi cheo gà leto Refl ask ${ }_{\text {lps }}$ this book who che=it has read 'this воок I wonder who read'
b. ${ }^{*}$ Me domando chi sto libro cheo gà leto Refl ask ${ }_{1 \mathrm{ps}}$ who this book che=it has read
c. ?? Me domando chi che sto libro o gà leto Refl ask $_{\text {lps }} \quad$ who che this book $\mathrm{it}=$ has read

All the data discussed in this section suggest that $\mathrm{se}_{\mathrm{Y} / \mathrm{N}}$ is hosted by a high leftperipheral head that can indeed be surrounded by topics but only followed by focus, like Int ${ }^{\circ}$ in Standard Italian, whereas se $\mathrm{w}_{\mathrm{wH}}$ and che wH must be merged within an interrogative projection that can only be preceded by focus and topics. This interrogative that-complementiser lies much lower in the structure than its declarative homophonous counterpart, which I take to realise the head of ForceP, following Rizzi (1997).

A summary of the distribution of the complementisers under investigation is provided in (28):

DISTRIBUTION OF INTERROGATIVE IF- AND THAT-COMPS
WRT TOPICS AND FOCUS

$$
\begin{aligned}
\mathrm{se}_{\mathrm{Y} / \mathrm{N}} & >\text { focus }>\text { topic } \\
& \text { focus }>\text { topic }>\mathrm{se}_{\mathrm{wH}} \\
& \text { focus }>\text { topic }>\text { che }_{\mathrm{wH}}
\end{aligned}
$$

Consequently, it seems safe to state that $\mathrm{se}_{\mathrm{Y} / \mathrm{N}}$ canonically realises Int0, like its Italian counterpart discussed in Rizzi (2001), while $\mathrm{se}_{\mathrm{wH}}$ heads a very low left-peripheral functional projection, situated lower than the last topical projection. In line with Rizzi's (1997) discussion of Italian indirect wh- questions, revised in Rizzi \& Bocci (2017), I suggest that this position is QembP ${ }^{29}$. The situation is summarised in (29):

[^18]
## THE TREVISAN LEFT PERIPHERY

### 4.1.3 $\mathrm{Se}_{\mathrm{wH}}$ licenses an interrogative operator in SpecIntP

Given my claim that both the embedded complementiser che of indirect questions and $\mathrm{se}_{\mathrm{wH}}$ are first-merged within QembP, a purely interrogative projection, let us turn back to the question of the nature of $\mathrm{se}_{\mathrm{wH}}$, as compared to doubling elements in wh-doubling constructions. In Chapter 3, I claimed that wh-doubling elements are actually instances of Q-particles that result from the phonetically-overt realisation of both [q] and [wh]-features. The [wh]-feature on interrogative wh-elements is usually unvalued because, in the context of matrix wh-questions, it lacks an output effect (in the sense of Chomsky 1995). However, in some Northern Italian dialects, both $[q]$ and $[w h]$ can optionally need to be checked in C : in these peculiar environments, the [wh]-feature on the wh-element has an output effect and hence must be valued. Subsequently, the valued [wh]-feature is transmitted to the Q-particle, which results in the phenomenon of wh-doubling. I have also claimed that my analysis of wh-doubling has interesting consequences for the theory of Northern Italian indirect wh-questions. Indeed, while single wh-in situ is ruled out in these constructions, doubling wh-in situ is instead felicitous: in my understanding, this phenomenon is predicted under the assumption that the Q-particle of single wh-in situ, contrary to that of wh-doubling, lacks the [wh]-feature needed to check the uninterpretable [wh]-feature in $\mathrm{Qemb}^{\circ}$. If we were dealing with the phonetically-realised and null forms of the exact same element, we would expect both to have the same syntactic properties, contrary to fact.

In Standard Italian indirect wh-questions, when a focused element is present, it lands in the Spec of Focus $_{\text {HIGH }}$, while the wh-element moves to the lower portion of the Left Periphery, into SpecQembP. The positions occupied by the elements under consideration are illustrated in (30):
(30) Standard Italian

Mi domando .. [Fochigh a gianni .. [QembP che cosa .. [ ${ }_{\text {TP }}$ abbiano detto $]$ ]] REFL ask ${ }_{\text {lps }}$ to John what have $_{\text {3pp }}$ said 'то JонN I wonder what they said (not to Piero)'

As discussed in Rizzi (1997) and further developments, constructions such as (30) are only felicitous in Standard Italian if the focused element is an indirect object and the wh-element is a direct object. In contrast, focus-containing indirect wh-questions are productive, and are felicitous regardless of the syntactic role of the elements involved, as in (31):
(31) Trevisan
a. Vojo saver el gato a chi chei gheo gà dato(, no want $_{\text {lps }}$ know the cat to who that=they= DAT=it= have given NEG el can!)
the dog
'I want to know the cat to whom they gave it (not the dog!)'
b. Me domando a to mama chi che ghe gà dato da bevar(, REFL ask ${ }_{\text {lps }}$ to your mum who that DAT= has given to drink no a lu)!
neg to him
'I wonder TO YOUR MUM who gave drinks (not to him)!'
c. Vojo saver dopo sena chi che te gà visto(,
want $_{\text {lps }}$ know after dinner who that you= have seen
no stamatina)!
NEG this.morning
'I want to know AFTER DINNER who you saw (not this morning!)'
Now, the higher clausal domain of indirect interrogatives displays declarative syntax, while the lower presents typical embedded syntax: subject-clitic inversion is ruled out. Therefore, we do not expect the embedded CP to have residual V2 syntax: the phi-features in C must have been correctly transferred to T, hence ruling out verb movement to C. It is not uncommon for languages to have V2 syntax only in certain contexts and not in others, and asymmetries between V2 in matrix and non-V2 in embedded clauses are observed in most V2 languages (den Besten 1983; Haegeman 1996; Samo 2018, a.o.). Given that the interpretation of indirect wh-questions is not the same as that of direct questions, i.e. not a set of alternatives on the wh-element but rather declarative-like semantics, it is possible to imagine that the matrix verb selects an embedded question whose Left Periphery is very similar to that of declaratives, with the sole exception of the activation of QembP in the lower portion of the periphery. Consequently, my model predicts that the embedded Focus ${ }_{\text {HIGH }}$ bears a [foc]-feature, not a [q]-feature. Indeed, embedded questions do not require an answer, and the felicitous co-occurrence of a wh-element and a focused constituent is guaranteed by the fact that the movement of the wh-element into QembP is not proper focal movement but rather mere wh-movement required to check a [wh]-feature, as in (32):
(32) THE LP OF TREVISAN INDIRECT WH-QUESTIONS

The featural specifications in (32) predict the following: (i) that languages like Trevisan, where the adjoined Q-particle is always silent (covert wh-doubling), only check [q] in C (as claimed in Chapter 3); (ii) that Northern Italian languages with
overt Q-particles, i.e. languages with wh-doubling, can check both [q] and [wh] in C, though not systematically; (iii) as a result of this, in indirect wh-questions, overt wh-doubling, which carries the [wh]-feature transmitted via percolation by the wh-element, is able to check the interrogative feature in QembP alone, through fronting of the Q-particle (while [q] is exceptionally not valued because it does not have an output effect in this precise context); (iv) in contrast, in the absence of wh-doubling, the silent Q-particle solely endowed with a [q]-feature is insufficient to check [wh] in QembP alone, and the computation fails. Note that, given the lack of a [q]-feature to be checked in C in this type of question, it is unnecessary (and hence not permitted) for Trevisan wh-elements to join the Q-particle. From (iv) it follows that, among the varieties in which only silent Q-particles are available, only those that are able to license an interrogative operator independently of wh-doubling will be able to license embedded wh-in situ felicitously. One of these languages, I claim, is Trevisan, where the existence of the inherently interrogative $\mathrm{se}_{\mathrm{INT}}$-head is sufficient to license an interrogative operator in SpecQembP, hence correctly marking the sentence as interrogative. I illustrate how the [wh]-feature in QembP is checked in the presence of overt wh-doubling in (34), using the Lombard example in (33):
(33) Strozzense (adapted from Manzini \& Savoia 2005: 593 (156)
'so 'mia *(se) por'ta-t (ko'ze)
know $_{1 \text { pS }}$ NEG what bring=you what 'I don't know what to bring you'
(34) FEATURE CHECKING IN QEMB: WH-DOUBLING
'so 'mia...

(35) illustrates how the $\mathrm{se}_{\mathrm{wH}}$ licenses an interrogative operator in SpecQembP, thereby marking the embedded sentence as interrogative in the absence of an $i[\mathrm{wh}]$ feature in Q . The main difference with respect to the case of overt wh-doubling in (34) is that the wh-element here fails to pass its [wh]-feature to the Q-particle, hence the inherently [+wh] head $\mathrm{se}_{\mathrm{wH}}$ is needed to mark the embedded clause as interrogative:


### 4.1.4 Concluding remarks

In Chapter 3, following Cable (2010), I claimed that Trevisan and Northern Italian wh-in situ is possible when the Q-particle adjoins to a wh-element, while wh-fronting is actually fronting of a wh-element selected by a Q-projection. Subsequently, I argued that what makes optional wh-in situ possible is the availability of both strategies for joining the Q-particle to wh-elements, and that Northern Italian wh-doubling is an overt instantiation of [q]- and [wh]-features on the Q-particle itself. In this section, I have claimed that what makes wh-doubling different from single wh-in situ is the [wh]-feature which can be valued and can percolate into the Q-particle only in the former. My claim is supported not only by the morphological form of wh-doubling elements, which closely resembles that of wh-elements, but also by the morphosyntax of indirect wh-elements. It seems plausible to assume that the varieties with overt wh-doubling have both Trevisan strategies to integrate the silent Q-particle, namely Q-adjunction and Q-projection, plus a third strategy whereby the Q-particle not only has [q]-features but is also specified positively for [wh]. Here, I have claimed that embedded wh-in situ is highly exceptional and is only felicitous in varieties that are able to check the [wh]-feature in QembP. It has been claimed, beginning with Rizzi (1997), that this functional projection, which
sits very low in the Left Periphery of the clause, hosts wh-elements in indirect wh-questions. Evidence in favour of this claim comes not only from the distribution of wh-elements in focus-containing indirect wh-questions in both Standard Italian and Trevisan, but also from the distribution of the embedded that-complementiser and of the interrogative head $\mathrm{se}_{\mathrm{wH}}$ in Trevisan.

The productivity of focus-containing indirect wh-questions in Trevisan raises the question of locality: how can focus and wh-elements, two quantificational elements, co-exist within the same question without giving rise to a violation? In most cases, crossing quantificational chains, or at best nesting quantificational chains, should be involved here. However, I believe that there is no real need to posit that the quantificational chains under consideration are indeed incompatible with one another: given the semantics of indirect wh-questions, which unlike genuine wh-questions are not answer-seeking, it seems legitimate to posit that the two types of questions are associated to different Left Peripheries. Indeed, I have claimed that embedded questions have a declarative-like Left Periphery with an active QembP: consequently, these are characterised by a $\left[+\right.$ foc] Focus $_{\text {HIGH }}$ plus an interrogative projection in the lower portion of the Left Periphery, QembP, specified positively for [wh].

Under the assumption that syntactic operations are performed only if necessary, insertion of a Q-particle in the case of indirect wh-questions appears unnecessary, modulo the cases of overt wh-doubling where the presence of an overtly-realised [wh]-feature on the Q-particle plays a role. The role of the overt Q-particle, I claim, is to check the interrogative feature in QembP, hence licensing embedded wh-in situ felicitously. Once the [wh]-feature in QembP is checked correctly, the coalesced ForceP is marked as interrogative and the Left Periphery can expand further, virtually limitlessly, without the structural distance between ForceP and QembP being problematic. Recall that the primary role of the complementiser system is the expression of force, crucially distinguishing between various clause types (declarative, interrogative, exclamative, etc.) and finiteness, distinguishing at least between finite and non-finite clauses. Force and Finiteness can be thought of as two distinct heads closing off the complementiser system at the top and bottom end, with the need for two distinct functional positions becoming clear when the intermediate topic and focus field is activated. According to Rizzi (2001), it is possible for Force and Finiteness to coalesce into a single head in the simple cases, expanding only when required. Under this assumption, I believe, the structural distance between QembP and Force is of no concern for proper marking of the latter as interrogative to take place.

### 4.2 On wh-in situ within islands

Starting from Ross (1967), syntactic structures that prevent extraction to varying degrees have been referred to as islands. Cross-linguistically, extraction of wh-elements out of strong islands appears to be forbidden, while weak islands often partially allow extraction. With regard to the availability of island-trapped wh-in situ, there appears to be a clear-cut divide in Northern Italian dialects: the varieties that have been claimed to derive wh-in situ TP-internally (regardless of whether focus movement is present or not) systematically allow island-trapped wh-in situ (Manzini \& Savoia 2005 and this book), while Bellunese and similar varieties do not (Munaro 1999; Munaro et al. 2001, a.o.). In this section, which only provides a preliminary analysis of the phenomenon of Trevisan wh-in situ within islands for extraction, I tentatively propose that island-internal wh-in situ is different from wh-in situ outside of strong islands. In fact, while wh-elements fail to merge the Q-particle when trapped inside an island, hence being exceptionally bare, QP-selection of the whole island and (overt or covert) massive pied-piping thereof do seem to take place. In contrast, I claim that weak islands are not real islands in Trevisan and, while their clausal nature prevents QP from selecting them, wh-elements within them are able to correctly join to the silent Q-particle.
4.2.1 Trevisan strong islands and the puzzling optionality of subject-clitic inversion

If the right context is provided, Trevisan can felicitously license wh-elements inside syntactic islands. Observe the instances of strong islands in (36) to (38), which I delimit using double square brackets:
(36) Trevisan

Context: You work in a bookshop in a commercial street. Rumours say that some clients of the clothes shop down the street left without paying this morning. You overhear a colleague of yours discussing this with a friend. However, he's actually saying something about the grocery store next door, so you think he might have got the wrong information. You ask:
E te gà dito che [[ i clienti de chi ]] noi
they. $\mathrm{F}=\mathrm{you}=$ have said that the clients of whom $\mathrm{NEG}=$ they $\cdot{ }_{\mathrm{M}}=$
gà pagà?
have paid
'Who is $x$, such that $x$ is someone's client, and you've been told that $x$ didn't pay?'
(37) Trevisan

Context: A friend of yours went to the animal fair last weekend, as he does every year. He's a cattle raiser who attends the fair just to bid and try to buy the heaviest pig - and usually succeeds. You meet him at the bar and ask:
(Eora,) te gà comprà [[ un porsel che pesa cuanto ]]?
(so) $\mathrm{you}_{2 \mathrm{ps}}=$ have bought a pig that weights how.much
'What is the weight of $x$, where $x$ is a pig and you bought $x$ ?'
(38) Trevisan

Context: Your friend Giacomo is very ill-tempered and tends to overreact easily and leave without greeting anyone. You get to the bar where you and Giacomo go every evening, and notice that he's not there, which is strange because he usually leaves way later. You smile to a common friend and ask: (Eora,) el zé partìo [[ sensa saeudar chi ]], sto giro? (so) he= is left without greeting who this round 'Who is $x$, such that he left without greeting $x$ ?'

A first hypothesis suggested by cases such as (36) to (38) is that wh-elements trapped inside islands cannot be the same as wh-elements outside islands: if the Q-particle was joined and checked the interrogative feature in C overtly, subject-clitic inversion would be expected, and for the Q-particle to escape the island would constitute a violation, which should result in ungrammaticality. Plausibly, island-contained wh-elements are bare and only their [wh]-feature is relevant for the derivation of the question, which is checked using an island-escaping technique, such as feature movement. It has been argued that feature movement is derivationally 'lighter' than phrasal movement, and that it can escape islands without creating violations. An influential account of island-trapped wh-in situ along these lines is Soh (2005), who claims that Chinese nominal wh-in situ, which systematically take scope across an island, must be treated differently form adverbial wh-in situ, which might not). Under the assumption that Chinese wh-in situ involves generalised covert raising à la Huang (1982), Soh explains the asymmetry between wh-nominals and wh-adverbials in terms of covert feature movement, which is more unconstrained, as opposed to covert phrasal movement.

The prediction that only feature movement of [q] is involved in the derivation of wh-in situ trapped inside an island, which I shall slightly modify later on, is supported by the observation that, very canonically, wh-elements cannot escape strong islands, as in (39):

## (39) Trevisan

a. De chi $i_{\mathrm{i}}$ e te ga dito che [[ i clienti__i $]$ no i gà pagà?
b. Cuanto ${ }_{\mathrm{i}}$ te gà comprà [[ un porsel che pesa $\qquad$ i] ]?


Note that the questions in (39) would be ill-formed even in the presence of sub-ject-clitic inversion. Interestingly though, the questions in (36)-(38) are also grammatical when construed with subject-clitic inversion, as in (40):
(40) Trevisan
a. Te ga-e dito che [[ i clienti de chi $]$ ] noi you $=$ have $=$ they $_{{ }_{F}}$ said that the clients of whom NEG=they $._{M}=$ gà pagà?
have paid
b. (Eora,) ga-tu comprà [[ un porsel che peza cuanto ]]?
(so) have $=\mathrm{you}_{2 \mathrm{ps}}$ bought a pig that weights how.much
c. (Eora,) ze-o partìo [[ sensa saeudar chi ]], sto giro?
(so) is=he left without greeting who this round
In the model that I developed in Bonan (2019), for (40) to be possible, overt interrogative movement to the Left Periphery of the clause must be involved. Therefore, I shall henceforth try to fit Q into the computation.

### 4.2.2 Massive pied-piping of strong islands

Cable (2010) argues that one of the most interesting similarities between the Q-particles of Tlingit and Sinhala, respectively sá and da, concerns their behaviour with regard to islands for extraction. What Cable argues is that, when the Q-particle is located outside of the island, it is accessible to the matrix C , which results in structural felicity. Cable uses these data to support his theory that wh-elements are not relevant in the computation of wh-questions, i.e. agreement is established between $C$ and $Q$, while the matrix $C$ bears no syntactic relationship to the wh-operator itself. In fact, that the wh-element remains inside the island appears to have no bearing on the well-formedness of the sentence.

Kishimoto (2005), in line with Hagstrom (1998), argues that in Sinhala wh-questions a wh-element may be contained inside an island iff the Q-particle is merged outside the island. In complex-NP islands, the Q-particle must be merged to the right of the head of the relative clause, as in (41):
(41) Sinhala (Cable 2010: 33 (38), originally in Kishimoto 2005: 29)
a. Oyaa [[ Chitra kaa-ta dunna ${ }_{\mathrm{CP}}$ ] pota $_{\mathrm{NP}}$ ] da kieuwe? you Chitra who-Dat give book $Q$ read 'Who did you read the book that Chitra gave?'
b. *Oyaa [[ Chitra kaa-ta da dunna ${ }_{\mathrm{CP}}$ ] pota $_{\mathrm{NP}}$ ] kieuwe? you Chitra who-dat Q give book read

The same condition is argued to be at play in wh-questions in Tlingit, where the whelement may be contained inside an island for extraction iff the Q-particle sá is merged outside of it. Recall that, as argued in Chapter 2, while Sinhala is a Q-projection language where QP-fronting occurs after Spell Out (giving rise to wh-in situ), in Tlingit QP-fronting occurs before Spell Out. Consequently, when an island is selected by QP, it is pied-piped as a whole, as in (42):
(42) Tlingit (Cable 2010: 33 (39))
a. [[ Wáa kwligeyi ${ }_{\mathrm{CP}}$ ] xáat ${ }_{\mathrm{NP}}$ ] sá i tuwáa sigóo? how it.is.big.rel fish $\quad$ Q your spirit it.is.happy
'How big a fish do you want?' (Literally: 'A fish that is how big do you want?')
b. *[[ Wáa sá kwligeyi ${ }_{\mathrm{CP}}$ ] xáat $_{\mathrm{NP}}$ ] i tuwáa sigóo? how Q it.is.big. ${ }_{\text {rel }}$ fish your spirit it.is.happy
c. *[[ Wáa kwligeyi ${ }_{\mathrm{CP}}$ ] sá xáat ${ }_{\mathrm{NP}}$ ] i tuwáa sigóo? how it.is.big.rel $\quad$ Q fish your spirit it.is.happy
(42b) and (42c) illustrate that the Tlingit Q-particle sá cannot occur either within the relative clause or before its head: as claimed in Cable (2010), QP must select the whole strong island.

### 4.2.2.1 Application to Trevisan strong islands

The behaviour of wh-in situ within islands in Trevisan is very interesting and is worth exploring here. First of all, the infelicity of out-of-island extraction suggests that strong islands do indeed block extraction in this language, which results in two predictions: (i) that Q-particles also cannot escape islands, hence the presence of subject-clitic inversion in examples such as (43a) ought to be explained in terms of movement of material external to the island itself, and (ii) that the absence of subject-clitic inversion in (43b) must be related to a similar mechanism.
(43) Trevisan
a. (Eora,) ga-tu comprà [[ un porsel che peza cuanto ]]? (so) have=you bought a pig that weights how.much
b. (Eora,) te gà comprà [[ un porsel che peza cuanto ]]? (so) you= have bought a pig that weights how.much

One hypothesis worth pursuing is that the element responsible for subject-clitic inversion in (43a) is the Q-particle which, as argued in Cable (2010) for Tlingit, is able to enter the computation by exceptionally adjoining to the whole wh-containing island. I have so far claimed that Trevisan is able to license wh-in situ thanks to the availability of Q-adjunction; under this assumption, the felicity of a question like (43a) is not surprising. Observe (44), in which the silent Q adjoins to the complex-NP, which has the status of a strong island. That Q is able to adjoin here is not surprising because, despite its complexity, the constituent is nevertheless nominal in nature. Consequently, Q-Agreement is correctly established between the uninterpretable Q-feature in Focus ${ }_{\text {HIGH }}$ and its interpretable counterpart on the silent Q-particle. Because of the presence of EPP in Focus ${ }_{\text {HIGH }}^{\circ}$, the goal is attracted into SpecFocus HIGr . Note that the head of the focus projection hosts the verb, which has been attracted by the left-peripheral phi-features (the interrogative nominative clitic) within it.


Accounting for (43b) might seem more complex. However, I believe that Cable (2010) offers a straightforward solution based on the Tlingit examples of massive pied-piping of strong islands, an operation that he refers to as pied-piping past islands (see $\$ 4.2 .4$ for a discussion). The idea that (43b), where a wh-element is trapped within the strong island in the absence of subject-clitic inversion, is an instance of covert pied piping of the whole island seems supported by the data in (45):
(45) Trevisan
${ }^{?}$ (Eora,) $[[\text { un porsel che pesa cuanto }]]_{j}$ ga-tu comprà __? (so) a pig that weights how.much have=you bought

The sentence in (45) closely resembles the Tlingit examples discussed above. Although it is slightly degraded for some speakers, I actually believe that it supports the idea that it is possible for Trevisan QPs to select strong islands; the examples also favour an analysis of islands like (43b) as being likely selected by QP, with the lack of subject-clitic inversion attributed to highly-exceptional covert QP-fronting. In fact, if only Q -adjunction was at play, subject-clitic inversion would be expected, contrary to fact. Subsequently, a question that contains a QP-selected strong island must be derived as shown in (46): following Q-Agreement between the uninterpretable feature in Focus ${ }_{\text {HIGH }}^{\circ}$ and the interpretable Q -feature of the silent Q-particle, the island-containing QP is attracted by the EPP into SpecFocus HIGH and the Q-criterion is satisfied. subject-clitic inversion normally takes place.
(46) QP-SELECTION OF THE STRONG ISLAND + OVERT MASSIVE PIED PIPING


If QP-movement takes place covertly, then subject-clitic inversion does not take place and the island is pronounced in situ. It is not clear why covert movement is exceptionally preferred in the case of a QP-selected strong island, in a language like Trevisan where interrogative movements always take place before Spell Out. However, this phenomenon, which could probably be attributed to computational complexity, is not limited to Trevisan. Observe the Lombard data in (47), from Manzini \& Savoia (2005):
(47) Grumellese (adapted from Manzini \& Savoia 2005: 587 (157))
a. Dìg-ei che gé egnìt [[ i amìs de chi ]]? say=them that is come the friends of whom 'For which $x$, such as $x$ is someone's friend, they say that $x$ came?'
b. Ta pjah [[ i liber ch'i pàrla de cohè ]]? you like the books that'they speak of what 'For which $x$, such as $x$ is a topic, you like books about $x$ ?'
c. L'è ndàtf ivja [[ hènha haludà chi ]]? he' is gone away without greeting who 'For which $x$, such as $x$ is a person, you left without greeting $x$ ?'

In Grumellese, which systematically requires subject-clitic inversion in matrix clauses, the status of subject-clitic inversion seems uncertain when a strong island enters the computation. It would be interesting to study the status of massive pied-piping in such languages; however, what is certain is that Trevisan is not the only Northern Italian dialect which exceptionally allows QP-fronting to be delayed to Logical Form when the constituent selected by QP is a strong island. I shall leave the investigation of the phenomenon for further work.
4.2.3 Wh-phrases are bare within strong islands, but not within weak islands

I have claimed that wh-elements are bare within strong islands, i.e. they do not adjoin to the silent Q-particle. Here, I shall claim that the situation is different with weak islands for extraction: wh-elements are indeed able to adjoin to the silent Q-particle normally, and so are islands iff their nature is nominal. Note that I exclude wh-islands from this discussion because multiple wh-questions are impossible in Trevisan, and the presence of 'se' in indirect yes/no questions makes them ambiguous between the (correct) polar reading and the single wh-reading (which disrupts the island). Let us look instead at the examples of a negative island in (48) and a factive island in (49):
(48) Trevisan

Context: Your wife is very picky when it comes to choosing the best holiday destination. You've been discussing where to go during Easter break for some weeks, and earlier this morning you overheard her complaining about some of the eligible destinations with your daughter on the phone. You go see your daughter and ask:
(Eora, sintimo,) te ga-ea dito che [noa vol ndar dove]? (so, hear ${ }_{2 \mathrm{PP}}$ ) you= has=she said that $\mathrm{NEG}=$ she= wants go where 'Tell me, what is $x$ such that $x$ is a destination and she told you she does not want to travel to $x$ ?'
(49) Trevisan

Context: Your daughter is a hoarder, and her room is always messy, so last week you had her throw away most of her belongings. She's been sad since, and you feel guilty. You ask her:
Te pianze-o el cuor [ de ver butà via cossa], sopratuto? you $=$ cries=it the heart of having thrown away what above.all 'What is $x$ such as $x$ is one of your items and are sad because you threw away $x$ ?'

Since both types of weak islands can be construed with subject-clitic inversion, it can legitimately be hypothesised that weak islands are of a different type to strong islands, and indeed that they permit Q -adjunction to the in situ wh-element and Q-Agreement between the Q-feature in Focus $_{\text {HIGH }}$ and the island-trapped wh-element. The Q-adjunction within island analysis in (51) is supported by the possibility of extracting the wh-element from the island itself, as in (50):
(50) Trevisan
a. Dove te ga-ea dito che [ noa vol ndar $\qquad$ ]?

b. Coss $a_{\mathrm{i}}$ te pianze-o el cuor [ de ver butà $\qquad$ ]?
$\qquad$
A question such as (48) must therefore be derived along the lines of (51):
Q-AGREEMENT ACROSS A WEAK ISLAND


In (50a), where the lack of subject-clitic inversion is predictably unacceptable, Q-projection selecting the island-contained wh-element and overt QP-fronting must be at play, as shown in (52):

Q-AGREEMENT ACROSS A WEAK ISLAND + QP-FRONTING


To conclude, note that wh-in situ within weak islands can also be licensed in the absence of subject-clitic inversion, provided the island is nominal in nature, as in (53):
(53) Trevisan
a. ??a te gà dito che $[$ trp $n$ noa vol 'ndar dove ]? she $=\mathrm{you}_{2 \text { ps }}$ has said that $\mathrm{NEG}=$ she= wants go where
b. te pianze el cuor $\left[\begin{array}{ll} \\ \text { de ver butà via cossa } \text { ]? }\end{array}\right.$ you cries the heart to have thrown away what

Although the judgements are often tricky, it appears that the absence of subject-clitic inversion in instances such as (53a) forces its interpretation as an echo question. It is tempting to analyse (53b) as an instance of QP selecting the whole island, and then exceptionally moving to C after Spell-Out, similarly to what was suggested for strong islands. However, it is not immediately clear why (53a) requires subject-clitic inversion, suggesting that QP-selection does not apply. Observe (54):
(54) Trevisan
a. ${ }^{[T P}$ noa vol 'ndar dove $]_{j}$ te ga-ea dito che $\longrightarrow_{j}$ ? neg=she= wants go where you has=she said that
b. ${ }^{?}\left[_{\mathrm{pp}} \text { de ver butà via cossa }\right]_{j}$ te pianze-o el cuor __j ? to have thrown away what you cries=it the heart

Under the assumption that a fronted island must be selected as a whole by QP, there appears to be a selectional requirement at play, namely that the constituent selected by QP is a nominal. Unlike in (54a) in fact, the island in (54b) is a nominal, hence can be selected by QP and can undergo QP-fronting. Note that fronting of the clausal island in (54a) would be just as bad if the whole CP was selected by QP, as illustrated in (55):
(55) Trevisan
${ }^{*}\left[_{\mathrm{CP}} \text { che noa vol 'ndar dove }\right]_{j}$ te ga-ea dito $—_{j}$ ? that $\mathrm{NEG}=$ she wants go where you has=she said

A reasonable suggestion would actually be that Trevisan weak islands are in fact neither islands for extraction nor for Q-Agreement, and that their (in)ability to be selected as a whole by QPs is dependent on the selectional requirement of QPs for their internal complement to be a nominal, as formulated in (56):
(56) SELECTIONAL REQUIREMENTS OF QP

A QP must select a constituent as its internal argument. Minimally, the selected constituent must contain a wh-element and be nominal in nature.

### 4.2.4 English limited pied-piping vs Trevisan tlingit-like syntax

What led Cable (2010) to posit that the Q-based analysis of Tlingit ought to be extended to all other wh-fronting languages is the observation that these languages exhibit the same grammatical patterns that in Tlingit can only be explained by that approach. These patterns relate to the ill-formedness of, in turn, (i) P-stranding (where P refers to both pre-positions and post-positions), (ii) possessor extraction and (iii) determiner extraction. Observe the ungrammatical extractions in the Tlingit examples in (57):
(57) Tlingit
a. No Q between a postposition and its complement (Cable 2010: 44(64))
i. Aadóo teen sá yeegoot?
who with Q you.went
'Who did you go with?'
ii. *Aadóo sá teen yeegoot?
who Q with you.went
b. No Q between a possessor and the possessed NP (Cable 2010: 44-45 (67))
i. Aadóo yaagú sá ysiteen?
who boat Q you.saw.it
'Whose boat did you see?'
ii. *Aadóo sá yaagú ysiteen?
who Q boat you.saw.it
c. No Q between a D and its NP complement (Cable 2010: 45 (72))
i. Daakw keitl sá asháa? which $\operatorname{dog} \mathrm{Q}$ it.barks 'Which dog is barking?'
ii. *Daakw sá keitl asháa? which Q dog it.barks

In all these sentences, Cable claims, the infelicitous wh-extraction could only take place from a base structure where a QP intervenes between a functional head, F , and a phrase that F selects for. This type of extraction violates the formal requirement that he calls the QP-Intervention Condition:
(58) THE QP-INTERVENTION CONDITION (Cable 2010: 57(107))

A QP cannot intervene between a functional head F and a phrase selected by F . Such an intervening QP blocks the selectional relation between F and the lower phrase.

In this section, I shall claim that both the QP-intervention data and the syntax of wh-in situ within strong islands in Trevisan provide supporting evidence in favour of my analysis of Trevisan wh-fronting as an instance of QP-fronting. In (59) to (61), I illustrate the application of the QP-intervention condition using examples from Trevisan, where structures of the types given in (57) below are predictably ill-formed. Observe that the exceptional felicity of (57a) in English is explained by Cable in terms of the unusual lexical properties of English prepositions; refer to Cable (2010: 100-112) for a detailed discussion of the issue.
(59) ILL-FORMEDNESS OF P-STRANDING (Trevisan)

impossible PP, violates QP-intervention condition
'To whom am I supposed to say this?'
(60) ILL-FORMEDNESS OF POSSESSOR EXTRACTION (Trevisan)


[^19](61) ILL-FORMEDNESS OF D-EXTRACTION (Trevisan)

'Which books did you read?'
For structures such as (59) to (61) to be well-formed, QP must select the whole pp/ DP in case of QP-fronting or, in a mixed language like Trevisan, QP- in the case of fronting and Q alone if the whole constituent containing the wh-operator remains clause-internal. I illustrate this in (62), using the case of the PP in (59):
(62) RELATIONS OF Q WITH A PP CONTAINING A WH-ELEMENT Trevisan
a. Ill-formed QP-selection (resulting in a violation of the QP-intervention condition)
$$
{ }^{*}\left[{ }_{\mathrm{pp}} \text { a }\left[\mathrm{Qp}_{\mathrm{p}} \mathrm{Q}[\mathrm{dp} \mathrm{chi}]\right]\right]
$$
b. Well-formed relations
i. QP-selection (leading to QP-fronting) $\left.{ }_{[\mathrm{QP}} \mathrm{Q}\left[{ }_{\mathrm{PP}} \mathrm{a}\left[{ }_{\mathrm{DP}} \mathrm{chi}\right]\right]\right]$
ii. Q-adjunction (leading to wh-in situ) $\left[_{p p}\left[{ }_{p P}\right.\right.$ a ${ }_{\text {DP }}$ chi $]$ Q $]$

As previously mentioned, the parallelism between the Tlingit data and patterns observed cross-linguistically led Cable (2010) to propose that all wh-fronting structures must receive the Q-based analysis. In this approach, the ill-formedness of island-contained wh-in situ is not explained in terms of the islandhood of the base position of the wh-element, but rather in terms of constraints on the placement of Q. Accordingly, Cable argues, the empirical motivation for classifying those structures as islands for extraction is weakened. The Trevisan data clearly support this claim, and the discussion below should constitute further evidence in favour of extending the grammar of Q to languages with phonetically-null Q-particles as well.

Recall that in Tlingit an interrogative wh-element can appear inside of a fronted QP-selected island. These configurations, which Cable refers to as pied-piping past islands, have the form shown in (42), repeated here as (63):
(63) Tlingit
[[ Wáa kwligeyi ${ }_{\mathrm{cp}}$ ] xáat ${ }_{\mathrm{NP}}$ ] sá i tuwáa sigóo? how it.is.big. ${ }_{\text {rel }}$ fish $\quad$ Q your spirit it.is.happy
'A fish that is how big do you want?'
The structure in (63) is the same as the structure that I posited for Trevisan wh-in situ within strong islands. However, not all Qp-fronting languages allow pied-piping past islands, as illustrated by the English examples in (64):
(64) English (Cable 2010: 144 (5))
a. ${ }^{*}\left[_{D P} A\right.$ fish $\left[{ }_{C P}\right.$ that is how big $]$ d do you want?
b. ${ }^{*}{ }_{\text {DP }}$ A book $[\mathrm{CP}$ that who wrote $]$ did you buy?

To explain the unexpected unavailability of (64) in English, even though it has Qp-fronting, Cable proposes that the constraints governing pied-piping in languages like English follow from a single requirement that is absent from Tlingit-like languages, namely that the Q-particle and the wh-element must Agree. Cable formulates this requirement as in (65):
(65) the nature of limited pied-piping (Cable 2010: 144 (14))

If the Q -particle must Agree with the wh-element it c-commands, then a wh-element cannot be dominated in the sister of Q by islands or lexical categories. Thus limited pied-piping languages are those where $\mathrm{Q} /$ wh-Agreement must occur.

The definition in (65) is based on Cable's more general assumption that probing and agreement cannot apply across islands, which he explains on semantic grounds. Therefore, if we assume that limited pied-piping languages require $\mathrm{Q} /$ wh-Agreement, we correctly predict that these languages cannot permit pied-piping past islands: the domination of the wh-element by an island located within the sister of Q would prevent Agreement between the Q-particle and the wh-element, as in (31). Cable argues that in a language like English where the Q-particle bears an interpretable but unvalued Q -feature ( $i \mathrm{Q}[]$ in the derivation below), at Logical Form the presence of a syntactic island between the Q-particle and the wh-element blocks the Q-particle from receiving a value for the Q -feature. As a consequence, structures of this sort crash at the Logical Form interface.
(66) illicit pied-piping past island in english (Example (64a) above, from Cable 2010: 148 (15))


On the contrary, in languages like Tlingit where the Q-particle is lexically-endowed with a valued Q -feature (indicated as $\mathrm{iQ}[+]$ in the derivation), the presence of an island between the Q-particle and the wh-element does not affect the interpretability of the structure at Logical Form, as illustrated in the grammatical example in (67):
(67) LICIT PIED-PIPING PAST ISLAND IN TLINGIT (Example (28) above, from Cable 2010: 148 (16))


Since languages without Q/wh-Agreement, such as Tlingit, permit pied-piping past islands, it seems plausible to posit that Trevisan does not require Agreement between the silent Q-particle and the wh-element. This property provides evidence in support of my claim that the Force in Trevisan is inherently interrogative and does not need checking; what is more, not only does it support to the analysis of Trevisan as a QP-language, but it also suggests that I am on the right track in proposing that a [wh]-feature must be at play in wh-doubling configurations, where [wh]-features are clearly visible on the Q-particle and island-trapped wh-in situ is not licit. Languages might also exist in which the relationship between Q and the wh-element does not merely involve the Q-feature but also a wh-feature. I believe that it is indeed Cable's Wh/Q-Agreement mechanism that is responsible for the transmission of [wh]-features to the Q-particle, which is theoretically more desirable than the mechanism of feature percolation that I posited earlier. As a consequence, for instances of overt wh-doubling, it does indeed seem legitimate to assume the existence of an unvalued interpretable [wh]-feature on the wh-element, and of its uninterpretable counterpart in Q , as shown in (68). I shall call this mechanism bi-directional Wh/Q-Agreement:

BI-DIRECTIONAL WH/Q-AGREEMENT (WH-DOUBLING)


### 4.2.5 Concluding remarks

Questions containing syntactic islands are often strongly presuppositional, and can be either uttered as a follow-up to a preceding utterance, i.e. almost as an echo question, or as a consequence of the set of beliefs of the speaker, who is clearly convinced that the event in question must have taken place. Nonetheless, these are real questions, hence the syntax of Trevisan island-trapped wh-elements and the surprising lack of subject-clitic inversion clearly sets the behaviour of island-trapped wh-elements apart from that of free clause-internal wh-elements, which are always construed with subject-clitic inversion.

In this chapter, I have investigated the morphosyntax of Trevisan islands for extraction, crucially claiming that only strong islands block extraction, while weak islands are not islands at all: the Trevisan facts strongly suggest that no islandhood is at play when a wh-element is located within a weak island, since neither Q-Agreement nor QP-fronting are blocked. In contrast, strong islands do indeed block both extraction and Q-Agreement, and any wh-element within them is exceptionally bare: either QP selects the whole island, or the computation fails. Basing my discussion on a cross-linguistic comparison with Cable's (2010) Tlingit and Sinhala data, I have argued that Trevisan can exceptionally delay Qp-fronting to Logical Form if the selected constituent is an island, provided that island is a nominal. I have also claimed that Cable's notion of Wh/Q-Agreement, which explains the (un)availability of pied-piping across islands cross-linguistically, can be slightly improved to also account for the case of Northern Italian wh-doubling. In fact, assuming that these languages have bidirectional Wh/Q-Agreement in the case of wh-doubling offers a straightforward explanation for the phonetically-audible (and highly-exceptional) presence of wh-features on the Q-particle.

Before moving on to Chapter 5, I would like to note that Cable's classification of languages into two groups based on their status with regard to the Agreement between wh-elements and Q also correctly predicts the contrasts observed in (69) and (70):
(69) Standard English
a. *What do you wonder I bought where?
b. What do you wonder where I bought?
(70) a. Trevisan

Me domando *(se) a lo gà comprà dove REFL ask ${ }_{1 \mathrm{ps}} \quad \mathrm{se}_{\mathrm{wH}}$ she= $\mathrm{it}=$ has bought where 'I wonder where she bought it'
b. Strozzense (adapted from Manzini \& Savoia 2005: 593 (156))
'so 'mia *(se) por'ta-t (ko'ze)
know $_{1 \text { pS }}$ NEG what bring=you what
'I don't know what to bring you'
In English, where the silent Q-particle is subject to Wh/Q-Agreement but no [wh]-feature is involved in the mechanism, the indirect wh-interrogative is infelicitous in the presence of a clause-internal wh-element: wh-fronting to the embedded Left Periphery is required. What makes English different from Trevisan is the presence of an inherently-interrogative head in the former, but not in the latter, which is able to check Rizzi \& Bocci’s (2017) QembP, as I discussed in $\$ 4.1$. As a consequence, languages with overt wh-doubling, where Wh/Q-Agreement involves both [q] and [wh] and the [wh]-feature on the Q-particle is morphologically visible, are expected to be unable to perform pied-piping past islands. This prediction is correct, at least for languages like Bellunese (as described in Munaro 1999), where wh-in situ is not felicitous within islands for extraction, but also for Manzini \& Savoia's (2005) Lombard varieties, where only single wh-in situ is felicitous within islands, while wh-doubling fails.

To conclude, note that in a system in which the featural specification of Focus $_{\text {HIGH }}$ changes on the basis of the type of clause ( $[+$ foc $]$ in declaratives and [ +q ] in interrogatives), it is actually possible to dispense with Rizzi's (1997) claim that wh-elements (QPs) and focused constituents compete for the same structural position. In fact, it is plausible to think that what is targeted by interrogative wh-elements in matrix questions is actually IntP, an inherently interrogative projection. This type of approach would probably be theoretically sensible and would only leave phi-features in the interrogative Focus head, which would be responsible for the attraction of the verb to C, and Q-features in Int, which would be responsible for Q-agreement. However, an analysis along these lines would to an extent undermine my idea that interrogative nominative clitics are phi-features that are pronounced once a correct Spec-head configuration is created in Focus HIGH Since this point is not per se problematic for the theory developed here, I shall leave aside further investigations in this regard for future work.

## CHAPTER 5

## On the theory of Romance wh-in situ

In Chapter 1, I provided an overview of the morphosyntax of Northern Italian whin situ. On the basis of the somewhat complex distributional patterns displayed by clause-internal wh-elements, I suggested a primitive classification of Northern Italian dialects into major groupings, based on purely empirical observations. These groupings, which I will henceforth label types, are the following:

TYPES OF NORTHERN ITALIAN WH-IN SITU
Type I: Trevisan and similar varieties;
Type II: Lombard and similar varieties;
Type III: Bellunese and similar varieties.
The types can be identified on the basis of complex interactions among the properties of Northern Italian wh-in situ. The crucial variables are listed below:

DISTRIBUTIONAL PROPERTIES OF WH-IN SITU: VARIABLES
a. (in)felicity of D-linked wh-elements clause-internally;
b. presence or absence of a sentence-final requirement (the need for clause-internal wh-elements to occupy the edge of the sentence in the phonetic string);
c. presence or absence of short movement;
d. iff short movement is present, the mandatory vs optional status thereof;
e. (in)felicity of wh-elements in long-distance and/or indirect wh-questions;
f. (in)felicity of wh-elements inside weak and/or strong syntactic islands.

Crucially, type III varieties are those that have the D-linking, short movement, embedded, and island variables set negatively, but the sentence-finality variable set positively. In contrast, type II varieties have all variables set positively, modulo those of short movement and of the sentence-finality requirement. Finally, note that the only major divide between type II and type I varieties is that the short movement variable is set positively, and associated with a mandatory status only in the latter. My proposal is that the interactions observed among the distributional variables above are so regular in Northern Italian wh-in situ (and beyond) that to disregard them in establishing a solid theoretical account of the morphosyntax of optional wh-in situ would be a major conceptual error.

My claim so far has been that Trevisan and similar varieties have fake wh-in situ, which I analysed in terms of focus movement into a $v \mathrm{P}$-peripheral Spec. My proposal here will be to apply a slightly modified version of Wh-to-Foc to type III varieties as well, and to posit the existence of unmoved wh-in situ in type II varieties (in the sense of Manzini \& Savoia 2005, though with different theoretical implementations which take the role of the periphery of $v \mathrm{P}$ into consideration). How Northern Italian wh-in situ can be derived in a tripartite way, and how it is parametrised, will follow from the observation of the projections that are exploited by wh-in situ and its featural properties.

The reader will find it easier to follow my discussion if they keep in mind that I assume that direct and indirect interrogatives are inherently endowed with different Left Peripheries, as argued in Chapter 4. Namely, I take the Left Periphery of Northern Italian interrogatives to have an IntP à la Rizzi (2001), endowed with an [int]-feature, while Focus HIGH is associated to a [q]-feature; in contrast, indirect wh-interrogatives have a declarative-like Left Periphery with Focus ${ }_{\text {HIGH }}$ set as [+foc], modulo the presence of Rizzi \& Bocci's (2017) QembP, which I analyse as inherently [+wh]. Additionally, some languages have a [foc]-feature in the clause-internal focal head, $\mathrm{Foc}_{\text {Low }}{ }^{\circ}$. The [int]-feature in IntP can only be checked by extraordinary why-words that are externally-merged directly in the Left Periphery, whether in SpecIntP (as in Rizzi 2001) or in the lower portion of the Left Periphery (as in Shlonsky \& Soare 2011). In contrast, the [q]-feature in the interrogative Focus ${ }_{\text {HIGH }}$ is checked by elements moved from within TP: QPs in the case of wh-fronting, the Q-particle when wh-elements stay clause-internally, and polar particles in the case of yes/no questions. The declarative Focus ${ }_{\text {HIGH }}$ also hosts elements moved from within TP, namely contrastively-focused constituents. However, I shall argue that this type of focus fronting is only available in languages in which $\mathrm{Foc}_{\text {Low }}$ is not endowed with a [foc]-feature, such as Standard Italian. In all other languages, clause-internal focus fronting into SpecFoc $_{\text {Low }}$ is observed. The [wh]-feature in QembP is checked either via fronting of the bare wh-element or of the higher element of wh-doubling (which I analyse here as a Q-particle exceptionally endowed with [wh]-features); additionally, in the absence of wh-fronting and wh-doubling, an inherently interrogative element can be externally-merged directly in Qemb ${ }^{\circ}$ and can license an interrogative Op in SpecQembP, such as Trevisan se ${ }_{\text {wH }}$. To conclude, when relevant, the [foc]-feature in $\mathrm{Foc}_{\text {Low }}$ is responsible for clause-internal focus fronting of either wh-elements or contrastive foci. The choice behind the labels used for features is arbitrary: whatever their names, the crucial point is that each of the projections under consideration is compatible with one and only one of these features.

## Organisation of this chapter

The chapter opens with an investigation of published works on the morphosyntax of Northern Italian (and more generally Romance) wh-in situ. In \$5.1.1, I provide an overview of the remnant-IP movement analysis (Poletto \& Pollock 2000; Munaro et al. 2001 and related works), followed by a discussion of Manzini \& Savoia’s (2005) plea in favour of real wh-in situ (covert movement analysis) in $\$ 5.1 .2$. Then, in §5.1.3, I comment on the non-applicability of both analyses to the Trevisan data. In §5.2, I provide a brief excursus on the morphosyntax of wh-in situ in a number of Romance varieties spoken outside of Northern Italy, claiming that the division into types that I have developed for Northern Italian dialects seems to generally hold for Romance as a whole. To conclude, in $\$ 5.3$ I discuss the consequences of my theory of Wh-to-Foc for Northern Italian wh-in situ, and suggest that we analyse the differences observed between types of wh-in situ as dependent on a number of plausibly parametrised variables ranging from the positions available for clause-internal wh-elements to the strategies for integrating the silent Q-particles into the computation.

### 5.1 Type-specific analyses: Moving further!

Over the years, two major, conflicting treatments have been proposed for wh-in situ in Northern Italian dialects. Some authors claim that Northern Italian wh-in situ is derived by exploiting a projection in the low CP , and hence that it is an instance of fake wh-in situ (Munaro et al. 2001; Poletto \& Pollock 2000-2015): overt wh-movement of clause-internal wh-words does indeed take place, but is masked by further syntactic computations. I discuss these works, which I classify under the label of 'remnant-IP movement analysis', in §5.1.1. Other authors, however, have argued in favour of real Chinese-like wh-in situ in Northern Italian dialects, i.e. lack of wh-movement of any kind before Spell Out (Manzini \& Savoia 2005, 2011). I discuss this proposal, which I call the 'covert movement hypothesis', in §5.1.2.

I shall argue that, while my analysis in terms of Wh-to-Foc can be applied to all languages that derive wh-in situ through focus movement within TP, like Trevisan (type I), the remnant-IP movement analysis accounts perfectly for the data from Bellunese-like varieties (type III), while Lombard-like varieties (type II) fit perfectly into Manzini \& Savoia’s account. However, as I shall show, none of these existing theoretical treatments is able to account for the special behaviour of Trevisan and similar 'type I' varieties. As a consequence, in $\$ 5.3 .1$, I shall argue that a unified explanation is not sufficient to account for all of the behavioural patterns observed in Northern Italian dialects, and I hence instead propose a more flexible model
where linguistic types derive (real or fake) wh-in situ by making different use of the focal projection within the clausal domain. Furthermore, in the spirit of Chomsky's (2001) 'Uniformity Principle', I argue in favour of an analysis of type III wh-in situ as a constrained instance of Wh-to-Foc.
5.1.1 Left-peripheral fake wh-in situ

In Chapters 2 and 3 I mentioned that, starting from Poletto \& Pollock (2000) and Munaro et al. (2001), it has been claimed that Northern Italian wh-in situ is the result of overt wh-movement to the CP . Observe the Bellunese question in (1):
(1) Bellunese (Poletto \& Pollock 2000: 118 (5))

Ha-tu parecià che? have=you prepared what 'What did you prepare?'

In the remnant-IP movement analysis, clause-internal wh-words such as che ('what') of Example (1) do not stay in their external-merge position, but rather undergo $\mathrm{A}^{\prime}$-movement to a functional projection in the lower portion of the Left Periphery, as shown in (2):
(2) WH-IN SITU TYPE iII (simplified derivation)

Input: [IP tu ha parecià che ]
a. First step: Wh-movement to a functional projection higher than IP (here, xp) ${ }^{\mathrm{XP}} \mathrm{che}_{\mathrm{i}} \mathrm{X}^{\circ}{ }_{\mathrm{IP}_{\mathrm{IP}}}$ tu ha parecià __i $]$ ]
b. Second step: Movement of the remnant-IP to a higher functional projection (yp)
$\left[_{\mathrm{YP}}\left[\mathrm{IPP}^{\mathrm{t}} \text { tu ha parecià __i }\right]_{\mathrm{j}} \mathrm{Y}^{0}\left[{ }_{\mathrm{XP}} \mathrm{che}_{\mathrm{i}} \mathrm{X}^{\circ}\right.\right.$ __ $\left.\left._{\mathrm{j}}\right]\right]$
Consequently, Bellunese-like languages are assumed to display instances of fake wh-in situ: as shown in (2), the wh-element is first moved, then its movement is masked by further computations that target higher portions of the Left Periphery, including movement of the remnant-IP. The remnant-IP movement analysis is based on a number of factors including:
i. Kayne's (1998) claim that there cannot be covert movement of any kind;
ii. the assumption that the different sequences displayed by French and Bellunese (and perhaps others) at Spell Out cannot be random and must reflect the interplay of the invariant structure of the CP-domain. I develop this point in what follows.

Point (ii) refers to the morphological similarity between two what-words in French and Bellunese (respectively, que and che), and to their close connection with subject-clitic inversion. Observe the examples in (3) to (6). Distributionally, que is the only wh-word in French that is only felicitous clause-initially, as illustrated in (3):
(3) French
a. Tu vas où ?
you go where
'Where are you going?'
b. Où (est-ce que) tu vas?
where (est-ce que) you go
c. *Jean a acheté que?

Jean has bought what
'What did Jean buy?'
d. Qu'a Jean acheté?
what=has John bought
In contrast, Bellunese che is incompatible with fronting, as in (4), like most non-Dlinked wh-words in this variety:
(4) Bellunese
a. Ha-tu magnà che?
have=you eaten what
'What did you eat?'
b. *Che ha-tu magnà ?
what have=you eaten

However, despite the (apparent) distributional differences displayed by que and che, both wh-words are obligatorily construed with subject-clitic inversion. Subject-clitic inversion, always required in genuine questions in Bellunese (Munaro 1999, see Examples (3) \& (4)), is wholly incompatible with clause-internal wh-elements in French, as in (5), yet compulsory when construed with a fronted que, as in (6):
(5) French
a. Où vas-tu ?
where go=you
'Where are you going?'
b. ${ }^{* V a s-t u ~ o u ̀ ? ~}$
go=you where
(6) French
a. Qu'a-t-il acheté? what=has=t=he bought 'What did he buy?'
b. *Que il a acheté? what he has bought

Because of these striking morphosyntactic similarities between French que and Bellunese che, and given the invariable structure of the CP-domain, Poletto and Pollock argue that the two wh-words must target the same Spec in the lower portion of the Left Periphery. In this framework, the reason why que appears clause-initially, while che occupies a clause-internal position at Spell Out, is that only the latter requires complex computations to take place after wh-movement, with these computations moving all IP-internal elements to the CP-domain (including the inverted verb-subject cluster), as shown in the sketch in (7):

REMNANT-IP MOVEMENT ANALYSIS: BELLUNESE VS. FRENCH


A derivation similar to that of Bellunese wh-in situ is also posited for French strings such as Tu as mangé quoi? ('What did you eat?'), where the wh-element appears clause-internally. The cross-linguistic differences between Bellunese and French, and especially the puzzling status of subject-clitic inversion, are attributed to the presence of a truncated CP-domain in the latter. The original studies, especially Poletto \& Pollock (2009), provide details of the proposed derivation of French wh-in situ.

### 5.1.1.1 Why wh-movement?

In addition to the similarities between French que and Bellunese che and their relationship with subject-clitic inversion, at least four other phenomena inspired the analysis of the clause-internal wh-words in Bellunese and similar languages as moved. Three are related to the syntactic properties of Bellunese wh-in situ, while the fourth is linked to the morphosyntax of wh-doubling in Northern Italian dialects:
i. the impossibility of wh-in situ in embedded questions, as in (8):
(8) Bellunese (Munaro 1999: 69 (1.95))
a. No so quando che i-é rivàdi NEG know when that they=are arrived 'I don't know when they arrived'
b. ${ }^{*}$ No so (che) i-é rivàdi quando
NEG know that they=are arrived when

According to Poletto and Pollock (2000), this property and the observation that subject-clitic inversion is exclusively a root phenomenon follow from the fact that, in embedded contexts, feature checking via (remnant) movement is unnecessary and is thus ruled out by Economy: the matrix verb is indeed sufficient to identify the type of sentence. In their account, subject-clitic inversion targets SpecForce, hence its absence in embedded contexts is predicted. On the contrary, in matrix questions, the remnant is attracted into SpecForce by the [int]-feature in Force ${ }^{\circ}$.
ii. Bellunese shows both strong and weak island effects (Munaro 1999), as discussed in the previous chapters and illustrated in (9):
(9) Bellunese (adapted from Munaro 1999: 74 (1.105 \& 1.107))
a. ${ }^{*} \mathrm{Te}$ piase-lo [ i libri che parla de che ]? you like=it the books that speak of what 'What is $x$, such that $x$ is a topic and you enjoy books about $x$ ?'
b. ??No te-te-ricorda [ andé che von comprà che ]? NEG you=REFL=remember where that have ${ }_{1 \text { pp }}$ bought what 'What is $x$, such that we bought $x$ and you don't remember where?'

The claim is that, if Bellunese clause-internal wh-words were situated in the Spec of a TP-internal functional projection, it would be difficult to account for their infelicity inside syntactic islands.
iii. the different orders occupied by arguments in Bellunese declaratives and interrogatives prove that wh-in situ obeys a sentence-final requirement, as suggested by the contrasts in (10):
(10) Bellunese (adapted from Poletto \& Pollock 2015: 139 (2))
a. Al ghe a dat al libro a so fradel
he dat has given the book to his brother
'He gave the book to his brother'
b. *Ghe ha-lo dat che a so fradel? DAT has=he given what to his brother 'What has he given to his brother?'
c. Ghe ha-lo dat che, a so fradel? Dat has=he given what, to his brother 'To his brother, what did he give?'

In Poletto \& Pollock's (2015) terms, the verb-selected indirect object in instances of wh-in situ such as (10c) is necessarily 'de-accented' in Bellunese che-questions, although not in statements like (10a). Accordingly, if che in examples like (10c) was in the ordinary direct object position in which il libro ('the book') is located in (10a), it would be difficult to understand the need for dative complements such as a so fradel ('to his brother') to be right-dislocated.

On the basis of the above observations, and similar to the analysis carried out in previous studies, Poletto and Pollock (2015) conclude that strings like Bellunese A-tu magnà che? (have=you eaten what, 'What did you eat?') and French Tu as mangé quoi? (you have eaten what) are misleading. They claim that both the Bellunese and the French examples result from a 'conspiracy' involving at least overt wh-movement to the C . For them, neither language allows actual wh-in situ, i.e. wh-elements in the position in which they are externally-merged.

### 5.1.1.2 When the whole IP moves to the Left Periphery

Let us examine how wh-in situ that includes wh-movement to the CP is derived. Keep in mind that this account crucially rests on the idea that, when a bipartite wh-word is merged, each of its elements must check dedicated left-peripheral projections, as claimed in Chapter 2. Recall too that the two parts of bipartite wh-words can both be phonetically-realised, or else either one of the two can be null. The derivation of overt wh-doubling is shown in (11): ${ }^{30}$
(11) Mendrisiotto (adapted from Poletto \& Pollock 2009: 7 (19))

Sa ta fet cusè?
what you do what
'What are you doing?'

[^20]Example (11) is an instance of type A wh-doubling: the fronted element is a wh-clitic (as described in Chapter 1). The derivation proposed in Poletto \& Pollock (2009: 7 (21)) is reproduced in (12): ${ }^{31}$
(12) Input: $\left[\begin{array}{l}\text { IP } \\ \text { ta fet }[\text { sa cusè }]]^{32}\end{array}\right.$
a. The first step of the derivation is movement of the clitic part of the complex wh-element (sa) to the interrogative ClP (Clitic Phrase) within IP. Remember that the CIP is located in the higher portion of IP, right below the subject position:
[ IP $s a$ ta fet [ <sa> cusè ]]
b. During the second step, the derivation starts to make use of the CP. An operator projection called Op1P (in earlier works, Wh1P) is in fact merged to IP. Subsequently, [ cusè ] is attracted to SpecOp1: [ ${ }_{\text {oplp }}$ cusè $\mathrm{Opl}^{\circ}{ }_{\text {IP }}$ [ sa [ ta fet [ <sa cusè> ]]
c. Step three is when ForceP and Op1P are merged. The remnant-IP is then attracted to SpecForce. Movement of the whole IP is justified by the need to check the interrogative force of the clause:
[ForceP $\left[_{\text {IP }}\right.$ [ sa [ ta fet [ <sa cusè> ]] $\mathrm{F}^{\circ}$ [oplP cusè $\mathrm{Opl}^{\circ}$ <IP> ]]
d. To conclude, in step four a higher operator projection, Op2P (in earlier works, Wh1P) is merged to ForceP. $S a$, the wh-clitic, is then attracted to Op2 ${ }^{\circ}$ :

In (12), the clause-internal wh-word could have been null (Sa ta fet ø?, what you do ø). However, I exemplified the derivation using the overt wh-item cusè for the sake of clarity. At this point, one might wonder why the equivalent subject-clitic inversion-less question is not possible in French with a wh-clitic like que, as in the example in (13):
(13) French (Poletto \& Pollock 2009: 7 (20))
*Que tu manges?
what you eat
'What are you eating?'
According to Poletto and Pollock (2009), the differences between (11) and (13) lie in the base position of clitics: in Northern Italian dialects, subject clitics are lower in the ip than they are in French. It follows that the wh-clitic position to which the wh-clitic moves as a phrase is higher than subject clitic ta ('you') in Mendrisiotto but lower than French $t u$, as shown in (14):

[^21]\[

$$
\begin{align*}
& {\left[_{\mathrm{IP}} \mathrm{~S}-\mathrm{cl}>\mathrm{ClP}_{\mathrm{wH}}>\mathrm{S}-\mathrm{cl}>\text { Wh-clitic }\right]}  \tag{14}\\
& \text { French NIDs }
\end{align*}
$$
\]

Because of the various intervening heads, the wh-clitic que does not reach its high Wh1 position in French but sa-like Northern Italian wh-clitics do. The derivation for type B wh-doubling, when the fronted wh-item is non-clitic, is slightly different. Extending Cardinaletti \& Starke's (1999) tripartition to wh-items, Poletto and Pollock (2009) proposed that weak wh-words like indua ('where'), cusa ('what') and cuma ('how') move within IP, to the right of the inflected verb, to a specific position for weak elements. Thus, a question like (15) has the derivation in (16):
(15) Mendrisiotto (adapted from Poletto \& Pollock 2009: 8 (24)) ${ }^{33}$

Cusa ta fet cusè?
what you do what
'What are you doing?'

a. First step: attract cusa to interrogative WeakP(hrase) within IP:
[ IP ta fet cusa [ <cusa> cusè ]]
b. Second step, the first of all the left-peripheral operations: merge Op1P and IP and attract cusè to SpecOp1P:
[ ${ }_{\text {OplP }}$ cusè $\mathrm{Op} 1^{\circ}$ [IP $^{\text {ta fet }}$ cusa [ <cusa cusè> ]]
c. Third step: merge ForceP and Op1P and attract the remnant-IP to SpecForce. This operation checks the interrogative force of the clause:
[ ${ }_{\text {ForceP }}{ }_{\text {IP }}$ ta fet cusa [ <cusa cusè> ]] Force ${ }^{\circ}$ [ ${ }_{\text {OplP }}$ cusè Op1 ${ }^{\circ}$ <IP> ]]
d. Fourth step: Merge Op2P and ForceP and attract cusa to Op2 ${ }^{0}$ :
[ ${ }_{\text {Op2P }}$ cusa $\mathrm{Op}^{\circ}{ }^{\circ}$ ForceP $\left[_{\text {IP }}\right.$ ta fet <cusa> [ <cusa cusè> $\left.]\right]$ Force ${ }^{\circ}\left[{ }_{\text {Op1P }}\right.$ cusè ... ]]

Let us now explore how questions with mandatory subject-clitic inversion are derived under these theoretical assumptions. In line with earlier versions of the theory, what Poletto \& Pollock (2009) claim is that the linear order of 'in situ' wh-questions must be derived via movement of the remnant-IP past the wh-word, to a dedicated left-peripheral position. For this to be possible in a language like Bellunese, subject-clitic inversion must be overt phrasal remnant movement targeting a left-peripheral projection that is situated between a low and a high wh-position. In this work, the projection under discussion is ForceP, as shown in (17): ${ }^{34}$

[^22]\[

$$
\begin{gather*}
{[\text { Op2P }}  \tag{17}\\
\text { wh-phrase [ForceP }[\text { Topp } \\
\text { FRONTED }
\end{gather*}
$$
\]

Turning to the two additional projections, GroundP and TopP, the former is taken to be targeted by the nominative subject clitics, and the latter by the remnant-IP chunk. Observe that, in the wh-doubling Mendrisiotto example in (11), the subject clitic did not move to GroundP prior to movement of the remnant-IP to Force. The claim is that this is possible because subject clitics in Mendrisiotto are located in a very low position.

Since the analysis developed by Poletto and Pollock is crucially based on the comparison between French and Bellunese wh-questions, let us first examine the derivation of subject-clitic inversion in the former, using Où est-il allé? (where is=he gone, 'Where did it go?') as an example of wh-fronting. The derivation is provided in (18):
(18) Input: [ il est allé où ]
a. In the first step, Op1P is merged to IP and the wh-word is attracted to SpecOp1P. Note that in French, unlike what was proposed for Mendrisiotto, the wh-element is not externally-merged iP-internally in the Spec of an interrogative ClP:
[op1P où $\mathrm{Op} 1^{\circ}$ [ il est allé <où> ]]
b. In step two, TopP and Op1P are merged, and the participial phrase (trace of the wh-element included) is attracted to SpecTopP:
[Topp [allé <où>] Top $^{\circ}$ [Op1P où $\mathrm{Op}^{\circ}$ [ il est <allé où> ]]
c. In step three, G (round) P and TopP are merged. The subject clitic is attracted to SpecGP:
[GP il G ${ }^{\circ}$ [TopP [allé <où>] Top ${ }^{\circ}$ [ ${ }_{\text {Op1P }}$ où $\mathrm{Op}^{\circ}$ [ <il> est <allé où> ]]
d. The fourth step consists in merging ForceP and GP and then attracting the remnant-IP to SpecForce. Note that the remnant-IP has the form: [<il> est <allé où>]; here, I only reproduce the verb, for the sake of clarity:

e. Finally, in the fifth step, Op2P and ForceP are merged, and the wh-element is attracted to SpecOp2P:

Unlike French, Bellunese has generalised subject-clitic inversion. Since this variety has wh-doubling, it is claimed that its 'in situ' wh-questions are derived via movement of the wh-element to Op1P, and then further movement of the covert wh-part from Op1P to Op2P. With single wh-fronting, the reverse situation is observed: the wh-part that stays in Op1P is silent, while the part that moves further to Op2P is phonetically-realised.

Let us examine the derivation of the question in (19). ${ }^{35}$ Poletto \& Pollock (2000: 135) assume that the wh-word andé is merged in a complex wh-element, [andé Rest], as in (20):
(19) Bellunese (Poletto \& Pollock 2000: 117 (2))

Se-tu 'ndat andé?
are=you gone where
'Where did you go?'
(20) Input: [ ${ }_{\text {IP }}$ tu sé 'ndat [ andé Rest ] ${ }^{36}$
a. In the first step of the derivation, Op1P and IP are merged, and the complex wh-element, [ andé Rest ], is attracted to SpecOp1P. Note that, in this early work, the presence of interrogative ClPs had not yet been posited. However, this does not have a major impact on the derivation: [Op1P [andé Rest ] $\mathrm{Opl}^{\circ}{ }_{\text {[IP }}$ tu sé ndat <andé Rest> ]]
b. In step two, TopP and Op1P are merged. The participial phrase (PartP) that includes the trace of the complex wh-element, ['ndat <wh> ], is attracted to SpecTopP. For the sake of clarity, I will write the copy of the wh-element merely as <wh>:

c. In the third step, G (round)P and TopP are merged, and the subject clitic $t u$ is attracted to SpecGP:
$\left[_{\text {GP }}\right.$ tu G ${ }^{\circ}\left[_{\text {TopP }}\left[{ }_{\text {PartP }}\right.\right.$ ndat <wh> $]$ Top $^{\circ}\left[\right.$ ${ }_{\mathrm{Op} 1 \mathrm{P}}[$ andé Rest $]$ Op1 ${ }^{\circ}\left[_{\text {IP }}<\mathrm{tu}>\right.$ sé ... ]]
d. In step four, ForceP and GP are merged, and the remnant-IP is attracted to SpecForce. Here, for clarity, the remnant-iP only consists of the verb sé ('are'); the detailed version is $[$ IP $<$ tu $>$ sé $<$ ndat $><$ wh $>]$ ]:
$\left[_{\text {ForceP }}\left[{ }_{\text {IP }}\right.\right.$ sé $]$ Force $^{\circ}\left[{ }_{\text {GP }}\right.$ tu G ${ }^{\circ}\left[_{\text {TopP }}[\right.$ PartP $n d a t<w h>]$ Top $^{\circ}\left[_{\text {OplP }}[\right.$ andé Rest ] <IP> ]
e. In the last step of the derivation, Op2P and ForceP are merged, and Rest is attracted to SpecOp2P:
$\left[_{\mathrm{Op} 2 \mathrm{P}}\right.$ Rest $\mathrm{Op} 2^{\circ}\left[_{\mathrm{FP}}\left[_{\mathrm{IP}}\right.\right.$ sé $] \mathrm{F}^{\circ}\left[_{\mathrm{GP}}\right.$ tu $\mathrm{G}^{\circ}\left[_{\mathrm{TopP}}\left[{ }_{\text {PartP }} \text { ndat }<\mathrm{wh}>\right]_{\text {Top }}{ }^{\circ}\left[_{\mathrm{Op} 1 \mathrm{P}}\right.\right.$ [ andé <Rest> <IP> ]

In this account, the main distinction between the two languages is that Bellunese has two (incomplete) classes of clitics, an assertive series (2-3PS, 3PP) and a non-assertive paradigm (all persons, 1PS excluded), while French does not. The non-assertive paradigm is, in Poletto and Pollock's words, 'morphologically somewhat

[^23]36. Rest(rictor) is the silent part of complex wh-elements, as posited before the analysis in terms of CIPs was developed.
heavier' than its assertive counterpart. Consequently, the authors assume that the non-assertive paradigm is merged in SpecAgrS and is associated with a [+Ground] feature. The assertive paradigm, meanwhile, is argued to be made up of spellouts of $\mathrm{Agrs}^{\circ}$, i.e. real clitic heads. It follows that when GroundP is merged, non-assertive clitics in Bellunese are attracted to the CP-domain. In contrast, Standard French only has a set of (weak) nominative pronouns that only optionally bear the [+ground] feature: when GroundP is merged, a [+ground] element must be attracted there to delete an uninterpretable feature; French nominative pronouns are [+ground] only in these precise cases. With regard to D-linked wh-elements, which in Bellunese are always construed with subject-clitic inversion and can only appear clause-initially, it is possible to attribute this property to the fact that these are not associated with a silent Restrictor that can check Op2P alone: the D-linked wh-element has to move to SpecOp2P at the very end of the derivation.

### 5.1.2 IP-internal real wh-in situ

Manzini and Savoia $(2005,2011)$ were heavily critical of the remnant-IP movement hypothesis, both for theory-internal and for data-related reasons. The former include the fact that the labels used in these works (GroundP, OpP, NIP, etc.) are 'reconstructed backwards from the required movements, rather than motivated by genuinely independent needs' (Manzini \& Savoia 2011), and the observation that the proposed analysis faces the restrictiveness problem that is generally imputed to Kaynian movement, i.e. that Chomsky's (1995) Economy Principle, according to which movement is possible only if necessary, does not hold. In what follows I survey the Lombard data that according to Manzini \& Savoia prove that the remnant-IP movement derivation is not suitable for Northern Italian dialects.

### 5.1.2.1 Evidence against wh-movement

Manzini and Savoia (2011) presented data-related arguments against a derivation of Northern Italian wh-in situ that involves overt movement to the CP , such as the remnant-IP movement hypothesis. The first argument is that, unlike Bellunese, Lombard dialects show no sensitivity to islands in the case of single wh-in situ, as in (21):
(21) Grumellese (adapted from Manzini \& Savoia 2005: 587 (157))
a. Subject island

Dìg-ei che gé egnìt [[ i amìs de chi ]]? say=them that is come the friends of whom 'For which $x$, such as $x$ is someone's friend, they say that $x$ came?'
b. Complex-NP island

Ta pjah [[ i liber ch'i pàrla de cohè $]]$ ?
you like the books that'they speak of what
'For which $x$, such as $x$ is a topic, you like books about $x$ ?'
c. Adjunct island

L'è ndàtf ivja [[ hènha haludà chi ]]?
he'is gone away without greeting who
'For which $x$, such as $x$ is a person, you left without greeting $x$ ?'
Examples of island-contained wh-in situ like those in (21) suggest that no wh-movement takes place before Spell Out. Interestingly, however, if the clause-internal wh-elements in (21) are doubled by their left-peripheral counterpart, island effects appear, as in (22):
(22) Grumellese (adapted from Manzini \& Savoia 2005: 587 (157))

of whom say=them that is come the friends of whom
b. De kòha ${ }_{\mathrm{i}}$ ta pjah [[i lìber ch'i pàrla ${ }_{\square}{ }^{\mathrm{i}}$ de cohè ]]?
of what you like the books that'they speak of what

who he'is gone away without greeting who
According to Manzini and Savoia, the contrast between examples like (21) and (22) clearly proves that, while in the case of single wh-in situ no wh-movement takes place in overt syntax, in the case of wh-doubling the higher, doubling wh-element is moved, hence the ungrammaticality of the extractions in (22). Note that in the examples in (22) my choice of the position in which the wh-doubling element is internally-merged is completely arbitrary; my only aim is to signal that wh-movement of the doubling wh-item is assumed to start out Ip-internally. Whatever the initial position of the fronted doubling wh-item, the Lombard data studied by Manzini and Savoia are in clear contrast with those discussed in Poletto \& Pollock (2000) and related works.

Another argument that undeniably establishes a definite division between the Bellunese-like and Lombard dialects is that in the latter wh-in situ is not exclusively a root phenomenon. In Manzini \& Savoia's (2005) corpus, embedded wh-in situ is in fact widely attested, both in in long-distance questions (23) and in indirect wh-questions (24):
(23) Grumellese (adapted from Manzini \& Savoia 2005: 591 (155))
a. Krèdet [ che al hàbe indàtf indoé ]? think $_{\text {2ps }}$ that he has ${ }_{\text {SUBI }}$ gone where 'Where do you think he went?'
b. (Kòha) pènhet [ che l'abe fàtf kohè ]? (what) think ${ }_{2 \text { 2ps }}$ that he'has ${ }_{\text {SUBJ }}$ done what 'What do you think he did?'
(24) Grumellese (adapted from Manzini \& Savoia 2005: 591 (156))
a. Öle haì [ indó l'è ndàtf (indoé) ]
want $_{1 \text { ps }}$ know where he' is gone where
'I want to know where he went'
b. Domànde-ga [ kòha l'a fàtf (kohè) ]
ask=him what he'has done what
'Ask him what he did'
Finally, whereas in the Bellunese-like varieties that inspired the remnant-IP movement analysis D-linked wh-elements are not felicitous clause-internally ( $\$ 1.3 .2$ ), no distributional asymmetry is observed between D-linked and non-D-linked wh-elements in Lombard. In addition, Manzini \& Savoia argue that there is no direct correlation between the availability of subject-clitic inversion as a question formation strategy and wh-in situ, both of the regular and of the wh-doubling types. Indeed, as claimed in Chapter 1 of this work, no Northern Italian dialect displays French-like behaviour in this regard. In the varieties spoken in the Northern Italian domain, both subject-clitic inversion and lack of subject-clitic inversion are possible in genuine questions; however, unlike French, these varieties are very consistent in their treatment of subject-clitic inversion and either require or exclude subject-clitic inversion as a question-formation strategy, independently of the linear position occupied by the wh-element(s).

### 5.1.2.2 Northern italian wh-in situ is real wh-in situ

On the basis of the data summarised in $\$ 5.1 .2$, Manzini \& Savoia conclude that Northern Italian wh-in situ must be real: for them, in overt syntax, clause-internal wh-elements in Northern Italian dialects stay in their first-merge position. The explanation provided for the unique data found in Bellunese and similar languages (as described in Munaro 1999; Poletto \& Pollock 2000; Munaro et al. 2001, a.o.) is that, in the context of micro-variation among closely-related grammars, it is plausible that in some grammars there are factors that impel wh-movement in embedded sentences but not in others. Manzini and Savoia also argue that different sensitivities to islands can be explained more effectively if they are taken to be related to conditions on Logical Form interpretive construals, not on movement
operations. Against this theoretical background, the choice between wh-in situ and wh-movement in Northern Italian dialects is simply a classic, parametrised distinction between scope construal on the one hand (in case of wh-in situ) and overt scope (wh-fronting) in the other. Consequently, wh-doubling grammars can be explained as exceptionally requiring an overt lexicalisation of both the scope marker and the variable.

### 5.1.3 The Trevisan data in the theory of Northern Italian wh-in situ

The theoretical model for the study of Romance wh-in situ that I call the remnant-IP movement hypothesis accounts for the data from Bellunese and similar languages (including Standard French), but fails to predict the possibility of, perhaps among other phenomena: (a) non clause-final wh-in situ, (b) embedded wh-in situ, and (c) island-contained wh-in situ. In the previous chapters, I claimed that (a) to (c) are actually attested in Northern Italian dialects; in $\$ 5.2$, I shall argue that these phenomena are also observed outside the Northern Italian domain. Another phenomenon to add to that list is the felicitous licensing of D-linked wh-elements clause-internally, which is possible in type I and type II languages, but not in the varieties discussed in the works under consideration, i.e. type III. Clearly, justifying the presence of (a), i.e. non-clause final wh-in situ, in languages like Trevisan that display systematic short movement of clause-internal wh-elements like Trevisan, would be problematic if the wh-elements into consideration were indeed moved to the Left Periphery of the clause. In fact, to explain the Trevisan 'wh-indirect object > direct object' order observed in 'in situ' questions in the case of ditransitive verbs, as well as the lack of a prosodic break between the two elements, one would at least have to posit an unjustified topicalisation of the direct object prior to wh-movement, so that the direct object can remain TP-internal when the remnant-IP raises to the Left Periphery. I discuss these issues in what follows, along with the presence of (b) and (c) in type I and type II varieties: if the grammars of languages of this type required mandatory movement of clause-internal wh-elements to the low portion of the CP, then the felicity of wh-extraction should be guaranteed (at least) for embedded questions and weak islands. Consequently, these would display total wh-fronting rather than wh-in situ, contrary to the attested data.

On the other hand, a model like the covert movement hypothesis, where clause-internal wh-elements stay in their first-merge position, correctly predicts most of the patterns of Northern Italian data discussed in Chapter 1, namely the availability of: (a) non clause-final wh-in situ, (b) embedded wh-in situ,
and (c) island-contained wh-in situ. The availability of D-linked wh-elements clause-internally is also accounted for. However, like the remnant-IP movement analysis, this approach fails to predict a further feature, (d), namely the availability of clause-internally moved wh-elements. Quite clearly, a derivation of wh-in situ that assumes that wh-elements stay in the position in which they are externally-merged is not incompatible with the availability of short-distance scrambling, i.e. optional iP-internal movement of the wh-element (like the movement that I shall posit for French and Spanish in $\$ 5.2$ ). However, this type of model fails to account for mandatory short movement, i.e. proper syntactic movement within TP.

In this book I have presented and discussed novel data from Trevisan, a dialect of the Venetan area in which the distribution of clause-internal wh-elements appears strikingly different from that found in more widely-studied Bellunese (Munaro 1995; Munaro et al. 2001; Poletto \& Pollock 2015, and related works). Among the reasons behind my proposal that the clause-internal wh-elements of Trevisan are moved TP-internally is the different linear positions occupied by indirect objects and adverbials in declaratives compared to the wh-indirect objects and wh-adverbs of the corresponding wh-questions. Indeed, in genuine wh-questions, clause-internal wh-elements clearly always directly follow the past participle in the linear string. As a consequence, wh-adverbials and wh-indirect objects precede direct objects linearly, as in (25):
(25) Trevisan
a. Ga-tu magnà cuando $_{\mathrm{i}}$ el dolse___ ? have=you eaten when the cake 'When did you eat the cake?'
b. Ghe ga-tu dato a chi $i_{\mathrm{i}}$ a tecia ___ ? Dat have=you given to whom the saucepan 'Who did you give the saucepan to?'

I have claimed that direct objects such as el dolse 'the cake' in Example (25a) are not right dislocated. In fact, dislocation in Trevisan is only possible when construed with clitic resumption (when available) and in the presence of so-called comma intonation. In addition, the strict order between verb-selected arguments and adverbs in declaratives strongly suggests that Italian-like marginalisation is categorically excluded in this variety. These data are extremely difficult to account for in a remnant-IP movement derivation. If Trevisan had wh-movement of clause-internal wh-elements to the CP , followed by movement of the remnant-IP, then in order to derive peculiar orders such as those in (25) one would have to posit either:
i. the existence of a left-peripheral functional projection lower than Op1P to which the direct object is attracted prior to wh-movement, as in (26):
(26) Input: ${ }_{\text {IP }}$ te gà magnà el dolse cuando ]
a. Step 1: Merge FP and IP; attract the DP to SpecFP: [ ${ }_{\mathrm{FP}} \mathrm{el}$ dolse ${ }_{\mathrm{j}} \mathrm{F}^{\circ}{ }_{\text {IP }}$ te gà magnà __j cuando ]]]
b. Step 2: merge Op1P and FP, and attract the wh-element to SpecOp1P: [ ${ }_{\mathrm{Op} 1 \mathrm{P}}$ cuando $_{\mathrm{i}} \mathrm{Op}^{\circ}{ }^{\circ}\left[{ }_{\mathrm{FP}} \mathrm{el}\right.$ dolse $\mathrm{j}_{\mathrm{j}} \mathrm{F}^{\circ}{ }_{[\mathrm{IP}}$ te gà magnà __j -i $\left.]\right]$ ]
ii. or some sort of topicalisation of the direct object to a TP-internal projection higher than IP, taking place prior to all other movements. Crucially, this would spare the direct object, which would be able to stay тp-internally when the remnant-IP raises to the Left Periphery, as in (27):
(27) Input: ${ }_{\text {IP }}$ te gà magnà el dolse cuando ]
a. Step 1: Topicalisation of the direct object to a FP higher than IP:
$\left[{ }_{\text {TP }}\right.$ el dolse ${ }_{\mathrm{j}} \mathrm{T}^{\circ}{ }_{\text {IP }}$ te gà magnà __j cuando $\left.]\right]$ ]
b. Step 2: Various movements that displace the wh-element, the past participle, and the subject clitic to the CP :

c. Step 3: When the remnant-IP is attracted to the CP , the TP-internal direct object is spared:
$\left[{ }_{\mathrm{CP}}\left[{ }_{\mathrm{IP}} \ldots \text { ga } \ldots\right]_{\mathrm{IP}}\right.$ tu magnà __j cuando $\left[{ }_{\text {TP }}\right.$ el dolse $\mathrm{T}^{\circ}$ _IP ] $]$
However, while stipulating the presence of Bellunese-like bipartite wh-words in closely-related Trevisan might be justified, movements of the direct object such as those shown in (i) and (ii) would be extremely ill-justified, and hence ruled out. Clearly, a derivation including remnant-IP movement should be rejected at least for varieties of this type.

Similarly, if the clause-internal wh-elements of Trevisan-like languages stayed in the position in which they are externally-merged, as posited by Manzini and Savoia (2011), the only way to derive the orders in (25) would be systematic rightward extraposition of the direct object (as in 28), which is both an unjustified move and a theoretically undesirable one:


I have claimed that Trevisan wh-in situ closely resembles that found in the Lombard and similar varieties described by Manzini and Savoia (Chapter 1). In fact, it is felicitously licensed not only in long-distance and indirect wh-questions, but also inside syntactic islands. In a derivation based on remnant-IP movement, these
distributional properties are difficult to account for. For example, checking the Force of inherently interrogative sentences like indirect wh-questions via movement to the Left Periphery is unnecessary, and should hence be ruled out by Economy (as in Bellunese and similar varieties). However, in these varieties wh-in situ is felicitous in such questions.

Also, proposing that the wh-elements of Trevisan need to systematically check an interrogative feature in the low CP (in Op1P, in Poletto and Pollock's terms), as they do in Bellunese, would incorrectly predict the facts in (a)-(c):
a. systematic partial wh-fronting to the embedded Left Periphery in long-distance questions, yielding the infelicitous 'complementiser > wh-element' order, as in (29):

think=you that when she= come $_{\text {fut }}$ to visit.us
'When do you think she will visit?'
Following many cartographic studies (Rizzi 1997 and further related works) and my discussion in Chapter 5, I assume that the that-complementiser che in (29) realises Force ${ }^{\circ}$. Nevertheless, the reverse 'wh-element > che' order is also out. In fact, only long extraction targeting the matrix Left Periphery is possible.
b. systematic wh-fronting in indirect wh-questions, when construed with either the complementiser che ('that') or $\mathrm{se}_{\mathrm{wH}}$ ( (if'), as shown in (30):
(30) Trevisan
a. A vol saver [Forcep ... cuando $_{\mathrm{i}}$ che $\left[_{\mathrm{IP}}\right.$ te pasarà she $=$ wants know when that $y$ ou $=$ come $_{\mathrm{FuT}}$ catarne $\qquad$ i]
visit.us
'She wants to know when you will be visiting'

In (30), I take the low operator projection to be located higher than the projection(s) headed by the complementiser of indirect wh-questions, which realises QembP. This approach accounts for the correct 'wh-element > che' order in (30a), but incorrectly predicts it as the only viable option, as well as predicting that the ungrammatical order " wh-element > se' is possible (30b). The opposite order, where Op1P is lower than the projection headed by che/se, also predicts utterly ungrammatical orders: '* che $>$ wh-element' and '* $\mathrm{se}_{\mathrm{wH}}>$ wh-element'.
c. systematic extraction of island-contained wh-elements, targeting Op1P, as in (31):
(31) Trevisan
a. Wh-island

b. Complex-NP island

Cossa $_{i}$ a se gà inamorà de [ un profesor che insegna ${ }_{\square}{ }^{i}$ ]
what she=her=has fallen of a professor who teaches 'What is $x$, such as she has fallen in love with a professor who teaches $x$ ?'

Crucially, the need for the wh-element to check Op1P in overt syntax falsely predicts that weak-island extraction is the only available option (when in fact Trevisan can have wh-in situ inside weak islands), as in (31a), and predicts ungrammatical cases of fronting out of strong islands, as in (31b), which are actually excluded by the properties of islands themselves. In fact, the situation with islands would be even more complicated than presented here, because Force would need to be checked, producing extremely ill-formed strings.

Predictions (a)-(c) are clearly false. Finally, the felicity of clause-internal D-linked wh-elements also rules out a derivation of wh-in situ à la Poletto \& Pollock for at least both type I and type II varieties. For these reasons, an explanation of Trevisan fake wh-in situ as being derived TP-internally seems more reasonable, though not in an argumental position à la Manzini \& Savoia (2005): otherwise the observed short movement of wh-elements would remain unaccounted for. I therefore believe that the Wh-to-Foc analysis that I have developed in this monograph provides a better account of Northern Italian wh-in situ type I. One might wonder whether the Lombard data could actually fit into a derivation such as that proposed for Trevisan. This does indeed seem to be possible, as was confirmed by Rita Manzini (pc.): in Manzini and Savoia's (2005) corpus, there is neither positive nor negative evidence regarding short movement of clause-internal wh-elements. Consequently, an extension of the analysis of wh-in situ in terms of tP-internal focus movement to Lombard-like varieties might be plausible, although evidence from unmoved wh-in situ in other Romance and non-Romance varieties suggests that an over-generalisation of Wh-to-Foc should be avoided, as I shall claim in $\$ 5.2$.

### 5.2 Beyond Northern Italian dialects

Because the Northern Italian varieties discussed so far display very regular patterns in the distribution of clause-internal wh-elements, Romance wh-in situ is expected to follow similar patterns, at least partially. Indeed, data similar to those discussed for Trevisan and type II Lombard dialects are attested in other Romance varieties spoken outside Northern Italy. Differently, the case of type III remains isolated.

### 5.2.1 Sentence final (requirement). Or not?

It has been argued that some languages, such as Bellunese, only license wh-in situ at the edge of the clause, i.e. in a clause-final position (Munaro 1999; Poletto \& Pollock 2015, and related works). This means that, independently of its grammatical function, a clause-internal wh-element always occupies the rightmost clausal position: if followed by extra material, this would have to be dislocated and a clear-cut separation between the two would have to be signalled prosodically. Take for example the classic Bellunese examples below (all adapted from Poletto \& Pollock 2015: 139(2)): although in the declarative order indirect objects directly follow the direct object, as in (32a), it is not possible to reproduce the same order in 'in situ' wh-questions, as in (32b). The only felicitous option is placing the wh-word at the edge of the clause, separated by means of a prosodic pause, as in (32c):
(32) Bellunese (adapted from Poletto \& Pollock 2015: 139 (2))
a. Al ghe a dat al libro a so fradel
he dat has given the book to his brother
'He gave the book to his brother'
b. *Ghe ha-lo dat che a so fradel? dat has=he given what to his brother 'What has he given to his brother?'
c. Ghe ha-lo dat che, a so fradel? Dat has=he given what \# to his brother

As previously discussed, for authors such as Poletto and Pollock (2015) examples like (32c) prove that Bellunese clause-internal wh-words are moved from their external-merge position. Similar claims were made for French and Spanish by authors including Obenauer (1994), Ambar \& Veloso (2001), Munaro et al. (2001), Etxepare \& Uribe- Etxebarria (2005), Poletto \& Pollock (2015) (and previous related works), among others. Accordingly, in French (or Spanish) questions like (33) the wh-element that is situated at the rightmost edge of the clause at Spell Out is in fact not in its external-merge position:
(33) French (adapted from Poletto \& Pollock 2015: 142 (15)
a. Marie a embrassé qui?

Mary has kissed who
'Who did Mary kiss?'
b. Marie a engagé quel linguiste?

Mary has hired what linguist
'Which linguist did Mary hire?'
However, this claim meets with disagreement in works where French clause-internal wh-elements are actually considered instances of real Chinese-like wh-in situ (Cheng 1991; Cheng \& Rooryck 2000; Mathieu 1999, 2002, a.o.). Non clause-final wh-in situ is also attested in varieties spoken outside of the Northern Italian domain. One of these is Contemporary Spoken French (Non Standard Colloquial French in Baunaz 2011; Baunaz \& Patin 2011, a.o.), as illustrated in (34):
(34) Contemporary Spoken French (Baunaz 2011: 48, $49(88,89)$ )

Context. Everybody is queueing at the cafeteria. Several main courses are proposed: beefsteak, chicken and stew. The waiter asks Léa, who is hesitating for too long:
a. Bon, vous prenez quoi finalement?
ok you take what finally
'Ok, what do you want, finally?'
b. Vous choisissez quel plat finalement?
you choose which dish finally
'Finally, which dish do you want?'
Examples like (34) clearly show that no sentence-final requirement applies in Contemporary Spoken French, both with non-D-linked and D-linked wh-elements. The prosody of sentences like this shows that the wh-element does not lie at the sentential edge: there is no prosodic pause between the wh-element itself and the following elements (such as finalement, 'finally'), yet the questions are perfectly felicitous (Baunaz 2011). In this variety of French, the lack of a sentence-final requirement can also be observed in constructions that resemble Trevisan Wh-to-Foc, as in (35b):
(35) Contemporary Spoken French
a. Tu as mangé les pommes quand ?
you have eaten the apples when
'When did you eat the apples?'
b. ?Tu as mangé quand les pommes?
you have eaten when the apples
Regardless of the formal explanation provided for this optional movement in (35b), it clearly constitutes further evidence that clause-internal wh-elements need not
occupy the clausal edge in Contemporary Spoken French. The lack of a sentencefinal requirement for clause-internal wh-elements has also been attested in European and Brazilian Portuguese (Cheng \& Rooryck 2002 and Kato 2013, respectively):
(36) European Portuguese (adapted from Cheng \& Rooryck 2002: 4 (10c) O João pensa [ que viu quem $_{\mathrm{S}}$ a Maria $_{\mathrm{po}}$ ]? the John thinks that saw who the Mary 'Who does João think saw Maria?'
(37) Brazilian Portuguese (adapted from Kato 2013: 6 (12d))

Maria ama [ o livro [ que quem ${ }_{S}$ escreveu $_{\mathrm{V}}$ ]]?
Mary loves the book that who wrote
'Mary loves the book that was written by whom?'
Although the examples above are not instances of root wh-in situ, they clearly demonstrate that in both varieties of Portuguese clause-internal wh-elements are not required to occupy the rightmost clausal edge. A non-strict sentence-final requirement for clause-internal wh-elements is in fact also attested in Spanish (Biezma 2018; contra Etxepare \& Uribe-Etxebarria 2005, 2012), which I discuss in §5.2.2.

### 5.2.2 (Optional) TP-internal wh-movement

Because of the requirement for Trevisan clause-internal wh-elements to move TP-internally, I have argued that this movement should be treated as proper syntactic movement, i.e. movement triggered by the need to check a [foc]-feature in the $\nu \mathrm{P}$-peripheral $\mathrm{Foc}^{\circ}{ }_{\text {⿺ow }}$. A close look at the behaviour of clause-internal wh-adverbs in Contemporary Spoken French and Spanish suggests that wh-in situ can also be moved TP-internally in these languages. In French, short movement of clause-internal wh-elements has been claimed to be felicitous in strongly presuppositional contexts (Baunaz 2011), while in Spanish the possibility seems to be linked to the notion of 'givenness' (Biezma 2018). ${ }^{37}$ Observe (38) and (39):

[^24](38) Contemporary Spoken French

T'as mangé quand ${ }_{\mathrm{ADV}}$ les frites $\mathrm{DO}_{\mathrm{DO}} \quad$ _- ${ }_{\mathrm{ADV}}$ ?
you=have eaten when the french.fries
'When did you eat the French fries?'
(39) Spanish (adapted from Biezma 2018: 6 (8))

Context: Two people are talking. Speaker A wants to know where speaker B bought all of their music instruments. Speaker B gives information about their trumpet; then speaker A replies asking when they bought the guitar.
A: ¿ Cuándo ${ }_{\text {ADV }}$ compraste todos estos instrumentos musicales $\qquad$
'When did you buy all this musical instruments?'
B: Compré la trompeta ${ }_{\mathrm{DO}}$ el lunes ${ }_{\mathrm{ADV}}$. 'I bought the trumpet on Monday.'
A: ¿Y compraste cuándo $o_{\text {ADV }}$ la guitarra $_{\mathrm{DO}}$ __adv $^{\text {? }}$ ? and bought ${ }_{2 \text { ps }}$ when the guitar

However, unlike what is observed in Trevisan, the clause-internal wh-elements of Contemporary Spoken French and Spanish are also fine in their declarative order, i.e. short movement of the wh-element appears to be optional. Observe (40) and (41):
(40) Contemporary Spoken French

T'as mangé les frites ${ }_{\mathrm{Do}} \quad$ quand $_{\mathrm{ADV}}$ ?
you'have eaten the french.fries when
(41) Spanish

A: ¿ Y compraste la guitarra ${ }_{\mathrm{DO}}$ cuándo $_{\text {ADv }}$ ? and bought ${ }_{2 \mathrm{ps}}$ the guitar when (adapted from Biezma 2018: 6 (8))

The possibility of clause-internal wh-elements appearing in their first-merge position clearly makes Spanish and Contemporary Spoken French different from Trevisan. In a recent experimental study, Tual (2017) showed that in the case of ditransitive verbs, native speakers of French prefer non-TP-internally moved clause-internal wh-elements to TP-internally moved ones. In fact, although questions containing clause-internally moved wh-elements such as (42a) are not ungrammatical, they appear less natural than their unmoved counterparts, as in (42b):
(42) Contemporary Spoken French
a. T'as donné le bracelet ${ }_{\mathrm{DO}}$ à $q u i_{\mathrm{I}}$ ? you'have given the bracelet to whom 'Who did you give the bracelet to?'
b. ?T'as donné à qui $i_{\mathrm{IO}}$ le bracelet ${ }_{\mathrm{DO}}$ $\qquad$ you'have given to whom the bracelet

I suggest that sentences like (42b) should be analysed as optional permutations of word order, plausibly pragmatically-driven short distance scrambling. Starting from Ross (1967), scrambling is a term that has commonly been used to refer to a type of movement that is related to pragmatic word order considerations (see also Ross 1986; Saito 1989; Webelhuth 1989; Mahajan 1990; Nishigauchi 2002; Miyagawa 2005, a.o.). In formal linguistics, this phenomenon, along with the issue of free vs. constrained word orders more generally, has been widely explored in traditional works including Grewendorf \& Sternefeld (1990), van Riemsdijk \& Corver (1994), Kayne (1994), and Karimi (2003). Since in the presence of scrambling the order of the clausal constituents is determined by pragmatic considerations such as emphasis, it seems reasonable to posit that in this variety of French and in Spanish clause-internally moved wh-elements are scrambled, plausibly for reasons of prominence. Indeed, the optional status of these instances of movement makes an analysis of them as driven by feature-checking somewhat undesirable.

### 5.2.3 Embedded wh-in situ

In this section I survey the distribution of embedded wh-in situ in Romance languages spoken outside Northern Italy. The main properties that will be taken into consideration are: (i) the (in)ability to license wh-in situ in long-distance and/or indirect wh-questions, and (ii) the presence of an embedded complementiser construed with wh-fronting and/or with wh-in situ.

### 5.2.3.1 Long-distance questions

Insituness in long-distance questions is fine in Contemporary Spoken French (Obenauer 1994; Baunaz 2011; contra Mathieu 1999, Bošković 2000; Cheng \& Rooryck 2000, a.o.), both with non-D-linked and D-linked wh-elements, as in (43). Note that the availability of long construals in French has been debated for decades; this is because there are multiple varieties of oral French, whose grammars vary in the extent to which they permit wh-in situ (Baunaz 2011, a.o.).
(43) Contemporary Spoken French
a. Il pense [ qu'elle a appelé qui]?
he thinks that'she has called who
'Who does he think she called?'
b. Il t'a dit [ qu'elle est passée à quelle heure]? he you'has said that'she is passed at what hour 'What time did he tell you she passed by?'

Spanish has also been argued to license long-distance wh-in situ, again with both types of wh-elements (Etxepare \& Uribe-Etxebarria 2005), as in (44):
(44) Spanish (Etxepare \& Uribe-Etxebarria 2005: 19 (37))
a. Juan dice [ que Maria compró eso i donde] ?

John says that Mary bought this where
'Where does John say Mary bought this?'
b. Juan dice [ que Maria compró eso ¿̇ en qué tienda]?

John says that Mary bought this in which shop
'In which shop does John say Mary bought this?'
Wh-in situ in long-distance questions has also been observed in Brazilian Portuguese (Kato 2013), as in (45), and European Portuguese (Pires \& Taylor 2009; Cheng \& Rooryck 2000), as in (46):
(45) Brazilian Portuguese (Kato 2013: 6 (12))

Maria pensa [ que o Jõao comprou o quê ]?
Mary thinks that the John bought what 'What does Mary think John bought?'
(46) European Portuguese (Cheng \& Rooryck 2002: 3 (6))

O João pensa [ que a Maria viu quem ]?
the João thinks that the Maria saw who
'Who does John think that Mary saw?'

### 5.2.3.2 Indirect questions

It has been argued that Spanish licenses indirect wh-in situ (Etxepare \& UribeEtxebarria 2005; Suñer 1991, a.o.), both in regular wh-questions, as in (47), and in polar questions, as in (48). Note that the complementiser in (48) is a regular if-complementiser, unlike the semantically void $\mathrm{se}_{\mathrm{wH}}$ found in Trevisan: the only available interpretation for the question in (48) is 'for which $x, x$ is such that you don't know whether $x$ came?', not 'for which $x, x$ came and you don't know it?'. In contrast, the semantics of questions like (47) is undoubtedly that of a single wh-question. ${ }^{38}$

[^25](47) Spanish (Suñer 1991: 285 (4))

Juan dijo [ que a quién habían invitado]
John said that to whom had 3pp invited 'Who did John say they invited?'
(48) Spanish (Etxepare \& Uribe-Etxebarria 2005: 19 (38))

Y tú no sabes [ si ha venido ¿ quién ]?
and you neg know if has come who
'Who is $x$ such that you don't know whether $x$ came?'
Nevertheless, a cross-linguistic counterpart of $\mathrm{se}_{\mathrm{wH}}$ has indeed been attested in European Portuguese (Cheng \& Rooryck 2000, 2002), as in (49), and Brazilian Portuguese (Kato 2013), as in (50), but also in Belgian French (Boeckx et al. 2000), as illustrated in (51):
(49) European Portuguese (Cheng \& Rooryck 2002: 2 (1))

O João quer saber [ se tu compraste o qué]
the João wants know se you bought what
'João wants to know what you bought'
(50) Brazilian Portuguese (Kato 2013: 6 (12))

Eu me perguntei [ se o João comprou o que ]?
I myself asked se the John bought what
'I wondered what John bought'
(51) Belgian French (Boeckx et al. 2000: 60 (10))

Pierre a demandé [si tu as vu qui]
Pierre has asked se you have seen who
'Pierre asked who you saw'

### 5.2.4 Sensitivity to islands

The morphosyntax of French wh-in situ has often been compared to that of Northern Italian wh-in situ (Munaro et al. 2001; Poletto \& Pollock 2015, and related works). In the preceding sections, I showed that wh-in situ in Contemporary Spoken French does not obey a sentence-final requirement. I also showed that in this same variety, wh-in situ is productive in long-distance questions, but not in indirect questions. In fact, if the cryptic case of the unavailability of subject-clitic inversion construed with wh-in situ and the absence of wh-doubling are excluded, Contemporary Spoken French seems to qualify as a type II variety in the way it treats wh-in situ. Consequently, if my approach is valid, this variety of French is expected to show no island effects. Indeed, this prediction is correct, contra much of the existing literature on weak island effects (Obenauer 1994; Mathieu 1999;

Shlonsky 2012, a.o.). Similar predictions for Spanish and Portuguese can be drawn from the discussion in the previous sections, which are confirmed by the data on island-trapped wh-in situ that I discuss here.

### 5.2.4.1 Contemporary Spoken French

Mathieu (1999) argued that in French the argument-adjunct asymmetry observed in extraction out of weak islands does not extend to instances of wh-in situ, which he claims to be unselectively restricted by locality constraints such as Rizzi's (1990) Relativized Minimality. For Mathieu, unlike overtly-moved wh-arguments, clause-internal wh-arguments and wh-adjuncts are indeed sensitive to intervention by c-commanding quantificational elements. As pointed out in Shlonsky (2012), although the status of some weak island effects appears subtle and controversial, researchers (almost) universally agree that wh-in situ is ungrammatical inside negative and wh-islands. However, these claims do not apply to Contemporary Spoken French, where wh-in situ is indeed acceptable inside weak islands, as in the examples in (52) and (53). ${ }^{39}$ Note that in these cases overt out-of-island extraction is always possible:
(52) Contemporary Spoken French
> a. A qui il [ n'a pas voulu parler__i] ?
> to whom he NEG=has NEG wanted talk 'To whom didn't he want to talk?'
> b. Il [ n'a pas voulu parler à qui]? he neg=has neg wanted talk to whom
(53) Contemporary Spoken French
a. Quelle voiture ${ }_{i}$ tu te demandes [ qui devrait réparer ___ ${ }_{i}$ ]?
which car you refl ask who should fix 'Which car do you wonder when we should fix?'
b. Tu te demandes [ qui devrait réparer quelle voiture]? you refl ask who should fix which car

In contrast, most of the literature is in agreement that strong islands are able to embed wh-in situ (Obenauer 1994, Starke 2001, Shlonsky 2012, a.o.). Out-of-island extraction is categorically ruled out in these cases, and wh-fronting results in ungrammaticality. Therefore, inside strong syntactic islands wh-in situ is not only an option but is in fact compulsory. This is illustrated by the contrasts in (54) to (56):

[^26](54) Contemporary Spoken French
 who you think that'she has said this to push Pierre to seduce 'Who is $x$, such that you think that she said this to encourage Pierre to seduce $x$ ?'
b. Tu crois qu'elle a dit ça [[ pour inciter Pierre à séduire you think that'she has said this to push Pierre to seduce qui ]] ? (adapted from Tual 2019) who
(55) Contemporary Spoken French
a. Quoi $i_{i}$ tu crois quelles vont inviter [[ ceux qui ont fait __i ]]? what you think that'they will invite those who have done 'What is $x$, such that you think they are going to invite the people who $\operatorname{did} x$ ?'
b. Tu crois qu'elles vont inviter [[ ceux qui ont fait quoi ]]? you think that'they will invite those who have done what
(56) Contemporary Spoken French
a. De quel acteur $r_{i \times X X}\left[\left[\right.\right.$ un bon $\mathrm{ami}_{X}^{\mathrm{i}}$ i] a peint Van Gogh? of which actor a good friend has painted Van Gogh 'Who is $x$, such that $x$ is an actor whose good friend painted Van Gogh?'
b. [[ Un bon ami de quel acteur ]] a peint Van Gogh? a good friend of which actor has painted Van Gogh

The data from the examples discussed in this section confirm the prediction that this variety of French displays Lombard-like behaviour in its distribution of clause-internal wh-elements. ${ }^{40}$
40. Note that I have only analysed the syntactic islands discussed for Bellunese in Munaro (1999). However, the data on other island effects such as the Coordinate structure constraint, as in (1), or the Left-branch constraint, as in (2), also confirm what has been said so far, although the status of the two seems slightly degraded with respect to the strong islands in (54-56). (in prep)
(1) Contemporary Spoken French
a. * ( $\grave{A}) q u i_{i}$ tu as parlé [[ à Paul et __i $]$ ] ?
(to) who you have talked to Paul and 'Who is $x$, such that you talked to Paul and $x$ ?'
b. Tu as parlé [[ à Paul et (à) qui ]]? you have talked to Paul and (to) who
(continued)

### 5.2.4.2 Spanish and Portuguese

The data discussed in the previous sections, coupled with my discussion of Northern Italian dialects, predict that Spanish wh-in situ cannot be derived as in Bellunese and similar languages (type III). Its morphosyntactic properties instead more closely resemble those of Lombard and similar varieties (type II), so Spanish wh-in situ is hence expected to be acceptable inside syntactic islands. The prediction is confirmed by the data on wh-in situ inside islands attested in the literature on Spanish (Suñer 1991; Arnaiz 1993; Etxepare \& Uribe-Etxebarria 2005; Reglero 2007; Reglero \& Ticio 2008), all of which seem to confirm my intuition. Observe the weak and strong islands in (57) and (58):
(57) Spanish (adapted from Reglero 2007: 273 (18))
a. [Y] tú no sabes [ cómo llegó quien ]? and you neg know how arrived who 'Who is $x$, such that you don't know how $x$ arrived?'
b. Quién $n_{\mathrm{i}}$ tú no sabes [ cómo llegó __i ]? who you neg know how arrived
(58) Spanish (adapted from Reglero 2007: 272 (16))
a. Te has enamorado [[ del hombre que vive con quien ]]? you have fallen.in.love of.the man who lives with whom
b. Con quién $n_{\mathrm{i}}$ te has enamorado [[ del hombre que vive__i ${ }_{\sim}$ ]] ? with whom you have fallen.in.love of.the man who lives 'Who is $x$, such that you fell in love with the man who lives with $x$ ?'

Predictably, overt extraction of the wh-element is possible in the case of weak islands, as in (57), and ruled out with strong islands, as in (58). Data also exist that show the impossibility of out-of-island extraction of wh-elements for other types of islands, such as the adjunct island in (59):
(59) Spanish (adapted from Alcalà 2014: 168 (2a))

whom you left before of greeting
'Who is $x$, such that you left without greeting $x$ ?'
(2) Contemporary Spoken French
a. * Quoi ille a cassé [[ __i de Paul ]]? what she has broken of Paul 'What is $x$, such that you broke Paul's $x$ ?'
b. ?Elle a cassé [[ quoi de Paul ]]? she has broken what of Paul

In light of the data discussed so far, the structure in (59) is expected to be grammatical in the absence of wh-fronting. Let us now turn to Portuguese. ${ }^{41}$ I have claimed that Portuguese displays optional wh-in situ, both in root and in non-root contexts (Pires \& Taylor 2009; Cheng \& Rooryck 2000, 2002; Kato 2013). As mentioned above, the status of its indirect wh-questions is uncertain. In fact, it has been argued that both European and Brazilian Portuguese have wh-in situ in indirect questions under a complementiser which closely resembles Trevisan se $\mathrm{wH}_{\mathrm{H}}$. However, I have not been able to reproduce the data with my informants, who lack the relevant if-complementiser and systematically carry out wh-fronting in indirect interrogatives, as in (60):
(60) Brazilian Portuguese (adapted from Figueiredo Silva \& Grolla 2016: 263 (8))
a. Ele perguntou o que ${ }_{\mathrm{i}}(($ é $)$ que a Maria viu _-i
he asked what is that the Mary saw
'He asked what Mary saw'
b. *Ele perguntou ((é) que) a Maria viu o que
he asked is that the Mary saw what
In my theory, the absence of indirect wh-in situ in a variety that has an embedded that-complementiser construed with fronting but no specialised complementiser for wh-in situ (or wh-doubling) is predicted. Nonetheless, the possibility of embedding a wh-element within an indirect yes/no question, such as that in (48) for Spanish, has also been attested in Portuguese (61):
(61) Brazilian Portuguese (Figueiredo Silva \& Grolla 2016: 262(4))

A Maria perguntou se o João comeu o qué?
the Mary asked se the John ate what
'What is $x$ such that Mary asked if John has eaten $x$ ?'
What is more, although my data are not sufficient to establish whether Portuguese has proper syntactic movement of clause-internal wh-elements, it is clear that no movement of the remnant-IP can be involved in its derivation. There exists a possibility, although limited, of moving non-subject wh-elements in real questions, as in (62a), which looks like the phenomenon observed in Contemporary Spoken French and Spanish that I analysed as short-distance scrambling:

[^27](62) $\mathrm{DO}>\mathrm{WH}-\mathrm{ADV}$ vs $\mathrm{WH}-\mathrm{ADV}>\mathrm{DO}$

Brazilian Portuguese (adapted from Figueiredo Silva \& Grolla 2016: 277 (36c))
a. O Pedro viu a Maria Domo $_{\text {ADv }}$ ? the Peter saw the Mary how 'How did Peter see Mary?'
b. O Pedro viu como $_{\text {ADV }}$ a Maria $_{\mathrm{Do}}$ __Adv $^{\text {? }}$ the Peter saw how the Mary

Note that the order in (62b) is also possible in the presence of a prosodic break (O Pedro viu como, a Maria?), although only the latter should be considered an instance of scrambling. In line with Trevisan and Lombard varieties, Portuguese can also license D-linked wh-elements clause-internally, as in (63):
(63) Brazilian Portuguese (adapted from Figueiredo Silva \& Grolla 2016: 285 (17B))

Você fez quantos biscoitos?
you made how.many cookies
'How many cookies did you make?'
Consequently, the prediction is that wh-in situ should be not only possible (in all types of islands), but also necessary (inside strong islands). Observe the contrasts in (64) and (65):
(64) Brazilian Portuguese (adapted from Figueiredo Silva \& Grolla 2016: 263 (10))
a. Que livro ${ }_{i}$ (que) a Maria admira [[ o autor que escreveu__i $]$ ]? which book that the Mary admires the author who wrote 'What is $x$, such as $x$ is a book written and Mary admires the author of $x$ ?'
b. ?A Maria admira [[ o autor que escreveu que livro ]]? the Mary admires the author who wrote which book
(65) Brazilian Portuguese (adapted from Figueiredo Silva \& Grolla 2016: 263 (11))
a. O que ${ }_{i}$ você vai no quarto [[ fazer__id] ?
what you go in bedroom to.do
'What is $x$, such that you're heading to your bedroom to do $x$ ?'
b. Você vai no quarto [[ fazer o que ]] ?
you go in bedroom to.do what
Again, the legitimacy of the tripartition of wh-in situ developed so far is confirmed, and Portuguese appears to fit perfectly into the Lombard type.

### 5.3 Features responsible for Northern Italian wh-in situ(s)

The degree of morphosyntactic variation observed in Northern Italian wh-in situ is substantial, and realised along several variables. Even greater micro- and macro-variation can be observed if Romance varieties spoken outside of Northern Italy are taken into account. Consequently, the pursuit of a unified derivation that might account for all of the attested phenomena seems rather idealistic. It is clear, however, that languages display fixed behavioural patterns in the way that they license wh-in situ: based on a number of variables related to the distribution of wh-in situ, I have identified three provisory linguistic types. Let us move briefly outside of the Romance domain and explore whether the analysis presented so far can also be applied to non-Romance languages.

### 5.3.1 Pure wh-in situ

As briefly stated in the Introduction, the optionality observed in the in situ-ex situ alternation in Romance does not apply in languages which, like Chinese or Japanese, have wh-in situ as their only question formation strategy. Here, I take Mandarin Chinese as an example. The topic of this book is not pure wh-in situ; detailed accounts of the issue can be found in works such as Huang (1982), Xu (1990), Lasnik \& Saito (1992), Lin (1992), Watanabe (1992), Aoun \& Li (1993), Cole \& Hermon (1994; 1998), Tsai (1994; 1999), Beck \& Kim (1997), Kishimoto (2005), Ko (2005), Soh (2005), Bruening \& Thuan (2006), Downing (2011), Jin (2014), and Pan (2014), among others. In languages like Mandarin Chinese, elements must surface clause-internally. Observe the contrast in (66):
(66) Chinese (adapted from Huang 1982: 253 (159))
a. Ni kanjian-le shei?
you see-ASP who
'Who did you see?'
b. *Shei $i_{\mathrm{i}}$ ni kanjian-le __ ? who you see-ASP

Although Chinese and similar languages are different from Romance languages where wh-in situ is an option, i.e. it co-exists with total wh-fronting, let us try to understand whether it is possible to fit Chinese into one of the distributional patterns discussed so far. To the best of my knowledge, no compulsory short movement of Modern Chinese clause-internal wh-elements has been discussed in the literature, nor is there any sentence-final requirement: Chinese is head-final, hence non-subject wh-elements normally surface to the left of the verb, i.e. in a
non-clause-final position. The wh-element in (66) is non-D-linked. However, Chinese wh-in situ is also fine in the case of D-linking, as in (67):
(67) Chinese (Pan 2014: 6 (12))

Měi-gè nánshēng dōu xǐhuān nă-běn shū?
every-Cl boy all like which-Cl book 'Which book does every boy like?'

In Chinese, wh-in situ is fine in long-distance and indirect wh-questions, as in (68) and (69):
(68) Chinese (adapted from Cheng \& Bayer 2017: 4 (6))

Huángróng xiāngxìn [ Guōjìng maǐ-le shénme ]?
Huangrong believe Guojing buy-Perf what
'What does Huangrong believe that Guojing bought?'
(69) Chinese (adapted for Cheng 2003: 103 (3b))

Botong xiang-zhidao [ Hufei mai-le shenme]
Botong want-know Hufei buy-Perf what
'Botong wants to know what Hufei bought'
On the basis of the behavioural patterns identified so far, and given that Chinese wh-in situ displays the same properties as Lombard wh-in situ, it is expected to be acceptable inside syntactic islands, as confirmed by the data. Observe the instances of wh-in situ inside weak and strong islands in (70) and (71):
(70) Chinese (Cheng \& Bayer 2017: 5 (14a))

Nǐ xiǎng-zhīdào [ wǒ wèishénme maǐ shénme ]?
you wonder I why buy what
'What is the $x$ such that you wonder why I bought $x$ ?'
(71) Chinese (Cheng \& Bayer 2017: 5 (14b))

Zhāngsān [[ yīnwèi shéi méiyǒu lái ]] hěn shēngqi?
Zhangsan because who not.have come very angry
'Who is $x$ such that Zhangsan got angry because $x$ didn't come?'
Different analyses have been proposed for Chinese wh-in situ (Xu 1990; Lin 1992; Aoun \& Li 1993; Tsai 1994, 1999; Cole \& Hermon 1998, a.o.). Starting from Huang (1982), many authors have claimed that in situ wh-elements undergo movement to their scope position at Logical Form, i.e. after Spell Out. Other authors have argued that it is crucial to distinguish between two groups of wh-elements, nominal (which systematically take scope across an island) vs. adverbial (which might not). These authors claim that only adverbial wh-elements raise to their scope position in covert syntax, while nominal wh-elements do not. Other authors, such as Soh
(2005), have argued in favour of generalised covert raising à la Huang (1982), and explained the asymmetry between wh-nominals and wh-adverbials in terms of covert feature movement vs. covert phrasal movement. Nonetheless, what is clear is that none of the studies cited above assumes that Chinese clause-internal wh-elements move before Spell Out: the language displays real wh-in situ, i.e. clause-internal wh-elements appear in their first-merge position. Interestingly, leaving wh-doubling aside, Chinese wh-in situ displays all the characteristics of the Lombard type, which supports Manzini \& Savoia's (2005) covert movement analysis.

From the discussion in this chapter, it has emerged that the varieties studied for the remnant-IP movement analysis perfectly fit into type III, while those used in Manzini \& Savoia (2011) as evidence for unmoved wh-in situ fall into type II. In this theoretical framework, Trevisan and similar varieties, i.e. type I, which I argued have TP-internal Wh-to-Foc, are different from type II and I varieties in the way they derive wh-in situ.

### 5.3.2 Three types of wh-in situ

Contra Poletto \& Pollock (2000-2015), Munaro et al. (2001), Manzini \& Savoia (2005;2011) and Manzini (2014), I wish to argue against the possibility of proposing a unified derivation for Northern Italian wh-in situ (and more generally, wh-in situ in Romance). Indeed, I believe that the wide range of empirical variation is better explained in terms of micro-variations triggered by the need (or lack thereof) for clause-internal wh-elements to check TP-internal features, the status of the EPP in T , and the presence or absence of certain prosodic requirements in construals with wh-in situ.

In what follows, I shall first survey previous treatments of the optionality observed in the in situ/ex situ alternation, none of which considers the role of Q in the derivation of wh-questions. Consequently, maintaining Cable's (2010) claim that the Q-particle enters the computation even in languages where it does not have phonological content, I shall re-address the issue of Northern Italian optional wh-in situ, on the assumption that wh-elements do not move freely between TP and CP, but surface clause-internally or sentence-initially depending on whether they adjoin the Q-particle or are QP-selected. I shall also argue that the D-linked/ non-D-linked asymmetry in Bellunese signals the presence of an unusual evolutionary stage, where D-linked wh-elements are not yet able to adjoin the silent Q-particle, while non-D-linked wh-words have already moved towards generalised Q-adjunction.

### 5.3.2.1 Mixed pictures of wh-movement and wh-scoping

Manzini and Savoia (2011) concluded that no remnant-IP movement operation can be at work in the derivation of Northern Italian wh-in situ, and therefore argued in favour of real wh-in situ, where clause-internal wh-elements stay in their external-merge position. According to them, the parameter between wh-in situ and wh-movement in Northern Italian dialects should not be explained in terms of different derivations, but rather as a very ordinary alternation between scope construal (in the case of wh-in situ) and overt scope (in the case of wh-fronting). As for the exceptionality of Bellunese wh-in situ with respect to embedded wh-in situ and sensitivity to islands (Munaro 1999), the authors claim that, in the context of micro-variation among closely-related grammars, it is possible that some grammars impel wh-movement in embedded sentences (Bellunese-like varieties) while others do not (Lombard), while different sensitivities to islands are easily explained if they are taken to be related to conditions on Logical Form interpretive construals, rather than to conditions on movement operations. Even outside of the Romance domain, a mixed picture of wh-movement and wh-scoping is in fact quite common. Recall for example, among other works discussed in $\$ 3.1$, Mirdamadi’s (2018) discussion of Persian, where partial wh-movement and total wh-fronting co-exist with the movement of clause-internal wh-elements to $\mathrm{Foc}_{\text {Low }}$. Partial wh-movement is a variant of wh-movement where the wh-word moves to a position lower than its scope position, which is in turn filled by a distinct wh-word (usually a what-word). Observe the German examples in (72), where the contentful wh-element is given in italics, while the scope-marking wh-word is bolded:
(72) German
a. Was denken die Besucher, wen $_{\mathrm{i}}$ sie__ gesehen haben? what think the visitors who $_{\text {ACC }}$ they seen have 'Who do the visitors think that they saw?'
b. Was denken die Besucher, mit wem wie___ $_{\mathrm{i}}$ gesprochen haben? what think the visitors with who DAT they spoken have 'Who do the visitors think that they talked with?'

The instances of partial wh-movement in (72) clearly differ from their full wh-movement counterparts, where the wh-word functions as a scope marker on its own, as illustrated in (73):
(73) German
a. $W e n_{i}$ denken die Besucher, ___i dass sie___ gesehen haben? who $_{\text {ACC }}$ think the visitors that they seen have 'Who do the visitors think that they saw?'
b. Mit wem ${ }_{\mathrm{i}}$ denken die Besucher, __i dass sie _-i
with who think the visitors that they gesprochen haben?
spoken have
'Who do the visitors think that they talked with?'
Wahba (1991) shows that Iraqi Arabic also displays overt movement, wh-in situ (covert movement) and partial movement side by side. On the basis of robust cross-linguistic evidence, Cole and Hermon (1994) claim that the scoping strategies are often not homogeneous, both across closely-related languages and language-internally. For instance, while Imbabura Quechua systematically displays overt wh-movement, as in (74), Ancash Quechua also has covert wh-movement, as in (75):
(74) Imbabura Quechua (adapted from Cole \& Hermon 1994: 240 (4))
a. Ima-ta-taj $j_{i}$ ya-ngui [ Juan __i randishka-ta]?
what-ACC-Q think-2pp Juan bought-ACC
'What do you think Juan has bought?'
b. *Ya-ngui [ Juan ima-ta-taj randishka-ta]?
think-2PP Juan what-ACC-Q bought-ACC
(75) Ancash Quechua (adapted from Cole \& Hermon 1994: 240 (5))
a. May-man-taq ${ }_{\mathrm{i}}$ [ José munan [ María __i aywanan-ta ]]?
where-to-Q José wants María will-go-acc 'Where does José want María to go?'
b. [ José munan [ María may-mani aywanan-ta ]]? José wants María where-to will-go-ACC

The Q-morpheme taq in (75a) seems to be responsible for the attraction of the wh-element into CP. Indeed, if the wh-element remains clause-internal, as in (75b), no such morpheme appears. Interestingly, both island-sensitivity and ECP (Empty Category Principle) effects are observed in the case of overt wh-movement, but not in the case of wh-in situ. Observe the contrasts in (76) and (77):
(76) Ancash Quechua (adapted from Cole \& Hermon 1994: $245(12,14)$ )
a. * Ima-ta-taq $\mathrm{i}_{\mathrm{i}}$ qam) kuya-nki [ __i suwaq nuna-ta ]?
what-ACC-Q you love-2pp steal man-ACC
'What is $x$ such that you love the man who stole $x$ ?'
b. (Qam) kuya-nki [ ima-ta suwaq nuna-ta ]?
you love-2Pp what-ACC steal man-ACC
(77) Ancash Quechua (adapted from Cole \& Hermon 1994: $247(17,18)$ )
a. * Pi-taq $\mathrm{i}_{\mathrm{i}}$ Fuan musyan [__i tanta-ta ruranqan-ta ]?
who-Q Juan knows bread-acc made-ACC
'Who is $x$ such that Juan knows that $x$ made bread?'
b. Fuan musyan [ $p i$ tanta-ta ruranqan-ta ] ?

Juan knows who bread-acc made-ACC
The ECP is a principle of transformational grammar that requires traces to be visible. An empty category is sub-categorised for by a verb, and must be identifiable as an empty position at Logical Form, i.e. must be properly governed. Proper government can be ensured either by a lexical category, in which case it is referred to as theta-government, or via co-indexation with a governing maximal projection, which is known as antecedent-government (which is what we have in the examples in (77)). In (77) it is possible to observe that while Ancash Quechua exhibits strong restrictions on the extraction of complement subjects, as in (77a), no ECP-violation arises in case of wh-in situ, as in (77b).

Following Aoun \& Li (1993), Cole and Hermon argue that there must be a null wh-operator in SpecCP, which binds the clause-internal wh-word. This operation is carried out in the sense of variable binding, as in (78):
(78) VARIABLE BINDING VIA A WH-OPERATOR IN CP
$\left[{ }_{C P} \mathrm{Qu}_{\mathrm{i}} \mathrm{C}^{\circ}\left[{ }_{\text {IP }} \ldots\right.\right.$ wh-word $\left.{ }_{\mathrm{i}} \ldots\right]$
Malay is also a language in which wh-fronting and wh-in situ co-exist, along with partial wh- movement, as illustrated in (79):
(79) Malay (Cole \& Hermon 1998: 224-225 (1-3))
a. Siapa $a_{\mathrm{i}}$ (yang) [ Bill harap [ yang __i akan membeli baju
who that Bill hope that will buy clothes untuknya ]
for.him
'Who does Bill hope will buy clothes for him?'
b. Ali memberitahu kamu tadi [ Fatimah baca apa]

Ali informed.you just now Fatimah read what
'What did Ali tell you Fatimah was reading?'
c. Ali memberitahu kamu tadi ${ }_{C P} a p a_{\mathrm{i}}$ (yang) $\left[_{\mathrm{IP}}\right.$ Fatimah baca $\qquad$ i]

Ali told.you just now what that Fatimah read 'Ali told you just now, what was Fatimah reading?'

For Cole and Hermon (1998), wh-in situ is licensed by an operator, which can be either phonetically-realised or silent and serves as an unselective binder. Unselective binding is the idea, first investigated in Baker (1970), that certain quantificational elements bind any and all unbound variables in their scope. As for the reason why Malay (or any other language) should have all three wh-options at its disposal, Cole \& Hermon suggest that the variation can be reduced to certain lexical options that do not exist in pure wh-in situ and pure wh-movement languages. In their
discussion pure wh-movement languages such as English have wh-words composed of lexical combinations of operator and variable features (so-called [OP+Var]-type), while wh-words in pure wh-in situ languages such as Chinese lack the operator feature ([Var]-type). Therefore, [OP+Var]-languages impel wh-fronting so that the wh-word occupies the proper operator position, while [Var]-interrogative pronouns have to rely on an external operator and cannot undergo movement. Malay is said to involve both options: the [OP]-feature either stems from the lexicon as part of the interrogative pronoun, or it is externally-merged independently in ср. With regard to partial wh-movement, where island effects appear not only between the trace and the position occupied by the operator at Spell-Out, but also between the operator and its scope position, Cole \& Hermon argue that there must be an expletive that needs to be replaced by moving the [OP]-feature of the head of the overt chain upwards, covertly.

None of the approaches to optionality mentioned in this section and, to the best of my knowledge, none of the works on Romance wh-in situ published so far have tried to integrate Cable's (2010) theory of Q into the computation. Nonetheless, it should be clear from this discussion that Q is crucial in the derivation of Trevisan wh-in situ, and of Northern Italian wh-in situ more generally. Therefore, in the upcoming discussion I shall assume that Q is present (though with substantial cross-linguistic variation) in all Northern Italian dialects.

### 5.3.2.2 Variables and types of Northern Italian in situ/ex situ alternation

In a theory like the one proposed here, where wh-elements interact in various ways with a silent Q-particle, the wide range of morphosyntactic variation attested in the literature on Northern Italian dialects and discussed throughout this book is better explained if the in situ/ex situ alternation is taken to be the result of: (a) the (un) availability of QP-selection and/or Q-adjunction in the sense of Cable (2010); (b) the presence or absence of a feature other than the left-peripheral [q] to be checked in TP; (c) the presence or absence of an attracting EPP-feature in T and/or C.

A theoretical model for Northern Italian wh-in situ that is based on the differences between varieties in terms of properties (a) to (c) can serve to explain the broad but systematic range of variation in the in situ/ex situ alternation attested in Northern Italian dialects. I therefore claim that for Northern Italian dialects it is not necessary to posit either a unified derivation à la Poletto \& Pollock (2000) and Manzini \& Savoia (2005), or diametrically-different derivations: an identical underlying structure, combined with different ways of integrating the silent Q-particle to wh-elements and (if relevant) features other than [q] to be checked is sufficient. Crucially, assuming that all varieties must have QP-fronting, variable (a) will be responsible for the availability of covert movement of clause-internal wh-elements
(when QP-selection is involved) or overt movement of the silent Q-particle alone (in the varieties which display Q-adjunction). Meanwhile, variable (b) will account for all cases of apparent wh-in situ, i.e. Trevisan (and plausibly Lombard) moved clause-internal wh-elements. Finally, variable (c) will explain the presence or absence of Attraction into the Spec of a relevant functional projection after a proper Agree relation is established between the probing uninterpretable feature in their head and the interpretable feature of a matching goal. The Bellunese case is slightly more complex than the cases of Lombard, Trevisan, and similar languages, though I believe that remnant-IP movement can be dispensed with, and my theory of Wh-toFoc also extended to type III varieties if we analyse the D-linked/non-D-linked asymmetry and the sentence-final requirement through a new lens.

In a theoretical framework where we assume that clauses have both a Left Periphery (Rizzi 1997 and further developments) and a low periphery within the clausal domain (Belletti 2004), and where the existence of FPs available as landing sites for movement of clause-internal wh-elements has been posited both in the lower portion of the Left Periphery (Poletto \& Pollock 2000 and developments, Munaro et al. 2001) and inside the $v$ P-periphery (Manzini \& Savoia 200; Belletti 2006; Kato 2013; Manzini 2014, this work), we predict that (at least) three different types of wh-in situ should be possible:
I. TP-internal unmoved, Chinese-like wh-in situ;
II. TP-internally moved (fake) wh-in situ;
iii. (fake) wh-in situ derived via wh-movement to CP.

Following the discussion in this Chapter, (i) appears to be the case for Manzini \& Savoia's Lombard dialects (type II), (ii) for Trevisan-like varieties (type I), and (iii) for Bellunese-like languages (type III). Therefore, the projections available for clause-internal wh-elements in Northern Italian dialects are likely those in (80):
(80) POSITIONS AVAILABLE FOR CLAUSE-INTERNAL WH-WORDS IN NORTHERN ITALIAN DIALECTS
$\left[_{\mathrm{CP}} \ldots\right.$ [oplp wh-word $\mathrm{Op}^{\circ}{ }^{\mathrm{TP}}{ } \ldots$ [Foclow wh-element Foc ${ }^{\circ}$ ] ... type III: A'-position type I: A'-position
${ }_{\mathrm{vp}} \ldots{ }_{\mathrm{xp}}$ wh-element $\left.\left.]\right]\right]$ ]
type II: External-merge
Recall that in generative grammar, an A-position is a position where a theta-role can be assigned. A theta-role is a formal device used to refer to the arguments required syntactically by a given verb: thus, A-positions (or argumental positions) are those occupied by the subject and, if relevant, by the object(s). Under this assumption, all positions which are not an A-position are called A'-positions. In (80), I did not
use the term A-position for unmoved wh-elements because not all wh-elements are assigned a theta-role.

Op1P is the label used in some versions of the remnant-IP movement analysis to refer to the operator position in the lower portion of the Left Periphery to which clause-internal wh-elements are attracted in Bellunese and similar varieties. In the next section, although the availability of Rizzi \& Bocci's (2017) QembP was originally only posited in indirect wh-questions, I shall claim that the only way to derive the Bellunese facts in a remnant-IP movement derivation is to posit a parametrisation responsible for the activation of this landing site for wh-movement in direct wh-questions in type III varieties as well. I would like to note that $\mathrm{Foc}_{\text {Low }}$ is actually likely to also be involved in type II varieties. This possibility would entirely rule out real wh-in situ in Northern Italian dialects. However, in the absence of evidence of any kind, the possibility that there is unmoved wh-in situ in Lombard dialects cannot be excluded. In fact, although Romance languages spoken outside of the Northern Italian domain are not the topic of this book, I provided evidence in $\$ 5.2$ that while the status of Wh-to-Foc in Romance varieties other than Trevisan is yet to be tested, real wh-in situ should at least be assumed to be available, for example in Spanish and Contemporary Spoken French. In Manzini \& Savoia’s (2005) set of Lombard and Venetan dialects there might be both languages with real wh-in situ and languages that display Wh-to-Foc.

### 5.3.3 Wh-to-Foc and the theory of Northern Italian wh-in situ

I have claimed that, cross-linguistically, clause-internal wh-elements display fixed behaviours in matrix and non-matrix contexts, and within weak and strong islands. These are shown in Table 5.1:

Table 5.1 Distributional properties of clause-internal wh-elements

|  | NIDs |  |  | Romance |  |  | Other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bl type | Tv type | Lb type | Fr | Sp | Pt | Ch |
| Non-D-linked whp | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| D-linked whp | $x$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ |
| Sentence-final requirement | $\checkmark$ | $x$ | $x$ | $x$ | $x$ | $x$ | $x$ |
| Short movement | $x$ | $\checkmark$ | NA | $x$ | $x$ | $x$ | $x$ |
| Embedded Long-distance Qs | ? | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $x$ | $\checkmark$ |
| Indirect Qs | $x$ | $\checkmark$ | $\checkmark$ | $x$ | $\checkmark$ | ? | $\checkmark$ |
| Islands | $x$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $\checkmark$ | $x$ | $\checkmark$ |

The distributional regularities in Table 5.1 follow from the movement requirements of clause-internal wh-elements (or lack thereof), as I shall argue in what follows. Before moving on to the discussion of each type, observe the projections that have been argued to be relevant to the movement of wh-elements in the interrogative sentences of types I to III, in (83) to (81), respectively:
(81) A'-POSITIONS TARGETED BY INTERROGATIVE MOVEMENT: TYPE I
[ForceP $\ldots\left[_{\text {Focushigh }}\right.$ 'ex situ' Focus ${ }^{\circ} \ldots\left[_{\text {TP }} \ldots\right.$ [Foclow ${ }^{\text {' in situ' Foc }}{ }^{\circ} \ldots\left[{ }_{\mathrm{vp}} \ldots\right.$. $]$ ]]]]
(82) $\mathrm{A}^{\prime}-$ \& AND EXTERNAL-MERGE POSITIONS FOR WH-PHRASES: TYPE II [ForceP $\ldots$ [Focushigh 'ex situ' Focus ${ }^{\circ} \ldots\left[_{\text {TP }} \ldots\left[_{\mathrm{VP}} \ldots\left[_{\mathrm{xp}}\right.\right.\right.$ in situ ]]]]] A'-position External-merge position
(83) A'-POSITIONS TARGETED BY INTERROGATIVE MOVEMENT: TYPE III


### 5.3.3.1 Trevisan and similar varieties (type I): QP and Q-adjunction, plus focus movement

I have proposed that Trevisan has two strategies for integrating the silent Q-particle into the computation: both QP-selection, leading to QP-fronting into SpecFocus HIGH , and Q-adjunction, responsible for wh-in situ. Recall also that I have taken all observed instances of movement to be related to the presence of an EPP-feature both in C and in the periphery of $v \mathrm{P}$. In Trevisan wh-questions, wh-elements are never bare, modulo (i) the case of strong islands to extraction, where the island-trapped wh-element does not have a direct relation with the Q-particle (instead, it appears to select the whole island), and (ii) the case of wh-elements in indirect wh-questions. Following Cable (2010), I take QP-fronting to be triggered by a [q]-feature in C (or more precisely, in the head of Rizzi's Focus ${ }_{\mathrm{HIGH}}$ ). Under these assumptions, [wh] is not a relevant feature in interrogatives: on the assumption that what is relevant for the fronting of wh-elements in interrogatives is Q , and in the spirit of Chomsky's (2005) claim that the CP of interrogatives is a residual V2 environment, it seems plausible that the interrogative Force is somehow inherently set as [+int/wh]. This, as a consequence, sets Focus ${ }_{\text {High }}^{\circ}$ as [+q]. The [wh]-feature becomes relevant in the case of indirect wh-questions which, because of their special semantics, have a declarative-like Left Periphery with an active QembP: Focus ${ }_{\text {HIGH }}$ contains a [fo-c]-feature and (when relevant) QembP is set as [+wh]. (84) illustrates the situation:
(84) FEATURES IN THE LEFT PERIPHERY OF TREVISAN INTERROGATIVE CLAUSES
 [ $\left.\left.\left.\left.{ }_{\text {TP }} . ..\right]\right]\right]\right]$ ]


Consequently, when an indirect wh-element contains a focalised constituent, this Agrees with the [foc]-feature in Focus ${ }_{\text {ніGн }}^{\circ}$ and is subsequently attracted into its Spec, while the wh-element undergoes Wh-Agreement and is attracted into SpecQembP. This approach explains why only the order 'Foc > Wh' is felicitous (as discussed in Rizzi 1997), while also accounting for the limited availability of focus-containing wh-questions in Italian: plausibly, while Northern Italian dialects are able to use bare wh-elements as a last-resort operation, Standard Italian cannot (with the sole exception of the case of a focalised indirect object followed by a wh-direct object, as discussed in Rizzi 1997 and related developments). Note that while IntP is available only for elements that are externally-merged there (as in Rizzi 2001), Focus $_{\text {ніGн }}$ establishes an Agree-relation with TP-internal elements. In indirect wh-interrogatives, Trevisan bare wh-words must value at least their [wh]-feature.

I have in fact claimed that, in indirect questions, a fronted wh-element lands in the Spec of QembP following Wh-Agreement between Qemb ${ }^{\circ}$ and the interpretable [wh]-feature on the wh-element. For this reason, and in the exceptional absence of the Q-particle, in the case of indirect wh-in situ se $\mathrm{w}_{\mathrm{wH}}$ is needed in order for the question to be correctly set as [+int]. Similarly, wh-doubling is a way of checking Qemb $^{\circ}$ in the absence of overt movement of the wh-element. However, [foc] also is clearly active in the case of embedded wh-in situ in Trevisan, as it is needed to check the uninterpretable [foc]-feature in $\mathrm{Foc}^{\circ}{ }_{\text {Low }}$ before the wh-element moves further to satisfy the Wh-Criterion. That the Q-particle is excluded from the computation in indirect interrogatives is semantically not surprising: because these are not real interrogatives, the CP does not contain [q], thus the insertion of Q fails to have an output effect, and hence is plausibly ruled out or inactivated by Economy or another mechanism of this sort. In contrast, in the case of focus movement, wh-elements must be specified merely as [+foc]. The two features are, by default, interpretable but unvalued: the relevant feature is valued based on the context, while the remaining feature is deleted/not valued. Subsequently, the adjoined Q takes over the satisfaction of the Q-criterion via overt movement into Focus ${ }_{\text {HIGH }}$.

If the felicity of wh-in situ in embedded questions is exclusively linked to the availability of $\mathrm{se}_{\mathrm{wH}}$, long construals are indeed expected in a grammar that derives wh-in situ TP-internally. The same is true for weak islands, and is also expected in varieties other than Trevisan. On the contrary, the availability of wh-in situ within strong islands for extraction might only depend on the ability of QPs in a given language to select whole islands, and then in turn on the exceptional availability of covert QP-movement or overt massive pied-piping.

I have already argued that a crucial change introduced in Chomsky (2000) was related to the hierarchical loci where the EPP applies. Indeed, Chomsky suggests an
extension of the EPP from its original locus in T to all functional categories, namely $v \mathrm{P}, \mathrm{T}$ and C . The presence of the EPP in a given projection depends on the presence of the full set of the appropriate agreement features on the projection itself. In a way, the EPP has subsumed the strong features of Chomsky (1995), i.e. phonologically indigestible features to be checked overtly, and functions as a selectional feature that requires overt Merge. In Trevisan, the EPP is clearly present in all projections related to the movement of wh-elements: Foc $_{\text {Low }}$ and Focus $_{\text {HiGH }}$, as in (85). The reasons why it fails to be satisfied in the case of wh-elements trapped inside strong islands remain opaque for the time being.
(85) RELEVANT FEATURES IN TREVISIAN DIRECT INTERROGATIVES ${ }^{42}$
$\left[_{\text {ForceINT }}\right.$ Force $\left[\right.$ IntP Int $_{\text {[int }]}\left[\left[_{\text {Focushigh }} \text { Focus }_{[\mathrm{EPP}] ;[q] ;[\mathrm{phi}]}\right]_{\text {FinP }}\right.$ Fin $\left[{ }_{\text {TP }} \ldots\right.$
[Foclow $\left.\operatorname{Foc}_{[E P P] ;[f o c]}\right]$ ]]]]]
Note that the lack of an EPP-feature in IntP is linked to the fact that, to the best of my knowledge, IntP is only compatible with interrogative elements that are externally-merged there directly (but see Shlonsky \& Soare 2011 for a claim that why is generated lower in the Left Periphery, then moved to IntP: if they are right, the presence of an EPP-feature should also be posited in the head on IntP).

### 5.3.3.2 Lombard-like varieties (type II): Mixed languages with different availability of EPP in $\mathrm{Foc}_{\text {Low }}$

Manzini and Savoia (2005 and later in their 2011 paper), argued that Northern Italian wh-in situ is real: clause-internal wh-elements surface in the position in which they are first-merged. I have claimed that this type-specific approach to Northern Italian dialects needs to be abandoned, and that the observed micro-variation should be treated as the by-product of the presence/absence of certain clause-internal features and (if relevant) prosodic requirements. On these assumptions, Manzini and Savoia's Lombard and Venetan dialects should fit into one of two categories: type II with unmoved wh-in situ, as proposed in their work, and type I, with TP-internally moved wh-in situ, as in Trevisan. Indeed, neither positive or negative evidence for clause-internally moved wh-elements can be found in their (2005) corpus. The possibility that Northern Italian wh-in situ is derived via Wh-to-Foc was already mentioned in Manzini (2014), although I believe that the data in Manzini \& Savoia's (2005) corpus show some regular patterns that do not allow unmoved wh-in situ to be ruled out in some Lombard dialects. Consequently, both types of wh-in situ must be proposed to exist.

[^28]The major difference between the Lombard and Venetan dialects described in the studies cited above on the one hand and Trevisan on the other is wh-doubling which, I have tentatively claimed, is a special type of Q-adjoining structure where Wh/Q-Agreement à la Cable 2010 is bi-directional: the Q-particle is exceptionally endowed with the [wh]-features of the wh-element to which it adjoins, which are spelled out as a monosyllabic or bisyllabic Q. Despite the misleading term 'particle', bisyllabic Q-particles are attested cross-linguistically: puas in the Chinese language Hmong Njua (Harriehausen 1990: 205), nakai in the Oceanic language Niuean (Seiter 1980: 25), mbéni in the Bantu language Hunde (Kahombo 1992: 171), among others. Though the Q-particles that I have just mentioned are polar operators, they illustrate that particles need not be monosyllabic. Note that, for the extraordinary Q-particles in wh-doubling to encode [wh]-features entails that the grammars that allow them can (yet need not) exceptionally have a [wh]-feature to check in Focus ${ }_{\text {High }}$. Again, this phenomenon can be traced back to an intermediate linguistic stage where C can optionally encode [wh] along with [q], requiring wh-doubling if Focus ${ }_{\text {HIGH }}$ is exceptionally set as [q;wh].

My interpretation is that the dialects discussed by Manzini \& Savoia can be categorised into the following two types: dialects of the Trevisan type, where QP-selection and Q-adjunction co-exist, and the EPP in Focus High impels overt movement of Q, while an EPP-feature in $\mathrm{Foc}_{\text {Low }}$ triggers clause-internal focus movement; and languages where clause-internal wh-elements are not subject to focus movement. In this second type of variety, assuming that Cable's (2010) claim that matrix wh-fronting is always proof of the availability of QP-selection is correct, the relationship between the silent Q-particle and the clause-internal wh-element must be one of Q-adjunction. In fact, since the EPP is present in Focus ${ }_{\text {HigH }}$, as signalled by the possibility of overt QP-fronting, overt movement of Q to C must also be at play when wh-elements remain clause-internal, which is only possible if the language has Q -adjunction. For the Lombard languages that have no matrix subject-clitic inversion, a lack of phi-features in the interrogative $C P$ can be posited, which despite the presence of an EPP-feature in Focus ${ }_{\text {HIGH }}$ excludes T-to-C movement. Note that the fact that clause-internal wh-elements fail to undergo focus movement does not necessarily mean that in the varieties under consideration there is no Focus-Agreement: the asymmetry between focus movement vs. real wh-in situ can (but need not) be explained as the result of the absence of an EPP-feature in $\mathrm{Foc}_{\text {Low }}$. This is illustrated in (86):

[^29]To conclude, similarly to Trevisan, the fact that wh-in situ is derived TP-internally in the varieties under consideration here entails that this phenomenon can also appear in long construals. I have also claimed that indirect wh-questions are possible only in the presence of the [wh]-carrying Q-particle of wh-doubling. The status of wh-in situ within islands to extraction remains unclear, although I have argued that the examples discussed in Manzini \& Savoia (2005) suggest that QP-selection of entire strong islands might be at play in Lombard.

### 5.3.3.3 Bellunese (type III): A mixed language with a [wh]-feature in QembP...or something else?

The remnant-IP movement analysis developed in works such as Poletto \& Pollock (2000) and Munaro et al. (2001) is not entirely incompatible with the approach adopted in this book. If we take Bellunese wh-fronting to be a regular instance of QP-fronting à la Cable (2010), and if we assume that the FP where [q] is located higher than in Trevisan and other languages discussed here, then the analysis developed in the works cited above can be reconciled with mine. That some functional projections might be realised higher or lower in the functional spine across languages is a well-known phenomenon. Similarly, clause-internal wh-elements can be analysed as Q -adjoining structures and, under the assumption that Bellunese displays fake wh-in situ, the movement into the lower portion of CP can be justified by the need to check [wh] in QembP. Although Rizzi (1997) and further studies along the same lines argue that QembP is active only in indirect questions, it does not seem theoretically undesirable to suggest that the presence of QembP in indirect and/or direct questions might be parametrised. In this framework, the need to move the whole IP to the Left Periphery of the clause could be considered a sub-product of similar parametric variations, probably an evolutionary stage where wh-words are not yet able to remain clause-internal without checking [wh] in the low Left Periphery, and given the need to verify the residual V2 environment in CP, movement of phrasal chunks into various left-peripheral FPs is carried out as some sort of last-resort operation to save the structure.

Recall, however, that since the early days of the theory, there has been controversy regarding an analysis of Northern Italian wh-in situ in terms of remnant-IP movement. Theoretically, this type of analysis relies on the derivational approach to syntax (Chomsky 1998 and much related work) where strict cyclicity replaces proper binding, and where locality is systematically checked after each movement operation has taken place. Although movement of remnant chunks has been successfully proven to be possible in the literature, hence there is no reason per se to argue against a derivation of wh-in situ that includes movement of the remnant-IP, the feasibility of this analysis might be questioned, for reasons of both linguistic economy and learnability. Indeed, it is not clear how the linguistic input might be
sufficient for the learner to infer that wh-questions are derived via such complex computations including various displacements of trace-containing chunks. For this reason, I would like to tentatively propose a more economical theoretical explanation that fits within the approach that I have developed in this book. A derivation of type III wh-in situ that includes movement of the remnant-IP requires the postulation of major typological variation among closely-related varieties which, in light of Chomsky's (2001) Unifomity Principle, appears undesirable:

Uniformity Principle (Chomsky 2001: 2)
in the absence of compelling evidence to the contrary, assume languages to be uniform, with variety restricted to easily detectable properties of utterances.

One way of dispensing with the postulation of such a massive divide between type III and other Northern Italian varieties is to posit that Bellunese has both QP-selection, leading to QP-fronting, and Q-adjunction, which strands the wh-word clause-internally. Because of the presence of matrix subject-clitic inversion, there must be a residual V2 environment in CP, with a Focus-head bearing uninterpretable [phi;q] features, and an EPP-feature that triggers overt movement of QP-selected wh-words into SpecFocus HIGH Similarly, the wh-words that remain clause-internal must be Q-adjoining. Under these assumptions, the sentence-final requirement, i.e. the requirement that wh-words occupy the rightmost edge of the clause, might be constrained by PF. Indeed, in a question like (87), nothing prevents the wh-word from being in $\mathrm{Foc}_{\text {Low }}$, with deletion or dislocation of all following constituents for prosodic reasons, namely a requirement for wh-words to occupy the rightmost position in the prosodic string:
(87) Bellunese (adapted from Poletto \& Pollock 2015: 139 (2))
a. * Ghe ha-lo dat che a so fradel? dat has=he given what to his brother 'What has he given to his brother?'
b. Ghe ha-lo dat che, a so fradel? dat has=he given what \# to his brother

If dislocated material appears after the questioned wh-word, such as a to fradel in Example (87), it is plausible that the whole $v \mathrm{P}$ is pied-piped into a topic position such as Belletti's (2004) lowest TopP, along the lines of (88):

WH-TO-FOC \& PROSODIC BREAK


The movement analysis in (88) entails that $\mathrm{Foc}_{\text {Low }}$ must be endowed with both an uninterpretable [foc]-feature and an attracting EPP-feature, as posited for Trevisan. Under Belletti's (2004) assumption that dislocated elements are in the $v$ P-periphery, orders such as (87) are possible iff the wh-element itself undergoes movement to the focal projection of the low periphery. The hypothesis that Bellunese clause-internal wh-elements might undergo Wh-to-Foc is supported by data from Bellunese long construals such as (89), whose acceptability demonstrates that remnant-IP movement cannot be at play after all:
(89) Bellunese (Munaro 1999: 72 (1.100-102))
a. A-tu dit che l'a comprà che? have=you said that he=has bought what 'What did you say he bought?'
b. A-tu dit che l'e 'ndat andé? have=you said that he=is gone where 'Where did you say he went?'

With regard to the D-linked/non-D-linked asymmetry, and especially the unavailability of D-linked wh-words clause-internally (which are also better fronted in varieties like Trevisan), an explanation in terms of the non-availability of Q-adjunction is theoretically desirable. Observe (90):
(90) Bellunese (adapted from Munaro 1999)
a. A-tu parecià che?
have=you prepared what
'What did you prepare?'
b. *Che à-tu parecià?
what have=you prepared
c. Che vestito à-tu sièlt?
what dress have=you chosen
'Which dress did you choose?'
d. *A-tu sièlt che vestito?
have=you chosen what dress
Although QPS are available in Bellunese, covert movement is not, as indicated by the compulsory status of subject-clitic inversion. Therefore, if D-linked wh-elements are unable to adjoin Q , it follows that they would be infelicitous clause-internally. It is possible that, within a process of linguistic evolution that aims to achieve maximally-simple derivations (getting rid of optionality and of lexical strategies specialised for the same phenomenon, performing as little movement as possible, etc.), Bellunese has an evolutionary delay with respect to Trevisan, which is closest to becoming a pure Q -adjoining language, at least when it comes to D -linked
wh-elements. On the contrary, non-D-linked wh-elements, which are only felicitous clause-internally, have clearly developed Q-adjunction, to the point that they can no longer be selected by Q. It is well-established cross-linguistically that semantically-related linguistic phenomena can co-exist during 'transitional' periods (Roberts 2007b; Ledgeway 2012, a.o.), which strongly supports the analysis that I develop throughout this book.

With regard to indirect wh-in situ, I claim that its unavailability is due to the lack of both a $\mathrm{se}_{\mathrm{wH}}$ operator and of wh-doubling, contra Manzini \& Savoia’s (2005) claim that the Bellunese infelicity is the result of grammar-related reasons that compel wh-movement in embedded contexts. However, I do agree with Manzini \& Savoia (2011) when it comes to the unavailability of wh-in situ within islands and out-of-island extraction, which they believe is linked to conditions on Logical Form construals. If both strong and weak islands do indeed block extraction in Bellunese, and for some reason this variety has Q/Wh-Agreement, the impossibility of selecting whole islands is predicted, and in the absence of Q the computation fails. I illustrate this in (92) using the ill-formed instance of a complex-NP island in (91):
(91) Bellunese (adapted from Munaro 1999: 74 (1.105 \& 1.107)) ${ }^{*}$ Te piase-lo [[ i libri che parla de che ]]? you like=it the books that speak of what 'What is $x$, such that $x$ is a topic and you enjoy books about $x$ '
(92) ILLICIT PIED-PIPING PAST ISLAND IN BELLUNESE


For Cable, in languages with limited pied piping, the Q-particle bears an interpretable but unvalued Q-feature ( $i \mathrm{Q}[\mathrm{]}$ ); the presence of a syntactic island between the Q-particle and the wh-element therefore blocks the transmission of a value for the Q-feature of the Q-particle at Logical Form. If Bellunese is indeed this type of language, then it is entirely expected that structures like (91) should crash at the Logical Form interface. This approach to the syntax of Bellunese wh-in situ seems
more economical than the remnant-IP movement hypothesis and, even more importantly, does not require the postulation of major typological divides between Bellunese and type I-II varieties. I believe that this means that Munaro (1999) was right when he posited the presence of interrogative movement in Bellunese in the case of wh-in situ as well, which he explained in terms of an abstract operator that moves to the CP to determine the scope of the clause-internal wh-word. In a way, his abstract operator was a silent adjoined Q-particle ante litteram.

### 5.4 Concluding remarks

In this chapter, I have surveyed the existing analyses of Northern Italian wh-in situ. On the basis of robust cross-linguistic regularities, I have claimed that it is necessary to abandon the aim of finding a cross-linguistically unchanged derivation for wh-in situ: it is theoretically more desirable to posit the existence of more than one derivation, dependent on the type(s) of relationships between wh-elements and Q and on the need (or lack thereof) to check features other than [q] clause-internally.

Following my discussion, I provide some comments here on Cable's (2010) grammar of Q. Cable posited the existence of a number of variations in his Q-based grammar, which have some major consequences. I list only four of the five here, since the parameter that relates to multiple wh-questions, which is irrelevant in Trevisan, has played no role in this book.

CABLE'S GRAMMAR OF Q: PARAMETERS
Projection parameter: Q-projection vs. Q-adjunction
In Q -adjunction languages, Q adjoins to its sister and their mother is of the same category as the sister (in most cases, a Wh-projection). In Q-projection languages, Q takes its sister as complement, and so the node minimally dominating the Q and its sister is a QP.

Q-movement parameter: Overt movement vs. Covert movement
In overt Q-movement languages, the highest syntactic copy of a Q-particle is pronounced. In covert Q -movement languages, the lowest syntactic copy of a Q-particle is pronounced. In light of my discussion, we can tentatively attribute the setting of this parameter to the presence or absence of EPP in C.

Q-pronunciation parameter: Phonetically-realised vs. Silent
In some languages, like Tlingit, the Q-particle has phonological content. In other languages, like Trevisan, the Q-particle is phonologically null.

Agreement parameter: Q/Wh-Agreement vs. Non-Agreement
In Q/Wh-Agreement languages, a Q-particle must Agree with the wh-word that it enters a relationship with. In non-Agreement languages, Q-particles need not Agree with wh-words.

In light of my discussion of the Trevisan facts, I believe that the projection parameter and the agreement parameter ought to be modified as follows:

CABLE'S GRAMMAR OF Q: PARAMETERS


#### Abstract

Projection parameter (implemented) In Q -adjunction languages, Q adjoins to its sister and their mother is of the same category as the sister (in most cases, a Wh-projection). In Q-projection languages, Q takes its sister as complement, and so the node minimally dominating the Q and its sister is a QP. Some languages can have both Q-adjunction and QP-projection.

Agreement parameter (amended) In Q/Wh-Agreement languages, a Q-particle must Agree with the wh-word it entertains a relationship with. In non-Agreement languages, Q-particles need not undergo Agreement with wh-words. Q/Wh-agreement languages can have bidirectional agreement, hence display [wh]-features on the Q-particle.


The major consequences of the parameters above are first that the cases in which Q is attached not directly to the wh-word, but higher up, are those that are commonly referred to as pied-piping constructions. Only one kind of total fronting exists, namely that of Q-projection languages that move QP overtly. As a consequence, not only is wh-movement actually parasitic on Q-movement and not relevant in interrogatives, but according to Cable the existence of QPs should also be posited in languages with silent Q-particles: I have posited the existence of QPs in Trevisan and I believe the presence of silent QPs accounts rather well for all of the observed phenomena, from simple Qp-fronting to massive pied-piping of strong islands.

Another prediction of Cable's approach is that there can be basically three types of wh-in situ language: (a) Q-projection languages that move QP covertly, (b) Q-adjunction languages that move Q covertly, and (c) Q -adjunction languages that move Q overtly. I have argued that the apparent optionality in the in situ/ex situ alternation in Northern Italian dialects can be better explained if it is assumed to derive from the exceptional existence of two ways of joining the Q-particle to wh-words, rather than one: both Q-projection (responsible for total fronting) and Q-adjunction (responsible for wh-in situ).

Because of the presence of subject-clitic inversion in many Northern Italian dialects, both with QP-fronting and with wh-in situ, I have claimed that these are of the (c) type: Q-adjunction languages that move Q overtly. The lack of subject-clitic inversion in certain Northern Italian dialects has been explained in terms of a missing residual V2 environment at the level of C, with phi-features systematically transferred correctly to T. Admittedly, one could assume that these languages are actually type (b), i.e. Q-adjunction languages that move Q covertly. However, although a mixed picture of EPP/lack of EPP in C (resulting respectively in overt or covert Q-movement) does not seem impossible at certain stages of linguistic evolution, the total lack of an interrogative paradigm of nominative
clitics strongly suggests that these languages have moved past the residual V2 CP and their phi-features in C never fail to be correctly passed to T. Under these assumptions, I argue that nothing prevents Q-adjoining clause-internal wh-elements from undergoing non-Q-movement before Q moves to the Left Periphery of the clause. I have indeed identified a special type of movement of clause-internal wh-elements: focus movement triggered by [foc] in $\mathrm{Foc}_{\text {Low }}$, as in Trevisan. This peculiar movement, I claim, is justified by the need to check a [foc]-feature in the periphery of $v \mathrm{P}$, and then triggered by an EPP-feature in $v \mathrm{P}$. Some languages that do not have short movement of clause-internal wh-elements might still need to check the [foc]-feature in the $v \mathrm{P}$ periphery, and so do some QP -fronting languages, although I have left the identification of those languages for further work. Given the theory of Wh-to-Foc developed here, I believe that an additional parameter must be added to Cable's:

CABLE'S GRAMMAR OF Q: PARAMETERS (implemented)
Interrogative features parameter: bundling vs. scattering
There exist languages in which all features related to interrogative wh-movement are bundled in $C$, and languages in which these features are scattered between $C$ and the periphery of $v \mathrm{P}$. In the latter, clause-internal movement of wh-elements is observed if the language has an EPP feature in $v \mathrm{P}$.

A third prediction of Cable's theory of Q is that in languages where Q agrees with the wh-element that it enters a relationship with, there can be no obstacles preventing agreement between Q and the wh-element. Obstacles are mostly islands and phase boundaries: to prevent intervention as much as possible, Q must attach at the right height, which might not always be the same in different languages. In Trevisan, I have only discussed the case of islands, and have argued that one characteristic of this language is that its QPs can select entire islands. This is possible largely because Trevisan, like Tlingit, does not have Wh/Q-Agreement, hence the presence of an island border between a wh-element and the selecting Q-particle is unproblematic. This property makes the Trevisan Q-particles different from both the Q-particles of Bellunese and those of wh-doubling. I have in fact claimed that in Bellunese the infelicity of wh-in situ within islands can be traced back to the need for Q and the wh-element to Agree, as also observed in languages like English. Similarly, if I am right and wh-doubling is indeed an instance of bi-directional Wh/Q-Agreement where wh-features are exceptionally passed to (and pronounced on) the Q-particle, then the infelicity of wh-doubling when construed with islands is a logical consequence.

Contrary to Cable (2010), I have claimed that there must be languages where both QP-selection and Q-adjunction exist, which explains the apparent optional in situ/ex situ alternation of Northern Italian dialects quite well. Under these
assumptions, the fact that not all wh-elements can surface either clause-internally or sentence-initially can be assumed to be related to either: (i) special properties of the wh-elements under consideration (for example, why-words externally-merged directly in the Left Periphery) or (ii) the fact that, in intermediate stages of linguistic evolution, that QP-selection and Q-adjunction should not apply perfectly to all types of wh-elements is unsurprising. Ideally, my claim could be further supported by the existence of mixed varieties with phonetically-realised Q-particle(s) where both QP-fronting and Q-adjunction, though I have not yet encountered any such variety. Nonetheless, it would not be unsurprising for a variety to have an overt Q-particle construed within QPs and a silent one which adjoins to wh-elements, or the other way round. Supporting evidence in favour of this prediction is provided by Ancash Quechua (Cole \& Hermon 1994). Observe the peculiar instance of in situ/ex situ alternation illustrated in (93):
(93) Ancash Quechua (adapted from Cole \& Hermon 1994: 240 (5))
a. May-man-taqi [ José munan [ María __i aywanan-ta ]]?
where-to-Q José wants María will-go-ACC
'Where does José want María to go?'
b. [ José munan [ María may-man aywanan-ta ]]? José wants María where-to will-go-ACC
(93a) illustrates an Ancash Quechua fact that has been widely discussed in Cole \& Hermon (1994): that wh-fronting must be construed with the Q-particle taq. In contrast, wh-in situ is inconsistent with taq, as in (93b). Following the discussion provided so far, and under the assumption that wh-words are never bare in matrix questions, it seems possible to assume that wh-fronting is in fact overt QP-fronting of a QP-selected wh-element in Ancash Quechua, while clause-internal wh-elements adjoin a silent Q-particle, as in (94):

ANCASH QUECHUA AS A MIXED LANGUAGE
a. QP-projection (phonetically-realised Q-particle)
[ ${ }_{\mathrm{QP}}$ [WhP may-man ] taq ]
b. Q-adjunction (silent Q-particle)
[WhP [WhP may-man ] ø ]
It cannot be the case that Ancash Quechua has optionality in the timing of movement to CP, otherwise the presence of a QP-projecting wh-element would also be expected clause-internally, contrary to fact. My analysis of Ancash Queschua as a mixed language with overt movement to C is confirmed by both ECP effects and data on island-extraction. Observe (95) and (96):
(95) Ancash Quechua (adapted from Cole \& Hermon 1994: $247(17 ; 18)$
a. * Pi-taq $\mathrm{i}_{\mathrm{i}}$ Fuan musyan [ ___i tanta-ta ruranqan-ta ]? who-Q Juan knows bread-acc made-ACC 'Who is $x$ such that Juan knows that $x$ made bread?'
b. Fuan musyan [ $p i$ tanta-ta ruranqan-ta ]? Juan knows who bread-acc made-ACc
(96) Ancash Quechua (adapted from Cole \& Hermon 1994: $245(12,14)$ )
a. * Ima-ta-taq ${ }_{\mathrm{i}}$ (qam) kuya-nki [ ___i suwaq nuna-ta ]?
what-ACC-Q you love-2pp steal man-ACC
'What is $x$ such that you love the man who stole $x$ ?'
b. (Qam) kuya-nki [ ima-ta suwaq nuna-ta ]?
you love-pp what-ACC steal man-ACC
If my analysis is on the right track and Ancash Quechua is indeed a mixed language, the contrast in (95) follows logically: QP-fronting is blocked by the ECP, while the wh-element which stays clause-internally is a Q-adjoining one, predictably. Even more unsurprisingly, QP-fronting out of a strong island is banned, as in (96a), while wh-in situ is felicitous in this same environment. On the assumption that Ancash Quechua derives wh-in situ through Q-adjunction, the question in (96b) must indeed involve adjunction to the whole island. Note that the possibility that a wh-element within an island adjoins the Q-particle at a more embedded structural level, i.e. within the island, is untenable on the assumption that both QP-fronting and Q-to-C movement are carried out overtly in Ancash Quechua. I shall not discuss Ancash Quechua further here; however, I believe that this unusual presence of a Q-particle construed with wh-fronting is relevant and deserves attention in future work.

Recent works on pure wh-in situ have also illustrated that some languages have undergone interesting typological changes. For instance, Watanabe (2003) claimed that Japanese went from overt wh-fronting into CP during the Nara period (8th century) to modern-day wh-in situ. ${ }^{43}$ Examples of wh-fronting in Old Japanese are provided in (97):
(97) Old Japanese (adapted from Watanabe 2003: 182 (5))
a. [...] nani-wo-ka-mo mikari-no hito-no ori-te
$\quad$ what-ACC-KA-MO hike-GEN person-NOM pick-CONJ
kazasa-mu
wear.on.the.hair-will
'[...] what should hikers pick and wear on the hair?'

[^30]b. izuku-yu-ka imo-ga iriki-te yume-ni mie-tsuru where-throught-KA wife-NOM enter-CONJ dream-LOC appear-PERF 'From where did my wife come and appear in my dream, [...]?'

In light of Cable's (2010) assumption that wh-fronting is systematically QP-fronting, (97) could be taken as proof that the linguistic evolution goes from QP-fronting to unmoved Q-adjunction, passing through a phase characterised by optionality, such as that observed today in Northern Italian dialects. Indeed, it has been claimed that wh-fronting co-existed with wh-in situ in Japanese in the Heian period (9th to 12th century). A different evolutionary path is actually suggested by Aldridge's (2009) analysis of the Old Japanese examples in (97). According to Aldridge, Watanabe's claim that Old Japanese had wh-fronting is partly based on his assumption that genitive subjects are located in SpecTP, and hence he analyses a preceding wh-element as having been raised out of TP. In contrast, for Aldridge genitive subjects do not exhibit the behavior expected of nominative subjects located in SpecTP, and hence their distribution is better understood if they are assumed to stay in their first-merge position in $\operatorname{Specv} \mathrm{P}$. As a consequence of Aldridge's analysis whereby the genitive subject occupies a very low position, a TP-internal movement analysis is available for instances of clause-internal wh-elements such as those in (97). If Aldridge's analysis is on the right track, it is possible that Japanese never had Q-projection: under these assumptions, Old Japanese should rather be analysed as a Q-adjunction language, like the Contemporary variety is. Plausibly, the presence of an EPP-feature in T , which is no longer present today, triggered overt movement in Old Japanese. Similarly, in Aldridge's (2010) work on Archaic Chinese (Warring States period, 5th to 3rd century BCE) it is suggested that Chinese went from clause-internal movement of wh-elements, as shown in (98), to present day unmoved wh-in situ:
(98) Archaic Chinese (adapted from Aldridge 2010: 2 (2))
a. Tianxia zhi fu gui zhi qi zi $y_{a n}$ [vp wang __i ]?
world Gen father settle here 3 .gen son where go 'If the fathers of the world settled here, where would their sons go?'
b. Wu shei $\mathrm{i}_{\mathrm{i}}$ qi ___ ${ }_{\mathrm{i}}$ ? Qi tian hu?

I who deceive deceive Heaven Q
'Who do I deceive? Do I deceive Heaven?'
Aldridge's works therefore seem to suggest that both Japanese and Chinese moved from what looks like Wh-to-Foc to modern-day unmoved in situ. Another possible evolutionary path is illustrated by the syntax of wh-in situ in Contemporary Spoken French, i.e. the variety discussed in works such as Starke (2001) or Baunaz (2005). Remember that the most unusual property of French wh-in situ is its incompatibility with subject-clitic inversion, as illustrated in (99):
(99) Contemporary Spoken French
a. Qui as-tu rencontré? who have=you met 'Who did you meet?'
b. *As-tu rencontré qui? have=you met who

Under Cable's (2010) assumption that wh-fronting is always parasitic to QP-fronting, and Roberts' (2007a) analysis of French subject-clitic inversion as an instance of V-to-C movement triggered by a residual V2 environment in C in which phi-features are not transmitted to T but rather realised as an inflectional class of left-peripheral interrogative enclitics, the only possible explanation of the phenomenon in (99) is in terms of an optionality between overt QP-movement (leading to wh-fronting) and covert QP-movement (leading to wh-in situ). This analysis accounts for all peculiarities observed in the variety of French under investigation, from the absence of subject-clitic inversion and est-ce que (under the assumption that they both serve as indicators of an active Left Periphery before Spell-Out, their incompatibility with wh-in situ follows) to the felicity of wh-in situ within islands to extraction. I leave the investigation of this prediction for further work; for further details on the morphosyntax of French wh-in situ Baunaz (2005) and Faure \& Palasis (2020).

On the basis of the evolutionary patterns that I have surveyed here, it seems tempting to suggest that the evolution of wh-interrogatives goes from overt QP-fronting to either covert QP-fronting or unmoved Q-adjunction, along the lines of (100):
(100) PLAUSIBLE EVOLUTIONARY PATTERNS OF THE GRAMMAR OF Q

[^31]I discussed these cases here with two aims: to further support the analysis developed in this book, and to provide a starting point for the extension of my analysis of Northern Italian dialects to other optional in situ languages. Indeed, the patterns of linguistic evolution outlined in (100) constitute, I believe, a solid starting point for future research.

## Conclusions

In this book, I have explored the morphosyntax of a phenomenon related to wh-in situ which, to the best of my knowledge, had never previously been discussed with reference to Northern Italian dialects: the case of clause-internally moved wh-elements. This clause-internal movement of wh-elements, which I analysed in terms of Wh-to-Foc, i.e. focus movement into the Spec of Belletti's (2004) $v \mathrm{P}$-peripheral Foc, is a fairly robust phenomenon cross-linguistically, as I argued in Chapters 2 and 3. I based my analysis on novel data from Trevisan, aVenetan dialect, and published data from Venetan and Lombard varieties (Munaro 1999; Poletto \& Pollock 2000 and related works, Manzini \& Savoia 2005 and further developments, a.o.), which I discussed in Chapter 1, along with many studies of focus movement of clause-internal wh-elements in non-Romance languages, surveyed in Chapter 3 (Jayaseelan 1996 for Malayalam; Manetta 2010 for Hindi-Urdu; Aboh 2007 for Aghem; Sinopoulou 2008 for Greek multiple wh-questions; Kahnemuyipour 2001 for Persian, a.o.).

Many works have explored the in situ/ex situ alternation, but unfortunately none has been able to account for the substantial morphosyntactic variation observed in Northern Italian dialects. In light of this, and given the widely-attested existence of Q-particles in the interrogatives of numerous languages of the world, I decided to provide a completely new account of the phenomenon, in which I crucially posited the existence of (silent) Q-particles in Northern Italian dialects as well, à la Cable (2010). Indeed, in the cartographic enterprise, the existence of one functional head in one and only one language is enough to posit the existence of that head in all natural languages: therefore, given the robust cross-linguistic evidence from languages in which Q-particles are phonetically-realised (Japanese as described in Hagstrom 1998; Korean as in Ko 2005; Sinhala as in É. Kiss 1995; Tlingit as in Cable 2010; Edo as in Baker 1999; Ancash Quechua as in Cole \& Hermon 1998, a.o.), to not posit their existence in the computation in the absence of phonological content would constitute a major conceptual error.

I have therefore based my analysis on Cable's (2010) claim that there are two ways of joining the (phonetically-realised or silent) Q-particle to wh-elements in interrogatives, as discussed in Chapter 2: in Q-projection languages, Q takes its sister as complement, and so the node minimally dominating the Q and its sister
is a QP, as illustrated in (1); in Q-adjunction languages, Q adjoins to its sister and their mother is of the same category as the sister, as in (2):
(1) Q-PROJECTION

...wh-word...
(2) Q-ADJUNCTION


In the case of Q-projection, the Q-particle is not able to move alone, which results in compulsory QP-fronting, and 'parasitic' movement of the selected wh-element. The movement under consideration can either be overt, which leads to what is commonly referred to as pied-piping, or covert, which results in wh-in situ. Another type of wh-in situ is that found in languages in which the Q-particle adjoins to the wh-projection headed by the wh-element. In these cases, the Q-particle is more free and moves to the Left Periphery alone. Under these assumptions, in this book I have claimed that the in situ/ex situ alternation observed in Northern Italian dialects (and more generally in Romance) should be analysed as a by-product of the exceptional existence, in these languages, of both QP-selection and Q-adjunction, and of systematic overt movement of Q to CP triggered by the EPP-feature within it (plus, when relevant, clause-internal movement triggered by an [EPP;foc] featural bundle in the head of $\mathrm{Foc}_{\text {Low }}$ ).

The felicitous co-existence of two semantically-identical lexical or syntactic strategies, such as Q-selection and Q-adjunction, seems well-justified on the assumption that this functions as an indicator of an intermediate evolutionary stage, which will eventually lead to the generalisation of one or the other strategy, very plausibly Q -adjunction. In fact, linguistic stages characterised by optionality are widely attested and have been discussed in detail in many works on historical linguistics, such as Roberts (2007b) and Ledgeway (2012), among others. Intermediate linguistic stages in the in situ/ex situ alternation are also attested in
the literature, for languages that have overt Q-particles (as well as for some that do not), such as for example Ancash Quechua (as described in Cole \& Hermon 1998), whose syntax I believe can be better understood if one assumes that the particle taq, which is construed with wh-fronting, is responsible for Q-projection, while clause-internal wh-elements adjoin a silent Q-particle. Further supporting evidence in favour of my claim that Northern Italian interrogative wh-movement is closely linked to the presence of silent Q-particles comes from the phenomenon known as wh-doubling, which I take to be a special case of Q-adjunction where [wh]-features are exceptionally passed to the adjoined Q-particle. Wh-doubling, I claim, is the by-product of the optional setting of Focus ${ }_{\text {HIGH }}$ as $[q ;$ wh $]$ in some Northern Italian varieties, whose optionality should also be considered an intermediate evolutionary stage. One welcome consequence of the [wh]-features on the overt Q-particle of wh-doubling is the felicity of wh-in situ in indirect wh-questions, which follows from the exceptional ability of this special Q-particle to check [wh] in the lower portion of the Left Periphery (QembP). This unusual ability is only observed elsewhere in Trevisan se ${ }_{\mathrm{wH}}$, as described in Chapter 4. Similar yet not identical phenomena have been attested in older stages of pure in situ languages, as claimed in Chapter 5: the variety of Old Japanese spoken in the Nara period (8th century) has been in turn described as a wh-fronting language (Watanabe 2003) or a language that displays clause-internal movement of wh-elements similar to the Northern Italian movement I characterised as Wh-to-Foc (Aldridge 2009). Moreover, according to Aldridge (2009) an intermediate stage where the movement of wh-elements co-existed with present-day unmoved wh-in situ was attested in the Heian Period (9th to 12th century). Archaic Chinese (in the Warring States period, 5th to 3rd century BCE ) also displayed clause-internal movement of wh-elements, lost in the evolution to present-day Chinese, according to Aldridge (2010). I believe that all of these diachronic and synchronic phenomena constitute the foundations that should be taken into account in future works on interrogative wh-movement in languages at intermediate evolutionary stages.

Starting from Chapter 2, I claimed that the two configurations relevant for Northern Italian dialects are those illustrated in (3), where a Q-projection is attracted into the Spec of Focus ${ }_{\text {HIGH }}$ following Q-agreement, and in (4), where a Q-adjoining wh-element remains clause-internal, leaving the checking of the [q]-feature in the head of Focus ${ }_{\text {HIGH }}$ to the silent Q-particle:
(3) QP-FRONTING

(4) $\mathrm{Wh}-\mathrm{IN}$ SITU


To posit that the in situ/ex situ alternation in Northern Italian dialects is due to an optionality in the timing of movement, namely the co-existence of overt and covert QP-fronting, as I suggested for Contemporary Spoken French in Chapter 5, would constitute a major conceptual error. Indeed, in Northern Italian dialects the realisation of subject-clitic inversion indicates that the Left Periphery is active throughout the derivation and, in Northern Italian dialects that have lost subject-clitic inversion, its absence is orthogonal to the position occupied by the wh-element, unlike the extraordinary case of French. As in (3) and (4) and Chapter 3, I take the Force of interrogative clauses to be inherently set as [+int], and the head of Focus HIGH $^{\text {to }}$ be consequently endowed with an uninterpretable [q]-feature. The only exception to this rule, among the varieties discussed in this book, is that of languages with wh-doubling, which can (but do not have to) have an additional [wh]-feature in Focus ${ }_{\text {HIGH }}$, correctly checked by the [wh]-feature on the overt adjoining Q-particle. Therefore, as in Cable's model, my approach predicts that only [q] is responsible for wh-fronting (or better, QP-fronting) and the attraction of the adjoining Q-particle into the Spec of Focus ${ }_{\text {нIGн }}$. Both movements are carried out under Q-Agreement with Focus ${ }_{\text {HIGH }}$ and are triggered by a left-peripheral EPP-feature contained within it. In this theoretical framework, and on the basis of my discussion of Trevisan focus movement, I claimed that virtually all facts observed in the data from Northern Italian dialects are predicted by a model that assumes that (i) wh-fronting is a sub-product of the existence of Q-projections, (ii) wh-in situ follows from the mechanism of Q-adjunction, which strands the wh-element clause-internally and lets the Q-particle move to the Left Periphery alone, and (iii) features other than the left-peripheral [q] are checked clause-internally and, in a very limited number of cases, there is an exceptional prosodic requirement for the clause-internal wh-element to occupy the edge of the clause (which I referred to as the 'sentence-final requirement', à la Etxepare \& Uribe-Etxebarria 2005).

On the basis of an intuition sketched in Manzini (2014) and of the robust movement patterns observed in many Indo-Aryan languages (as discussed in Kahnemuyipour 2001; Aboh 2007; Manetta 2010, a.o.), in Chapter 3 I claimed that what triggers Trevisan Wh-to-Foc is the presence of both an EPP-feature and an uninterpretable [foc]-feature in the head of Belletti's (2004) $v \mathrm{P}$-peripheral focal projection, Foc $_{\text {Low }}$. Therefore, in my model, the Q-adjoining wh-element first undergoes Focus- Agreement and moves into the Spec of Foc ${ }_{\text {Low }}$, then regularly undergoes Q-Agreement with the [q]-feature in Focus ${ }_{\text {HIGH, }}^{\circ}$, which results in overt movement of the silent Q-particle to the Left Periphery of the clause, triggered by the EPP in C. This two-stage derivation is illustrated in (5):
(5) WH-TO-FOC: CLAUSE-INTERNAL FOCUS MOVEMENT
a. Step I: the uninterpretable [foc]-feature in $\mathrm{Foc}^{\circ}{ }_{\text {Low }}$ Agrees with its interpretable counterpart on the Q-adjoining wh-element, which is subsequently attracted into the Spec of Foc ${ }_{\text {Low }}$ by the EPP-feature in Foc ${ }_{\text {Low }}$ :

b. Step II: the uninterpretable [q]-feature in the left-peripheral Focus ${ }_{\text {HIGH }}$ Agrees with the interpretable counterpart on the silent Q-particle, which is then attracted into the Spec of Focus ${ }_{\text {HIGH }}$ by the EPP-feature in C:


In Step I, I claimed, a Focus Criterion is satisfied, while Rizzi's (1996) Wh/Q-Criterion is fulfilled in Step II. The analysis in (5) is based on the observation that clause-internal wh-elements in Trevisan do not surface in their external-merge position, but rather appear to move to a linear position higher than that targeted by the past participle, which I have argued is external to $v \mathrm{P}$, in the spirit of Cinque's (1999) movement analysis of the Italian active past participle. Observe (6) and (7):
(6) Trevisan
a. Declarative: $\mathrm{S}>\mathrm{V}>\mathrm{DO}>\mathrm{IO}$

Te ghe gà dato el reojo a to pare
you $=$ DAT $=$ have given the watch to your father
'You gave the watch to your father'
b. Interrogative. $\mathrm{S}>\mathrm{V}>$ wh-IO $>\mathrm{DO}$

Ghe ga-tu dato a chi $i_{\mathrm{i}}$ el reojo __i? DAT $=$ have $=$ you given to who the watch 'To whom did you give the watch?'
(7) Trevisan
a. Declarative: $\mathrm{S}>\mathrm{V}>\mathrm{DO}>\mathrm{ADV}_{\text {Time }}$

Te gà magnà tute e banane dopo sena you= have eaten all the bananas after dinner
'You ate all of the bananas after dinner'
b. Interrogative: $\mathrm{S}>\mathrm{V}>$ wh- $\mathrm{ADV}_{\text {Time }}>\mathrm{DO}$

Ga-tu magnà cuando $\mathrm{i}_{\mathrm{i}}$ tute e banane __i ? have=you eaten when all the bananas 'When did you eat up the bananas?'

Because of the rigid declarative word order, which is strictly SVO and requires the direct object to precede the indirect object and verb-selected arguments to precede adverbials, Italian-like emarginazione à la Cardinaletti (2001) or Samek-Lodovici (2015) is ruled out in Trevisan. Consequently, I have claimed that an analysis whereby the wh-elements in (6) and (7) occupy the sentential edge, with all following constituents somehow external to the core of the clause, cannot be correct. The triggers for overt movement in steps I and II, i.e. focus movement and Q-movement, are EPP-features in both the $v \mathrm{P}$-periphery and in the Left Periphery of the clause. The analysis in terms of Wh-to-Foc outlined in (5) finds further support in the availability, in languages like Trevisan, of Belletti's (2004) Foc ${ }_{\text {Low }}$ not only for focus of new information, as in (8), but also for contrastively-focused constituents, such as the one in (9). Focus fronting is somewhat marginal in Trevisan, as illustrated in (10):
(8) Trevisan
a. Question: Chi zeo che te gà ciamà? who is=ExPL that you= has called 'Who called you?'
b. Answer I: Me gà ciamà ${ }_{\text {Foctow }}$ Giani ] me has called John 'John called me'
c. Answer II: *[subjp Giani el [ ${ }_{\text {TP }}$ me gà ciamà $]$ ] John he= me has called
(9) Trevisan
a. A: Insoma Giani el gà ciamà a Maria, jeri...
so John he= has called the Mary yesterday
'So John called Mary yesterday...'
b. B: El gà ciamà [Foclow ${ }_{\text {INCuò }}\left[{ }_{v \mathrm{P}}\right.$ a Maria ]], no jeri! he= has called today the Mary neg yesterday 'He called Mary today, not yesterday!'
(10) Trevisan
??incuò el gà ciamà a Maria!
today he= has called the Mary
'He called Mary today'
The case of focus-containing wh-questions, which I have not investigated in this work, is very interesting and confirms the special status of focus-fronting in Trevisan. Observe the indirect question in (11), where a fronted focalised direct object needs to be construed with a coindexed clitic within the clausal domain:
(11) Trevisan

Me domando a maria quando chei $\quad{ }^{*}(\mathbf{l a})$ gà $\quad$ vist $\left({ }^{*} 0\right)^{*}(\mathbf{a})$, Refl ask $_{1 \text { Ps }}$ the Mary when that=they ${ }_{M}=$ her have seen..$_{\left({ }^{*}\right)^{*}{ }^{*}(\mathrm{~F})}$ no a Marina!
neg the Marina
'mary I wonder when they saw, not Marina'
Assuming that the fronted element in (11) is indeed a focus, because it is compatible with a negative tag (no a Marina!), nothing prevents an analysis of that element as subject to left-peripheral topic movement (refer to Bonan 2020 for a detailed analysis of the phenomenon). In fact, an interesting matrix/embedded asymmetry exists, and a matrix fronted focus in a declarative clause is incompatible with a corresponding clause-internal clitic, as in (12):
(12) Trevisan

$$
\begin{aligned}
& \text { A MARIA i } \quad\left({ }^{*} \text { la }\right) \text { gà } \text { vist }^{*}(0)\left({ }^{*} \mathrm{a}\right) \text {, no a Marina! } \\
& \text { THE MARY they } \cdot{ }_{\mathrm{M}}=\text { her have } \operatorname{seen}_{{ }_{*}(\mathrm{M})\left({ }^{*} \mathrm{~F}\right)} \text { NEG the Marina } \\
& \text { 'MARY they saw, not Marina' }
\end{aligned}
$$

These facts clearly need further investigation, which I leave aside for future work. In fact, the unavailability of proper focus fronting in Trevisan, and the infelicity of clause-internally moved foci in Standard Italian suggest not only that the Left Peripheries of the two languages are actually more divergent than they may seem, but also that the unavailability of wh-in situ in Standard Italian is attributable to more than just the existence of QP-fronting: the absence of a [foc]-feature that is able to Agree with wh-elements and contrastively-focused constituents in Foc ${ }^{\circ}{ }_{\text {oow }}$ might indeed play a crucial role. Note that, given Bianchi's (2013) claim that focus is a very unusual phenomenon that does not support a deterministic 'one head-one feature' mapping, it does not seem theoretically problematic to suggest that the head of $\mathrm{Foc}^{\circ}{ }_{\text {Low }}$ can indeed encode both new information focus and contrastive focus in some languages. However, other possible solutions to this problem could be (i) positing the existence of two different focus projections in the periphery of $\nu \mathrm{P}$, one dedicated to new information focus and the other to contrastively-focused constituents and clause-internally moved Q-adjoining wh-elements, or (ii) proving (if possible) that contra Belletti (2004) new information focus is actually unmoved and realised within $v \mathrm{P}$. In any case, it is clear that languages like Trevisan check [foc] within the periphery of $v \mathrm{P}$ and only [ q ] in C , crucially suggesting that a major divide must exist between languages that encode the features relative to interrogative wh-movement as a featural bundle in C, and languages that scatter these between C and $\nu \mathrm{P}$.

Let me now summarise why an analysis of Trevisan wh-in situ in terms of clause-internal focus movement of Q -adjoining wh-elements is indeed theoretically desirable. First, Wh-to-Foc is supported by robust cross-linguistic data on non-whmovement within the clausal domain, as discussed in detail in Chapter 3. Second, my approach dispenses with the spurious notion of syntactic optionality, which is for the first time shown to be related to the exceptional existence of two strategies for joining interrogative wh-elements and the (silent) Q-particle (in Cable's 2010 terms), plausibly as a consequence of an intermediate evolutionary stage that will result either in each strategy becoming semantically specialised, or in the strategy of Q-projection, falling out of use. Then, and related to the second point, the fact that wh-elements that move clause-internally do not need to raise further to the Left Periphery in case of fronting is theoretically welcome under Rizzi's (2004) Criterial Freezing. In fact, to be able to use both Q-projection and Q-adjunction means that only Q-projections are relevant for total wh-fronting and move successive-cyclically to the Left Periphery of the clause. In contrast, wh-elements that are frozen in place clause-internally are of the Q-adjoining type and need not move further: checking of [q] in Focus ${ }_{\text {HIGH }}$ is carried out via sub-extraction of the silent Q-particle, which does not violate Criterial Freezing. Finally, I believe that the theory of Wh-toFoc developed in this book, in combination with Cable's assumption that silent Q-particles should also be integrated into the computation, provides a simple and elegant framework for the study of Northern Italian wh-in situ, where languages can be classified on the basis of micro-variations along a typological continuum that goes from clause-internal focus movement to unmoved wh-in situ.

Let us now turn to the consequences that Wh-to-Foc has for the theory of Northern Italian wh-in situ. Ever since their (2000) paper, Poletto \& Pollock have proposed an analysis of Northern Italian wh-in situ as an instance of overt wh-movement targeting the lower portion of the CP , masked by further computations including movement of the remnant-IP to higher functional projections. I have referred to this approach, which is based on Bellunese and similar varieties, as the 'rem-nant-IP movement analysis' throughout. Observe the derivation of the Bellunese question in (13):
(13) Remnant-ip movement analysis (simplified)
a. Input: $\left[_{\mathrm{IP}}\right.$ tu ha parecià che $]$
you have prepared what
'What did you prepare?'
b. Step I: wh-movement to an FP higher than IP:
${ }_{[F P}$ che $e_{\mathrm{i}} \mathrm{F}^{0}{ }_{[\mathrm{IP}}$ tu ha parecià __i $]$ ]
c. Step II: Movement of the remnant to higher FP:


The remnant-IP movement analysis aimed to explain the composite phenomenon of Northern Italian wh-in situ as a whole. Similarly, Manzini \& Savoia (2005) and related works argued in favour of generalised real wh-in situ in Northern Italian dialects (the 'covert movement hypothesis'), along with a further development in Manzini (2014) where it was suggested that there might actually be movement to Belletti's (2004) Foc Low $_{\text {. My }}$ My claim is that, while both the remnant-IP hypothesis and the covert movement hypothesis fail to account for the full range of wh-in situ-related phenomena observed in Northern Italian dialects, Manzini's analysis in terms of TP-internally moved wh-elements was on the right track, but had two major weakness:
i. it too aimed to account for all Northern Italian phenomena related to wh-in situ at once, and
ii. it was not empirically supported.

Consequently, contra much work on Northern Italian wh-in situ, I suggested that three different derivations should be posited for the three linguistic types that I identified in the Northern Italian domain and beyond: varieties in which wh-in situ displays the same distributional patterns as Munaro (1999) observed for Bellunese (type III), varieties similar to Manzini \& Savoia’s (2005) Lombard and Venetan dialects (type II), and varieties similar to Trevisan (type I). Although I believe that Poletto \& Pollock's analysis of Northern Italian wh-in situ in terms of remnant-IP movement accounts perfectly for the data from Bellunese and related varieties, I have claimed that an application of their theory to my theoretical model would require (minimally) a parametrisation of the availability of Rizzi \& Bocci's (2017) low left-peripheral QembP, crucially entailing the existence of a major typological divide among closely-related varieties. Therefore, in the spirit of Chomsky's (2001) Uniformity Principle repeated below, in Chapter 5 I decided to dispense with wh-movement of clause-internal wh-elements and subsequent movement of the remnant-IP in type III varieties, and instead to posit the existence of micro-variations.

> Uniformity Principle (Chomsky 2001: 2)
> 'in the absence of compelling evidence to the contrary, assume languages to be uniform, with variety restricted to easily detectable properties of utterances'.

Observe the sketched derivation of Wh-to-Foc in (14), which I posited for type I Northern Italian varieties, namely Trevisan and some of the Venetan and Lombard dialects described in Manzini \& Savoia (2005) (as well as, plausibly, European and Brazilian Portuguese):


In the spirit of Chomsky's Uniformity Principle, and in light of the basic assumption that clauses are minimally endowed with a universally-invariant Left Periphery à la Rizzi (1997 and further developments) and, in some cases, also of a low periphery à la Belletti (2004), I have argued in favour of generalised Focus-Agreement, and of a parametrisation of the presence of the EPP-feature in Foc ${ }^{\circ}{ }_{\text {Low }}$ that is responsible for focus movement of clause-internal wh-elements into the Spec of Foc ${ }_{\text {Low }}$. Under these assumptions, the instances of unmoved Chinese-like wh-in situ observed in Northern Italian dialects by Manzini and Savoia (2005) and, plausibly, in languages such as Spanish, can be explained as the consequence of the absence of EPP in Foc ${ }^{\circ}{ }_{\text {Low }}$. Finally, I suggested that type III wh-in situ should be analysed as a sub-class of type I, namely an instance of Wh-to-Foc with a sentence-final requirement somehow constrained by PF , and a D-linked/non-D-linked asymmetry explained as an evolutionary stage where D -linked wh-phrases are not yet able to adjoin the Q-particle and surface clause-internally, while non-D-linked wh-words have already moved towards a generalisation of Q-adjunction which, as claimed in Chapter 5, constitutes the penultimate step in the process of evolution towards unmoved wh-in situ.

The possible movement patterns predicted by Cable's (2010) grammar of Q and by my discussion of clause-internal agreements and movements of wh-elements are illustrated in the diagram in (15).


In (15), (a) varieties are those that have total fronting, in the spirit of Cable (2010). Cable predicted that the only possibilities for QP-projecting languages were either overt QP-fronting (surfacing as a pied-piping structure), as in (a), or covert QP-fronting (resulting in wh-in situ), as in (d). My model, however, in which certain languages need to check lower features and display variation in the structural loci where EPP is present, also predicts (b) and (c). In languages like (b), QPs move clause-internally to check [foc], attracted by the EPP in $\mathrm{Foc}^{\circ}{ }_{\text {Low }}$, and then undergo Q-Agreement but, in the absence of EPP in Focus ${ }_{\text {HIGH }}$ their movement is delayed to Logical Form, resulting in TP-internally moved wh-in situ. Clearly, this cannot be the case for Trevisan or similar languages, where subject-clitic inversion shows that there is indeed an EPP-feature in C, and that QP- and Q-movement must be done overtly. Instead, nothing rules out the possibility that the phenomenon in (c) might be at play in Trevisan: I have claimed that this language has EPP both in T and in C, hence it is not implausible that fronted QPs might first undergo Focus-Agreement, resulting in overt Wh-to-Foc, and then Q-Agreement and movement to the Left Periphery. Concerning Q-adjoining languages, I claimed that the Lombard and Venetan varieties in Manzini \& Savoia (2005) can be either (e) or (g), namely either varieties with unmoved wh-in situ, or varieties with Wh-to-Foc. Technically, in the first case, nothing rules out the presence of invisible Focus-Agreement, which
would reduce the difference between types (e) and (g) to the presence/absence of EPP in T. Under these assumptions, if Bellunese and similar varieties do derive wh-in situ TP-internally, the differences between these and (g") varieties reside exclusively in the presence/absence of a sentence-final requirement. To conclude, the existence of ( f ) varieties, which have Wh-to-Foc of Q -adjoining wh-elements but no overt Q-to-C movement, is predicted by my model yet impossible to test in languages where the Q-particle is silent: though the absence of overt Q-to-C movement sets these varieties apart from Trevisan and similar varieties, the structure could be easily mistaken for type (b) QP-fronting. Overt Q-particles are necessary to distinguish between the two types.

To conclude, note that the availability of $\mathrm{Foc}_{\text {Low }}$ as a landing site for contrastively-focused constituents should be taken into account when trying to establish whether an in situ language has Wh-to-Foc, along with the status of Focus $_{\text {HIGH }}$ with respect to focus fronting. Indeed, the prediction is that a variety that displays Wh-to-Foc should resist focus fronting and should instead have clause-internally moved foci as the unmarked option.

Following my discussion in this book, the functional projections involved in the derivation of Northern Italian matrix wh-questions, along with their respective featural specifications, are those in (16). As previously stated, [wh] is not a feature involved in matrix wh-questions, where Force is by default set as [+interrogative], with the consequence that a residual V2 environment is activated and the phi-features in C are not transmitted to T. Under the assumption that the Left Periphery starts out as a single coalesced Force+Fin projection and then expands, the hypothesis that the featural specification of the activated left-peripheral projections is different in interrogatives and in declaratives does not seem untenable. In interrogatives, for instance, the lower portion of the Left Periphery is incompatible with the activation of Rizzi \& Bocci's (2017) QembP, and Focus High is set as [+q]. IntP, which I have described as inherently [+wh], is only compatible with elements externally-merged within it, not with moved ones (or at best with moved elements from the lower Left Periphery, as in Shlonsky \& Soare 2011). Since it is inherently interrogative, this projection is predictably unavailable in declarative clauses. Because interrogative movement to the Left Periphery always takes place overtly in Northern Italian dialects, both in the case of QP-fronting and in the case of Q-movement, I argued that there must always be an EPP-feature in the head of Focus $_{\text {HIGH }}$. As for the clausal domain, I argued that in Northern Italian dialects the head of $\mathrm{Foc}_{\text {Low }}$ is always associated to an unvalued [foc]-feature, responsible for Focus-Agreement with the Q-adjoining wh-elements, and in some varieties also with an EPP-feature.


Under the assumption that embedded interrogatives have a declarative-like Left Periphery, modulo the activation of QembP, in these structures Focus ${ }_{\text {HIGH }}$ is endowed with a [foc]-feature. This, I claimed, explains the order Foc $>$ Wh observed in focus-containing indirect wh-interrogatives in Rizzi (1997), which I take to have a declarative Left Periphery. Similarly, the different availability of focus-containing indirect wh-questions in Standard Italian with respect to languages like Trevisan follows from the fact that the latter, but not the former, has clause-internally moved contrastive foci which, I claimed, can only marginally be fronted in the Left Periphery. This fronting movement, as I claimed in Bonan (2020), is better analysed as a topicalisation of focus, targeting a left-peripheral TopP instead of Focus High .

The left-peripheral projections that distinguish indirect interrogatives, which have a declarative-like Left Periphery (modulo a realised QembP, as seen in (16)), from direct interrogatives are provided in (17). Note that, in the absence of a residual V2 environment in the Left Periphery, the phi-features in C are correctly transmitted to T, which can be realised in SubjP as declarative nominative clitics:


I argue that the in situ/ex situ alternation is a point where grammar appears quite plastic, which supports my analysis of optionality as a by-product of the exceptional existence of both strategies for joining wh-elements and the Q-particle. This is demonstrated for instance by the fact that wh-in situ can be felicitously licensed in the varieties of Italian spoken in areas in which an in-situ-licensing dialect is also spoken, such as in the Veneto region, as claimed in Chapter 1 and illustrated in (18):
(18) Venetan Italian
a. Context: You see your friend's new cardigan and find it amazing. You ask:
[E] l'hai comprata dove $e_{i}$ questa meraviglia ___?
[And] it have ${ }_{2 \text { ps }}$ bought where, this wonder
'[And] when did you buy this gem?'
b. Context: Your meet your friend Eva in the streets, she tells you that she is happy because Marco has called her, at least. You ask:
[E] ti ha chiamata quando $o_{\mathrm{i}}$ Marco ___ ?
[And] you has ${ }_{\text {3ps }}$ called when Marco
'[And] when did Marco call you?'
That language-specific inherent properties of wh-elemnts play a role in their distribution has already been convincingly proven in Lee (1991) and Finer (2014), who discuss Korean-English code-switching data and argue that wh-words in code-switched sentences maintain the same distributional properties as in the original language. The examples in (18) provide further evidence that the possibility of licensing wh-in situ is bound to depend not only on wh-elements themselves
but also on the focal projections that a variety can activate successfully. Venetan Italian, unlike the standard variety, can make use of Q-adjunction and, given the availability of the $\nu \mathrm{P}$-peripheral focal position for contrastively-focused elements, attracts Q-adjoining wh-elements into the Spec of Foc ${ }_{\text {Low }}$. Indeed, Venetan Italian can also exploit the $v \mathrm{P}$-peripheral focal projection for contrastive foci, as in (19):
(19) Venetan Italian

Ho dato IERI $_{i}$ i soldi a Gianni __i, non lunedi!
have $_{\text {lps }}$ given yesterday the money to John neg Monday
'I gave John the money yesterday, not on Monday!'
To conclude, I would like to briefly clarify an important issue. I have in fact been asked several times whether the focal projection involved in Wh-to-Foc might actually be the edge of $v \mathrm{P}$, namely the one through which wh-elements are argued to cyclically-move on their way to the Left Periphery. I think I have made it clear that it is not: indeed, I argued that the movement of clause-internal wh-elements is not the same as that involved in interrogative fronting, namely focus movement vs QP-movement, and that the type of Q-structures involved in the two cases are different: Q-adjunction vs QP-selection. Under these assumptions, I think the question of whether there exists a low periphery à la Belletti (2004), which I have adopted in this book, is irrelevant. In fact, if $v \mathrm{P}$ is to be considered a phase, as widely acknowledged in the literature, it is wholly unsurprising that it should have a periphery of some kind. It is precisely in this periphery that the focal projection relevant for moved wh-in situ is located, regardless of the name or structure that we decide to attribute to it.

Further research is undoubtedly needed to refine my analysis, to articulate its technical implementation and to test its empirical validity in other languages, not only synchronically but also in diachrony. Nonetheless, I believe that the approach developed in this book offers a novel, cross-linguistically well-motivated and theoretically uncomplicated model for the analysis of variation in optional in situ languages which, I hope, will inspire future investigations and debates on this composite and fascinating phenomenon.

## References

Aboh, E. 2006. If we see focus, you go left and I go right! Paper presented at the International Conference on Bantu Grammar, SOAS, London, April 2006.
Aboh, E. 2007. Leftward focus versus rightward focus, the Kwa-Bantu conspiracy. In Bantu in Bloomsbury: Special Issue on Bantu Linguistics [SOAS Working Papers in Linguistics 15]. N. C. Kula \& L. Marten (eds), 81-104. London: SOAS, University of London.

Adli, A. 2006. French wh-in-situ questions and syntactic optionality: Evidence from three data types. Zeitschrift für Sprachwissenschaft 25(2): 163-203. https://doi.org/10.1515/ZFS.2006.007
Alcalà, C. R. 2014. Syntactic Constraints on Topicalization Phenomena. PhD dissertation, Universitat Autònoma de Barcelona.
Aldridge, E. 2009. Short wh-movement in Old Japanese. In Japanese/Korean Linguistics, Vol. 17, S. Iwasaki, H. Hoji, P. Clancy \& S. Sohn (eds), 549-563. Stanford CA: CSLI.

Aldridge, E. 2010. Clause-internal wh-movement in Archaic Chinese. Journal of East Asian Linguistics 19(1): 1-36. https://doi.org/10.1007/s10831-009-9054-z
Ambar, M. \& Veloso, R. 2001. On the nature of wh-phrases, word order and wh-in situ. Evidence from Portuguese, French, Hungarian and Tetum. In Romance Languages and Linguistic Theory 1999. Selected Papers from 'Going Romance' 1999 [Current Issues in Linguistic Theory 221], Y. D’Hulst, J. Rooryck \& J. Schroten (eds), 1-38. Amsterdam: John Benjamins. https://doi.org/10.1075/cilt.221.01amb
Antinucci, F. \& Cinque, G. 1977. Sull'ordine delle parole in italiano: 1'Emarginazione. Studi di Grammatica Italiana 6: 121-146. Firenze: Accademia della Crusca.
Aoun, J. 1986. Generalized Binding: The Syntax and Logical Form of Wh-interrogatives [Studies in Generative Grammar 26]. Dordrecht: Foris.
Aoun, J. \& Li, Y. A. 1993. Wh-elements in situ: Syntax or LF? Linguistic Inquiry 24(2): 199-238.
Aoun, J. \& Hornstein, N. \& Sportiche, D. 1981. Some aspects of wide scope quantification. Journal of Linguistic Research 1(3): 69-95. Bloomington IN: Indiana University Linguistics Club.
Arnaiz, A. 1993. N-words and wh-in-situ in Spanish. ASJU XXVII 3: 785-814.
Baker, C. L. 1970. Notes on the description of English questions. The role of an abstract question morpheme. Foundations of Language 6(2): 197-219.
Baker, M. 1999. On the interplay of the universal and the particular: Case studies in Edo. In Proceedings of the 35th Annual Meeting of the Chicago Linguistics Society 35, S. J. Billings, J. P. Boyle \& A. M. Griffith (eds), 265-289. Chicago IL: The University of Chicago Press.

Baunaz, L. 2005. The Grammar of French Quantification [Studies in Natural Language and Linguistic Theory 83]. Dordrecht: Kluwer.
Baunaz, L. 2011. The syntax and semantics of wh in-situ and existentials: The case of French. Leiden Working Papers in Linguistics 2(2): 1-27. https://doi.org/10.1007/978-94-007-0621-7
Baunaz, L. \& Patin, C. 2011. Prosody refers to semantic factors: Evidence from French wh-words. In Actes d'interface, discours \& prosodie 2009, H.-Y. Yoo \& E. Delais (eds), 97-107. Paris: Université Paris 7: Paris.

Beck, S. 2006. Intervention effects follow from focus interpretation. Natural Language Semantics 14(1): 1-56. https://doi.org/10.1007/s11050-005-4532-y
Beck, S. \& Kim, S.-S. 1997. On wh- and operator scope in Korean. Journal of East Asian Linguistics 6: 339-384.
Belletti, A. 1990. Generalized Verb Movement: Aspects of Verb Syntax. Turin: Rosenberg \& Sellier.
Belletti, A. 2004. Aspects of the low IP area. In The Structure of IP and CP. The Cartography of Syntactic Structures, L. Rizzi (ed.), 16-51. Oxford: OUP.
Belletti, A. 2006. Clefts and wh in situ: Some notes. Paper presented at the Lisbon COST-Meeting, 6-8 July, 2006.
Benincà, P. 2001. The position of topic and focus in the left periphery. In Current Studies in Italian Syntax. Essays offered to Lorenzo Renzi, G. Cinque \& G. Salvi (eds), 39-64. Oxford: Elsevier.
Benincà, P. 2006. A detailed map of the left periphery of medieval Romance. In Crosslinguistic Research in Syntax and Semantics: Negation, Tense and Clausal Architecture, R. Zanuttini, H. Campos, E. Herburger \& P. Portner (eds), 53-86. Washington DC: Georgetown University Press.
Benincà, P. \& Poletto, C. 1997. Introduzione. In Strutture interrogative dell'Italia settentrionale [Quaderni di Lavoro ASIS 1], P. Benincà \& C. Poletto (eds). Padua: Consiglio Nazionale delle Richerche.
Benincà, P. \& Poletto, C. 2004. A case of do support in Romance. Natural Language and Linguistic Theory 22 (1): 51-94. https://doi.org/10.1023/B:NALA.0000005565.12630.c1
Benincà, P. \& Poletto, C. 2004b. Topic, focus, and V2. Defining the CP sub-layers. In The Structure of CP and IP. The Cartography of Syntactic Structures 2, L. Rizzi (ed.), 52-75. Oxford: OUP.
Benincà, P. \& Vanelli, L. 1982. Appunti di sintassi veneta. Guida ai Dialetti Veneti IV: 7-38.
Bianchi, V. 2006. On the syntax of personal arguments. Lingua 116(2): 2023-2067. https://doi.org/10.1016/j.lingua.2005.05.002
Bianchi, V. 2013. On 'focus movement' in Italian. In Information Structure and Agreement [Linguistik Aktuell/Linguistics Today 197], V. Camacho-Taboada, Á.L. Jiménez Fernández, J. Martín-González \& M. Reyes-Tejedor (eds), 193-216. Amsterdam: John Benjamins. https://doi.org/10.1075/la.197.07bia
Biezma, M. 2018. Givenness and the difference between wh-fronted and wh-in-situ questions in Spanish. In Romance Languages and Linguistic Theory: Selected Papers for Going Romance 29 [Romance Languages and Linguistic Theory 13], J. Berns, H. Jacobs \& D. Nouveauz (eds), 21-39. Amsterdam: John Benjamins. https://doi.org/10.1075/rllt.13.03bie
Biloa, E. 1997. Functional Categories and the Syntax of Focus in Tuki [Studies in African Linguistics 2]. Munich: Lincom.
Bocci, G. 2004. Contrastive focalisation on topics and preverbal subjects in Italian: Syntax free prosodic focalization or syntactic movement to focp? Rivista di Grammatica Generativa 29: 3-59.
Bocci, G. 2013. The Syntax - Prosody Interface. A Cartographic Perspective with Evidence from Italian [Linguistik Aktuell/Linguistics Today 204]. Amsterdam: John Benjamins. https://doi.org/10.1075/la. 204
Boeckx, C. 1999. Decomposing French questions. University of Pennsylvania Working Papers in Linguistics 6(1): article 6. [https://repository.upenn.edu/pwpl/vol6/iss1/6](https://repository.upenn.edu/pwpl/vol6/iss1/6) (4 August 2020).
Boeckx, C., Stateva, P. \& Stepanov, A. 2000. Optionality, presupposition, and wh-in situ in French. In Romance Syntax, Semantics, and L2 Acquisition. Selected papers from the 30th Linguistic Symposium on Romance Languages, Gainesville, Florida, February 2000 [Current Issues in Linguistic Theory 216], J. Camps \& C. R. Wiltshire (eds), 57-71. Amsterdam: John Benjamins. https://doi.org/10.1075/cilt.216.07boe

Bolinger, D. 1978. Asking more than one thing at a time. In Questions [Synthese Language Library. Texts and Studies in Linguistics and Philosophy 1], H. Hiz (ed.), 107-150. Dordrecht: Kluwer. https://doi.org/10.1007/978-94-009-9509-3_4
Bonan, C. 2017. Sé or c'est? On the cartography of clefts. In GG@G (Generative Grammar in Geneva) X: 131-151. https://doi.org/10.13097/cjg3-tfud
Bonan, C. 2017b. Arguing against a one-fits-all derivation for Northern Italian insituness. Quaderni di Lavoro ASIt 20: 49-76.
Bonan, C. 2018. On insituness and (very) low wh-positions. The case of Trevigiano. In GG@G (Generative Grammar in Geneva) XI: 21-41. Special Issue: Proceedings of the 1st SynCart Workshop "From Maps to Principles", G. Samo, K. Martini \& G. Bocci (eds), https://doi.org/10.13097/unige:120457
Bonan, C. 2019. On Clause-internally Moved Wh-phrases. Wh-to-Foc, Nominative Clitics, and the Theory of Northern Italian Wh-in situ. PhD dissertation. Université de Genève. https://doi.org/10.13097/archive-ouverte/unige:119060
Bonan, C. Accepted. On focal and wh-projections, indirect wh-questions, and quantificational chains. To appear in A. Nicolae \& A. Dragomirescu (eds.) Romance Languages and Linguistic Theory 2017. Selected papers from 'Going Romance 31' Bucharest.
Bonan, C. \& Shlonsky, U. 2017. On 'why' in situ in Northern Italian dialects. Paper presented at the 50th SLE Meeting, Zurich, 10 September 2017.
Bonan, C. \& Shlonsky, U. [accepted]. 'why' in situ in Northern Italian dialects: evidence from Trevisan. In G. Soare (ed.) Why is 'why' unique? Its syntactic and semantic properties. Proceedings of the 2017 SLE meeting, University of Zürich.
Bošković, Z. 1997. Superiority effects with multiple wh-fronting in Serbo-Croatian. Lingua 102(1): 1-20. https://doi.org/10.1016/So024-3841(96)ooo31-9
Bošković, Z. 2000. Sometimes in [Spec CP], sometimes in-situ. In Step by Step: Essays on Minimalism in Honor of Howard Lasnik, R. Martins, D. Michaels \& J. Uriagereka (eds), 53-88. Cambridge MA: The MIT Press.
Bošković, Z. 2001. On the interpretation of multiple questions. Linguistic Variation Yearbook 1(1): 1-15. https://doi.org/10.1075/livy.1.03bos
Bošković, Z. 2002. On multiple wh-fronting. Linguistic Inquiry 33(3): 351-383. https://doi.org/10.1162/002438902760168536
Bowers, J. 1993. The syntax of predication. Linguistic Inquiry 24(4): 591-656.
Bruening, B. \& Thuan, T. 2006. Wh-questions in Vietnamese. Journal of East Asian Linguistics 15(4): 319-341. https://doi.org/10.1007/s10831-006-9001-1
Brugè, L. 2002. The position of demonstratives in the extended nominal projection. In Functional Structure in DP and Ip. The Cartography of Syntactic Structures 1, G. Cinque (ed.), 15-53. Oxford: OUP.
Cable, S. 2010. The Grammar of Q. Q-Particles, Wh-Movement, and Pied-Piping. Oxford: OUP. https://doi.org/10.1093/acprof:oso/9780195392265.001.0001
Calabrese, A. 1984. Multiple questions and focus in Italian. In Sentential Complementation, W. De Geest \& Y. Putseys (eds), 67-74. Dordrecht: Foris.

Cardinaletti, A. 2001. A second thought on emarginazione: Destressing vs. right dislocation. In Current Studies in Italian Syntax. Essays Offered to Lorenzo Renzi, G. Cinque \& G. Salvi, G. (eds), 117-135. Oxford: Elsevier.
Cardinaletti, A. 2002. Against optional and null clitics. Right dislocation vs. marginalization. Studia Linguistica 56: 29-57. https://doi.org/10.1111/1467-9582.00086
Cardinaletti, A. 2004. Towards a cartography of subject positions. In The Structure of CP and IP. The Cartography of Syntactic Structures 2, L. Rizzi (ed.), 115-165. Oxford: OUP.

Cardinaletti, A. \& Repetti, L. 2008. The phonology and syntax of preverbal and postverbal subject clitics in northern Italian dialects. Linguistic Inquiry 39(3): 523-563.
https://doi.org/10.1162/ling.2008.39.4.523
Cardinaletti, A. \& Repetti, L. 2010. Proclitic vs enclitic pronouns in northern Italian dialects and the null-subject parameter. In Syntactic Variation: The Dialects of Italy, R. D'Alessandro, A. Ledgeway \& I. Roberts (eds), 119-134. Cambridge: CUP.
Cardinaletti, A. \& Starke, M. 1999. The typology of structural deficiency: On the three grammatical classes. In Clitics in the Language of Europe, H. van Riemsdijk (ed.), 145-233. Berlin: The Gruyter Mouton.
Carnie, A. 2006. Syntax: A Generative Introduction. Malden, MA: Wiley-Blackwell.
Chang, L. 1997. Wh-in-situ Phenomena in French. MA thesis, University of British Columbia.
Cheng, L.L.-S. 1991. On the Typology of Wh-questions. PhD dissertation, MIT.
Cheng, L.L.-S. 2003. Wh-in-situ. Glot International 7(4): 103-109.
Cheng, L.L.-S. \& Bayer, J. 2017. Wh-in-situ. In The Blackwell Companion to Syntax, M. Everaert \& H. van Riemsdijk (eds), 1-44. Malden, MA: Wiley-Blackwell.
Cheng, L.L.-S. \& Downing, L. J. 2012. Against FocusP: Arguments from Zulu. In Contrasts and Positions in Information Structure. Exploring the Interfaces: Case Studies, I. Kušerová \& A. Neeleman (eds), 247-266. Cambridge: CUP. https://doi.org/10.1017/CBO9780511740084.012
Cheng, L.L.-S. \& Rooryck, J. 2000. Licensing wh-in-situ. Syntax 3(1): 1-19. https://doi.org/10.1111/1467-9612.00022
Cheng, L.L.-S. \& Rooryck, J. 2002. Types of wh-in-situ. Ms, Leiden University.
Chiou, M. \& Vlachos, C. 2017. The pragmatics of wh-in situ questions in Greek. In Proceedings of the 3rd Annual Meeting on Greek Linguistics. Thessaloniki: Aristotle University of Thessaloniki. https://doi.org/10.5281/zenodo.1066264
Chomsky, N. 1957. Syntactic Structures. The Hague: Mouton.
Chomsky, N. 1964. Current Issues in Linguistic Theory [Janua Linguarum Series Minor 38]. Berlin: The Gruyter Mouton.
Chomsky, N. 1965. Aspects of the Theory of Syntax. Cambridge, MA: The MIT Press.
Chomsky, N. 1973. Conditions on transformations. In Festschrift for Morris Halle, S. Anderson \& P. Kiparsky (eds), 232-286. New York NY: Holt, Rinehart and Winston
Chomsky, N. 1976. Conditions on rules of grammar. Linguistic Analysis 2: 303-349.
Chomsky, N. 1977. On wh-movement. In Formal Syntax, P. W. Culicover, T. Wasow \& A. Akmajian (eds), 71-132. New York NY: Academic Press.
Chomsky, N. 1981. Lectures on Government and Binding: The Pisa Lectures. Dordrecht: Foris.
Chomsky, N. 1982. Some Concepts and Consequences of the Theory of Government and Binding. Cambridge MA: The MIT Press.
Chomsky, N. 1986. Barriers. Cambridge MA: The MIT Press.
Chomsky, N. 1989. Some notes on economy of derivation and representation. MIT Press Scholarship Online. https://doi.org/10.7551/mitpress/9780262527347.003.0002
Chomsky, N. 1993. A minimalist program for linguistic theory. MIT Occasional Papers in Linguistics 1. Cambridge MA: The MIT press.
Chomsky, N. 1995. The Minimalist Program. Cambridge MA: The MIT Press.
Chomsky, N. 1998. Minimalist Inquiries. The Framework [MIT Working Papers in Linguistics]. Cambridge MA: MIT.
Chomsky, N. 2000. Minimalist inquiries. The framework. In Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik, R. Martin, D. Michaels \& J. Uriagereka (eds), 89-155. Cambridge, MA: The MIT Press.

Chomsky, N. 2001. Derivation by phase. In Ken Hale: A Life in Language, M. Kenstowicz (ed.), 1-52. Cambridge MA: The MIT Press.
Chomsky, N. 2005. On phases. Ms, MIT.
Cinque, G. 1990. Types of $A^{\prime}$-bar Dependencies [Linguistic Inquiry Monographs 17]. Cambridge MA: The MIT Press.
Cinque, G. 1994. On the evidence for partial N-movement in the Romance Dp. In Paths Towards Universal Grammar. Studies in Honor of Richard S. Kayne, G. Cinque, J. Koster, J.-Y. Pollock, L. Rizzi \& R. Zanuttini (eds), 85-110. Washington DC: Georgetown University Press.

Cinque, G. 1999. Adverbs and Functional Heads: A Cross-Linguistic Perspective. Oxford: OUP.
Cinque, G. (ed.). 2006. Restructuring and Functional Heads. The Cartography of Syntactic Structures 4. Oxford: OUP.
Cinque, G. \& Rizzi, L. (eds). 2010. Mapping Spatial PPs. The Cartography of Syntactic Structures 6. Oxford: OUP. https://doi.org/10.1093/acprof:oso/9780195393675.001.0001

Cole, P. \& Hermon, G. 1994. Is there LF wh-movement? Linguistic Inquiry 25(2): 239-262.
Cole, P. \& Hermon, G. 1998. The typology of wh-movement: Wh-questions in Malay. Syntax 1: 221-258. https://doi.org/10.1111/1467-9612.00009
Cruschina, S. 2006. Informational focus in Sicilian and the left periphery. In Phases of Interpretation [Studies in Generative Grammar 91], M. Frascarelli (ed.), 363-385. Berlin: De Gruyter Mouton. https://doi.org/10.1515/9783110197723.5.363
Culicover, P. W. 1976. Syntax. New York NY: Academic Press.
Dauenhauer, N. M. \& Dauenhauer, R. 2000. Beginning Tlingit. Juneau: Sealaska Heritage Foundation Press.
Dayal, V. 2002. Single-pair versus multiple-pair answers: Wh-in-situ and scope. Linguistic Inquiry 33(3): 512-520.
Dayal, V. 2017. Does Hindi-Urdu have feature-driven wh-movement to Spec, vP? Linguistic Inquiry 48(1): 159-172. https://doi.org/10.1162/LING_a_00238
den Besten, H. 1983. On the interaction of root transformations and lexical deletive rules. In On the Formal Syntax of the Westgermania [Linguistik Aktuell/Linguistics Today 3], W. Abraham (ed.), 47-131. Amsterdam: John Benjamins. https://doi.org/10.1075/la.3.03bes
Déprez, V., Syrett, K. \& Kawahara, S. 2013. The interaction of syntax, prosody, and discourse in licensing French wh-in-situ questions. Lingua 124: 4-19. https://doi.org/10.1016/j.lingua.2012.03.002
Downing, L. J. 2011. Questions in Bantu languages: Prosodies and positions. ZAS Papers in Linguistics 55.
É. Kiss, K. 1995. Discourse Configurational Languages. Oxford: OUP.
Ernst, T. 2002. The Syntax of Adjuncts [Cambridge Studies in Linguistics 96]. Cambridge: CUP. https://doi.org/10.1017/CBO9780511486258
Etxepare, R. \& Uribe-Etxebarria, M. 2005. In situ wh-phrases in Spanish: Locality and quantification. Recherches Linguistiques de Vincennes 33: 9-34.
Etxepare, R. \& Uribe-Etxebarria, M. 2012. El movimiento de constituyentes. In Las preguntas de qu- in situ en español: Un análisis derivacional, J. M. Brucart \& A. J. Gallego (eds), 251-271. Madrid: Visor.
Faure, R. \& K. Palasis. 2020. Exclusivity! Wh-fronting is not optional wh-movement in Colloquial French. Natural Language and Linguistic Theory.
Fiengo, R., Huang, J., Lasnik, H. \& Reinhart, T. 1988. The syntax of wh-in-situ. In Proceedings of West Coast Conference on Formal Linguistics 7, H. Borer (ed.), 81-98. Stanford CA: CSLI.

Figueiredo Silva, M. C. \& Grolla, E. 2016. Some syntactic and pragmatic aspects of WH-in-situ in Brazilian Portuguese. In The Morphosyntax of Portuguese and Spanish in Latin America, M. A. Kato \& F. Ordóñez (eds), 259-285. Oxford: OUP.

Finer, D. L. 2014. Movement triggers and reflexivization in Korean-English code switching. In Grammatical Theory and Bilingual Codeswitching, J. MacSwan (ed.), 37-62. Cambridge MA: The MIT Press. https://doi.org/10.7551/mitpress/9780262027892.003.0002
Fowlie, M. 2013. Order and optionality: Minimalist grammars with adjunction. In Proceedings of the 13th Meeting on the Mathematics of Language, A. Kornai \& M. Kuhlmann (eds), 12-20. Stroudsburg PA: Association for Computational Linguistics.
Fowlie, M. 2014. Adjunction and minimalist grammars. In International Conference on Formal Grammar 14 [Lecture Notes in Computer Science 8612], G. Morrill, R. Muskens, R. Osswald \& F. Richter (eds), 34-51. Heidelberg: Springer. https://doi.org/10.1007/978-3-662-44121-3_3
Frascarelli, M. \& Hinterhölzl, R. 2007. Types of topics in German and Italian. In On Information Structure, Meaning and Form [Linguistik Aktuell/Linguistics Today 100], S. Winkler \& K. Schwabe (eds), 87-116. Amsterdam: John Benjamins. https://doi.org/10.1075/la.100.07fra
Garzonio, J. 2016. On complexity of interrogative syntax in Northern Italian dialects. In Complexity, Variation, and Isolation [Linguae \& Litterae 56], R. Baechler \& G. Seiler (eds), 95116. Berlin: De Gruyter Mouton. https://doi.org/10.1515/9783110348965-005

Giusti, G. 2002. The functional structure of noun phrases. A bare phrase structure approach. In Functional Structure in DP and Ip. The Cartography of Syntactic Structures 1, G. Cinque (ed.), 54-90. Oxford: OUP.
Grewendorf, S. \& Sternefeld, W. 1990. Scrambling and Barriers [Linguistik Aktuell/Linguistics Today 5]. Amsterdam: John Benjamins. https://doi.org/10.1075/la.5
Haegeman, L. 1996. Verb second, the split CP and null subjects in early Dutch finite clauses. Geneva Generative Papers 4(2): 133-175.
Hagstrom, P. 1998. Decomposing Questions. PhD dissertation, MIT.
Hamlaoui, F. 2010. On the role of phonology and discourse in Francilian French wh-questions. Journal of Linguistics 47: 1-34. https://doi.org/10.1017/So022226710000198
Harriehausen, B. 1990. Hmong Njua: Syntaktische Analyse einer gesprochenen Sprache mithilfe daten-verarbeitungstechnischer Mittel und sprachvergleichende Beschreibung des südostasiatischen Sprachraumes. Tübingen: Max Niemeyer.
Higginbotham, J. \& May, R. 1981. Questions, quantifiers and crossing. The Linguistic Review 1(1): 41-79. https://doi.org/10.1515/tlir.1981.1.1.41
Honcoop, M. 1998. Dynamic Excursions on Weak Islands. The Hague: Holland Academic Graphics.
Horvath, J. 1986. Focus in the Theory of Grammar and the Syntax of Hungarian. Dordrecht: Foris.
Huang, J.C.-T. 1982. Logical Relations in Chinese and the Theory of Grammar. PhD dissertation, MIT.
Huang, J.C.-T. 1991. Modularity and Chinese A-not-A questions. In Interdisciplinary Approaches to Language: Essays in Honor of Yuki Kuroda, C. Georgopoulos \& R. Ishihara (eds), 305-332. Dordrecht: Kluwer. https://doi.org/10.1007/978-94-011-3818-5_16
Hulk, A. \& Pollock, J.-Y. 2001. Subject Inversion in Romance and the Theory of Universal Grammar. Oxford: OUP.
Hyman, L. M. 1979. Phonology and noun structure. In Aghem Grammatical Structure. With Special Reference to Noun Classes, Tense-aspect and Focus Marking [Southern California Occasional Papers in Linguistics 7], L. M. Hyman (ed.), 1-72. Los Angeles CA: University of Southern California.

Hyman, L. M. 2005. Focus marking in Aghem: Syntax or semantics? Paper presented at the Conference on Focus in African Languages, ZAS Berlin.
Iatridou, S. 1990. About Agr(P). Linguistic Inquiry 21(4): 551-577.
Jackendoff, R. S. 1972. Semantic Interpretation in Generative Grammar. Cambridge MA: The MIT Press.
Jaeggli, O. \& Safir, K. J. 1989. The Null Subject Parameter [Studies in Natural Language and Linguistic Theory 15]. Dordrecht: Kluwer. https://doi.org/10.1007/978-94-009- 2540-3
Jayaseelan, K. A. 1996. Question-word movement to focus and scrambling in Malayalam. Linguistic Analysis 26: 63-83.
Jayaseelan, K. A. 2001. Questions and question-word incorporating quantifiers in Malayalam. Syntax 4(2): 63-93. https://doi.org/10.1111/1467-9612.00037
Jiménez, M. L. 1997. Semantic and Pragmatic Conditions on Word Order in Spanish. PhD dissertation, Georgetown University.
Jin, D. 2014. Contradiction, wh-questions and complex islands in Chinese. University of Pennsylvania Working Papers in Linguistics 21(1): article 15. <https://repository.upenn.du/pwpl/ vol21/iss1/15> (4 August 2020).
Johnson, K. 1991. Object positions. Natural Language and Linguistic Theory 9(4): 577-636.
Kahnemuyipour, A. 2001. On wh-questions in Persian. Canadian Journal of Linguistics/Revue Canadienne de Linguistique 46 (1-2): 41-51. https://doi.org/10.1017/Sooo841310001793X
Kahombo, M. 1992. Essai de grammaire du Kihunde [Hamburger Beiträge zur Afrikanistik 1]. Münster: LIT Verlag.
Kaiser, G. A. \& Quaglia, S. 2015. In search of wh in-situ in Romance; an investigation in detective stories. In Charting the Landscape of Linguistics: On the Scope of Josef Bayer's Work, E. Brandner, A. Czypionka, C. Freitag, T. Constantin \& A. Trotzke (eds), 92-103. Konstanz: University of Konstanz. [https://ling.sprachwiss.uni-konstanz.de/pages/WebschriftBayer/2015/contents.html](https://ling.sprachwiss.uni-konstanz.de/pages/WebschriftBayer/2015/contents.html) (1 August 2020).
Karimi, S. 2003. Word Order and Scrambling. Malden MA: Wiley-Blackwell.
Karimi, S. \& Taleghani, A. 2007. Wh-movement, interpretation, and optionality in Persian. In Clausal and Phrasal Architecture: Syntactic Derivation and Interpretation [Linguistik Aktuell/Linguistics Today 101], S. Karimi, V. Samiian \& W. Wilkins (eds), 167-187. Amsterdam: John Benjamins. https://doi.org/10.1075/la.101.09kar
Kato, M. 2003. The interpretation and derivation of wh-in-situ constructions in Brazilian Portuguese. Ms, UniCamp.
Kato, M. 2013. Deriving "wh-in-situ" through mouvement in Brazilian Portuguese. In Information Structure and Agreement [Linguistics Today/Linguistik Aktuell 197], V. CamachoTaboada, Á. L. Jiménez Fernández, J. Martín-González \& M. Reyes-Tejedor (eds), 175-192. Amsterdam: John Benjamins. https://doi.org/10.1075/la.197.06kat
Kayne, R. S. 1972. Stylistic inversion in French interrogatives. In Generative Studies in Romance Languages, J. Casagrande \& B. Saciuk (eds), 70-126. Rowley MA: Newbury House.
Kayne, R. S. 1975. French Syntax: The Transformational Cycle. Cambridge MA: The MIT Press.
Kayne, R. S. 1983. Connectedness. Linguistic Inquiry 14(2): 223-249.
Kayne, R. S. 1991. Romance clitics, verb movement, and PRO. Linguistic Inquiry 22(4): 647-686.
Kayne, R. S. 1994. The Antysymmetry of Syntax [Linguistic Inquiry Monographs 25]. Cambridge MA: The MIT Press.
Kayne, R. S. 1998. Overt vs covert movement. Syntax 1(2): 128-191. https://doi.org/10.1111/1467-9612.00006.

Kayne, R. S. 2008. Some notes on comparative syntax, with special reference to English and French. In The Oxford Handbook of Comparative Syntax, G. Cinque \& R. Kayne (eds), 3-69. Oxford: OUP. https://doi.org/10.1093/oxfordhb/9780195136517.013.0001
Kayne, R. S. \& Pollock, J.-Y. (2000) New thoughts on stylistic inversion. In Inversion in Romance, A. Hulk \& J.-Y. Pollock (eds), 107-163. Oxford: OUP.

Kayne, R. S. \& Pollock, J.-Y. 2012. Toward an analysis of French hyper-complex inversion. In Functional Heads. The Cartography of Syntactic Structures 7, L. Brugè, A. Cardinaletti, G. Giusti, N. Munaro \& C. Poletto (eds). Oxford: OUP. https://doi.org/10.1093/acprof:oso/9780199746736.003.0012
Kidway, A. 2000. xp-adjunction in Universal Grammar: Scrambling and binding in Hindi-Urdu. Oxford: OUP.
Kishimoto, H. 2005. Wh-in-situ and movement in Sinhala questions. Natural Language \& Linguistic Theory 23(1): 1-51. https://doi.org/10.1007/s11049-004-6574-o
Kitagawa, Y. \& Roehrs, D. \& Tamioka, S. 2004. Multiple wh-interpretations. In Generative Grammar in a Broader Perspective: Proceedings of the 4th Glow in Asia, H.-J. Yoon (ed.) 209-233. Seoul: Seoul National University.
Ko, H. 2005. Syntax of why-in-situ: Merge into [SPEC,CP] in the overt syntax. Natural Language \& Linguistic Theory 23(4): 867-916. https://doi.org/10.1007/s11049-004-5923-3
Kotek, H. 2014. Composing Questions. PhD dissertation, MIT.
Kokek, H. 2016. Covert pied-piping in English multiple wh-questions. Linguistic Inquiry 47(4): 669-693. https://doi.org/10.1162/LING_a_oo226
Krapova, I. 2002. On the left periphery of the Bulgarian sentence. Working Papers 12: 107-128. Venice: Università Ca' Foscari Venezia.
Krapova, I. \& Cinque, G. 2008. On the order of wh-phrases in Bulgarian multiple wh-fronting. In Formal Description of Slavic Languages: The 5th Conference, Leipzig 2003, U. Junghanns, G. Zybatow, R. Meyer \& L. Szucsich (eds), 318-336. Bern: Peter Lang.
Kuno, S. \& Robinson, J. J. 1972. Multiple wh-questions. Linguistic Inquiry 3(4): 463-487.
Lasnik, H. \& Saito, M. 1992. Move- $\alpha$. Cambridge MA: The MIT Press.
Ledgeway, A. 2012. From Latin to Romance. Morphosyntactic Typology and Change. Oxford: OUP.
Lee, M.-H. 1991. A parametric Approach to Code-mixing. PhD dissertation, SUNY at Stony Brook.
Lin, J. W. 1992. The syntax of zenmeyang 'how' and weishenme 'why' in Mandarin Chinese. Journal of East Asian Linguistics 1: 293-331.
Longobardi, G. 1988. Symmetry Principles in the Theory of Syntax. Padua: Unipress.
Lurà, F. 1987. Il dialetto del Mendrisiotto. Descrizione sincronica e diacronica e confronto con l'italiano. Zurich: Edizione Banche Svizzere.
Mahajan, A. 1990. The A/A' Distinction and Movement Theory. PhD dissertation, MIT.
Manetta, E. 2010. Wh expletives in Hindi-Urdu: The vP phase. Linguistic Inquiry 41(1): 1-34. https://doi.org/10.1162/ling.2010.41.1.1
Manetta, E. 2011. Peripheries in Kashmiri and Hindi-Urdu: The Syntax of Discourse-Driven Movement [Language Faculty and Beyond 4]. Amsterdam: John Benjamins. https://doi.org/10.1075/fab. 4
Manzini, M. R. 2012. On the substantive primitives of morphosyntax and their parametrization: Northern Italian subject clitics. In Representing Structure in Phonology and Syntax [Studies in Generative Grammar 124], M. van Oostendorp \& H. van Riemsdijk (eds), 167-194. Berlin: De Gruyter Mouton. https://doi.org/10.1515/9781501502224-007

Manzini, M. R. 2014. Grammatical categories: Strong and weak pronouns in Romance. Lingua 150: 171-201. https://doi.org/10.1016/j.lingua.2014.07.001
Manzini, M. R. \& Savoia, L. M. 2005. I dialetti italiani e romanci. Morfosintassi generativa I-III. Allessandria: Edizioni dell'Orso.
Manzini, M. R. \& Savoia, L. M. 2011. Wh-in situ and wh-doubling in Northern Italian varieties: Against remnant movement. Linguistic Analysis 37(1-2): 79-113.
Mathieu, É. 1999. French wh in situ and the intervention effect. In UCL Working Papers in Linguistics 11, C. Iten \& A. Neeleman (eds), 441-472. London: University College London.
Mathieu, É. 2002. The Syntax of Non-canonical Quantification: A Comparative Study. PhD dissertation, University College London.
Mathieu, É. 2004. The mapping of form and interpretation: The case of optional wh-movement in French. Lingua 114(9): 1090-1132. https://doi.org/10.1016/j.lingua.2003.07.002
Mathieu, É. 2009. Les questions en français: Micro- et macro-variation. In Le français d'ici: Études linguistiques et sociolinguistiques de la variation, F. Martineau, R. Mougeon, T. Nadasdi \& M. Tremblay (eds). Toronto: Éditions du Gref.
McCloskey, J. 2001. The morphosyntax of wh-extraction in Irish. Journal of Linguistics 37(1): 67-100. https://doi.org/10.1017/So022226701008775
McCloskey, J. 2002. Resumption, successive cyclicity, and the locality of operations. In Derivation and Explanation in the Minimalist Program, S. D. Epstein \& T. D. Seely (eds), 184-226. Oxford: Blackwell. https://doi.org/10.1002/9780470755662.ch9
McDaniel, D. 1986. Conditions on Wh-Chains. PhD dissertation, City University of New York.
McDaniel, D. 1989. Partial and multiple wh-movement. Natural Language and Linguistic Theory 7(4): 565-604. https://doi.org/10.1007/BFoo205158
Mirdamadi, F. S. 2018. Intervention Effects in Non-local Dependencies: Evidence from Persian. PhD dissertation, Université de Genève. https://doi.org/10.13097/archive-ouverte/unige:105725
Miyagawa, S. 2001. The EPP, scrambling, and wh-in-situ. In Ken Hale: A Life in Language, M. Kenstowicz (ed.), 293-388. Cambridge MA: The MIT Press.
Miyagawa, S. 2005. EPP and semantically vacuous scrambling. In The Free Word Order Phenomenon: Its Syntactic Sources and Diversity, J. Sabel \& M. Saito (eds), 181-220. Berlin: Mouton de Gruyter.
Moro, A. 1997. The Raising of Predicates. Predicative Noun Phrases and the Theory of Clause Structure [Cambridge Studies in Linguistics 80]. Cambridge: CUP. https://doi.org/10.1017/CBO9780511519956
Munaro, N. 1995. On nominal wh-phrases in some North-Eastern Italian dialects. Rivista di Grammatica Generativa 20: 69-110
Munaro, N. 1997. Proprietà strutturali e distribuzionali dei sintagmi interrogativi in alcuni dialetti italiani settentrionali. PhD dissertation, Università $\mathrm{Ca}^{\prime}$ Foscari Venezia.
Munaro, N. 1999. Sintagmi interrogativi nei dialetti italiani settentrionali. Padova: Unipress.
Munaro, N. 2003. On some differences between exclamative and interrogative wh-phrases in Bellunese: Further evidence for a Split-CP Hypothesis. In The Syntax of Italian Dialects, C. Tortora (ed.). Oxford: OUP.
Munaro, N. 2005. Grammaticalization, reanalysis, and CP layering. In Grammaticalization and Parametric Variation, M. Battlori, M.-L. Hernanz, C. Picallo \& F. Roca (eds), 29-47. Oxford: OUP. https://doi.org/10.1093/acprof:oso/9780199272129.003.0002
Munaro, N. \& Obenauer, H.-G. 1999. On underspecified wh-elements in pseudo-interrogatives. University of Venice Working Papers in Linguistics 9(1-2): 181-253.

Munaro, N. \& Poletto, C. \& Pollock, J.-Y. 2001. Eppur si muove! On comparing French and Bellunese wh-movement. In Linguistic Variation Yearbook 1, P. Pica (ed.), 147-180. Amsterdam: John Benjamins. https://doi.org/10.1075/livy.1.07mun
Ndayiragije, T. 1999. Checking economy. Linguistic Inquiry 30(3): 399-444. https://doi.org/10.1162/002438999554129
Nishigauchi, T. 2002. Scrambling and reconstruction at LF. Journal of the Linguistic Society of Japan 121: 49-105. https://doi.org/10.11435/gengo1939.2002.121_49
Obenauer, H.-G. 1994. Aspects de la syntaxe A-barre: Effets d'intervention et mouvement des quantifieurs. PhD dissertation, Université Paris 8.
Obenauer, H.-G. 2004 Nonstandard wh-questions and alternative checkers in Pagotto. In Syntax and Semantics of the Left Periphery [Interface Explorations 9], H. Lohnstein \& S. Trissler (eds), 343-384. Berlin: Mouton de Gruyter. https://doi.org/10.1515/9783110912111.343
Obenauer, H.-G. 2006. Special interrogatives - left periphery, wh-doubling, and (apparently) optional elements. In Romance Languages and Linguistic Theory 2004: Selected papers from 'Going Romance', Leiden, 9-11 December 2004 [Current Issues in Linguistic Theory 278], J. Doetjes \& P. Gonzalvez (eds), 247-273. Amsterdam: John Benjamins. https://doi.org/10.1075/cilt.278.120be
Oiry, M. 2011. A case of true optionality: Wh-in situ patterns like long movement in French. Linguistic Analysis 37(1-2): 115-142.
Pan, V. J. 2014. Wh-ex-situ in Mandarin Chinese: Mapping between information structure and split cr. Linguistic Analysis 39(3-4): 371-413.
Perlmutter, D. M. 1971. Deep and Surface Structure Constraints in Syntax. New York NY: Holt, Rinehart and Winston.
Pesetsky, D. 1987. Wh-in-situ: Movement and unselective binding. In The Representation of (In) definiteness [Current Studies in Linguistics 14], E. J. Reuland \& A. G. B. ter Meulen (eds), 204-251. Cambridge MA: The MIT Press.
Pesetsky, D. 2000. Phrasal Movement and its Kin [Linguistic Inquiry Monograph 37]. Cambridge MA: The MIT Press.
Pires, A. \& Taylor, H. L. 2009. The syntax of wh-in-situ and common ground. Proceedings from the Annual Meeting of the Chicago Linguistic Society 43(2): 201-215.
Poletto, C. 1993. Subject clitic-verb inversion in north eastern Italian dialects. In Syntactic Theory and the Dialects of Italy, A. Belletti (ed.), 95-135. Turin: Rosenberg \& Sellier.
Poletto, C. 2000. The Higher Functional Field. Evidence from Northern Italian Dialects. Oxford: OUP.
Pollock, J.-Y. 1989. Verb movement, universal grammar, and the structure of IP. Linguistic Inquiry 20(3): 365-424.
Pollock, J.-Y. 2006. Subject-clitic inversion, complex inversion and stylistic inversion in French. In Syncom. The Syntax Companion V, M. Everaert \& H. van Riemsdijk (eds). Oxford: Blackwell.
Poletto, C. \& Pollock, J.-Y. 2000. On the left periphery of some Romance wh-questions. University of Venice Working Papers in Linguistics 20(2).
Poletto, C. \& Pollock, J.-Y. 2004. On wh-clitics and wh-doubling in French and some North Eastern Italian Dialects. Probus 16: 241-277. https://doi.org/10.1515/prbs.2004.16.2.241
Poletto, C. \& Pollock, J.-Y. 2005. On wh-clitics, wh-doubling and apparent wh-in-situ in French and some North Eastern Italian dialects. Recherches Linguistiques de Vincennes 33: 135-156.

Poletto, C. \& Pollock, J.-Y. 2009. Another look at wh-questions in Romance: The case of Mendrisiotto and its consequences for the analysis of French wh-in-situ and embedded interrogatives. In Romance Languages and Linguistic Theory 2006. Selected Papers from Going Romance, Amsterdam 7-9 December, 2006 [Current Issues in Linguistic Theory 303], D. Torck \& W. L. Wetzels (eds), 199-258. Amsterdam: John Benjamins. https://doi.org/10.1075/cilt.303.12pol
Poletto, C. \& Pollock, J.-Y. 2015. Arguing for remnant movement in Romance. In Remnant Movement, G. Grewendorf (ed.), 135-178. Berlin: Mouton de Gruyter.
Reglero, L. 2007. Wh-in-situ interrogatives in Spanish. Probus 19: 267-297. https://doi.org/10.1515/PROBUS.2007.009
Reglero, L. \& Ticio, E. 2008. Wh-in-situ and the Spanish DP: Movement or no movement? University of Pennsylvania Working Papers in Linguistics 14(1), article 24. <https://repository. upenn.edu/pwpl/vol14/iss1/24> (4 August 2020).
Reinhart, T. 1998. Wh-in-situ in the framework of the minimalist program. Natural Language Semantics 6 (1): 29-56. https://doi.org/10.1023/A:1008240014550
Renzi, L. \& Vanelli, L. 1983. I pronomi soggetto in alcune varietà romanze. Studi in onore di G.B. Pellegrini. 23-50. Padua: University of Padua.
Richards, N. 2000. An island effect in Japanese. Journal of East Asian Linguistics 9(2):187-205.
Rizzi, L. 1982. Issues in Italian Syntax [Studies in Generative Grammar 11]. Berlin: De Gruyter Mouton.
Rizzi, L. 1986. Null objects in Italian and the theory of pro. Linguistic Inquiry 17(3): 501-557.
Rizzi, L. 1990. Relativized Minimality. Cambridge MA: The MIT Press.
Rizzi, L. 1996. Residual verb second and the wh-criterion. In Parameters and Functional Heads, A. Belletti \& L. Rizzi (eds), 63-90. Oxford: OUP.

Rizzi, L. 1997. The fine structure of the left periphery. In Elements of Grammar, L. Haegeman (ed.), 281-337. Dordrecht: Kluwer.
Rizzi, L. 2001. On the position int(errogative) in the left periphery of the clause. In Current Studies in Italian Syntax: Essays Offered to Lorenzo Renzi [North Holland Linguistic Series. Linguistic Variations 59], G. Cinque \& G. Salvi (eds), 287-296. Amsterdam: North Holland
Rizzi, L. 2004. Locality and left periphery. In Structures and beyond. The Cartography of Syntactic Structures 3, A. Belletti (ed.), 3-15. Oxford: OUP.
Rizzi, L. 2004c. On the form of chains: Criterial positions and ECP effects. Ms, University of Siena.
Rizzi, L. 2005. On some properties of subjects and topics. In Proceedings of the XXX Incontro di Grammatica Generativa, L. Brugè, G. Giusti, N. Munaro, W. Schweikert \& G. Turano (eds), 203-224. Venice: Cafoscarina.
Rizzi, L. 2006. On the form of chains: Criterial positions and ECP effects. In Wh-movement: Moving on [Current Studies in Linguistics 42], L.L.-S. Cheng \& N. Corver (eds), 97-134. Cambridge MA: The MIT Press.
Rizzi, L. 2006. On the form of chains: Criterial positions and ECP effects. In Wh-movement: Moving On, L.L.-S. Cheng \& N. Corver (eds), 97-133. Cambridge MA: The MIT Press.
Rizzi, L. 2010. On some properties of criterial freezing. In The Complementizer Phase: Subjects and Operators, E. P. Panagiotidis (ed.). Oxford: OUP. https://doi.org/10.1093/acprof:oso/9780199584352.001.0001

Rizzi, L. 2016. EPP and ECP revisited: The role of labeling. In Romance Languages and Linguistic Theory 10. Selected papers from Going Romance 28, Lisbon, E. Carrilho, A. Fiéis, M. Lobo \& S. Pereira (eds), 211-232. Amsterdam: John Benjamins. https://doi.org/10.1075/rllt.10.11riz

Rizzi, L. \& Bocci, G. 2017. Left periphery of the clause: Primarily illustrated for Italian. In The Wiley Blackwell Companion to Syntax, 2nd edn, M. Everaert \& H. C. van Riemsdijk (eds) Oxford: Blackwell. 589-638. https://doi.org/10.1002/9781118358733.wbsyncom104
Rizzi, L. \& Roberts, I. 1989. Complex inversion in French. Probus 1(1): 1-30. https://doi.org/10.1515/prbs.1989.1.1.1
Rizzi, L. \& Shlonsky, U. 2007. Strategies of subject extraction. In Interfaces + Recursion $=$ Language? Chomsky's Minimalism and the View from Syntax-Semantics [Studies in Generative Grammar 89], U. Sauerland \& H.-M. Gärtner (eds), 115-160. Berlin: De Gruyter Mouton.
Roberts, I. 2007b. Diachronic Syntax. Oxford: OUP.
Roberts, I. 2010. Agreement and Head Movement. Clitics, Incorporation, and Defective Goals [Linguistic Inquiry Monographs 59]. Cambridge MA: The MIT Press.
Rochemont, M. 1986. Focus in Generative Grammar [Studies in Generative Linguistic Analysis 4]. Amsterdam: John Benjamins. https://doi.org/10.1075/sigla. 4
Ross, J. R. 1967. Constraints on Variables in Syntax. PhD dissertation, MIT.
Ross, J. R. 1986. Infinite Syntax! Norwood NJ: Ablex.
Roussou, A., Vlachos, C. \& Papazachariou, D. 2013. In situ, ex situ and (non-)echo questions. In Major Trends in Theoretical and Applied Linguistics: Selected Papers from the 20th International Symposium on Theoretical and Applied Linguistics 3, N. Lavidas, T. Alexiou \& A. M. Sougari (eds), 475-494. Berlin: De Gruyter.
Rudin, C. 1988. Multiple questions in South Slavic, West Slavic, and Romanian. The Slavic and East European Journal 32: 1-24.
Rudin, C. 1988. On multiple wh-questions and multiple wh-fronting. Natural Language \& Linguistic Theory 6(4): 445-501. https://doi.org/10.1007/BFo0134489
Saito, M. 1989. Scrambling as semantically vacuous A'-movement. In Alternative Conceptions of Phrase Structure. M. Baltin \& A. Kroch (eds), 182-200. Chicago IL: The University of Chicago Press.
Saito, M. 1999. Wh-quantifier interaction and the interpretation of wh-phrases. In Linguistics: In Search of the Human Mind, M. Muraki \& E. Iwamoto (eds), 588-621. Tokyo: Kaitakusha.
Samek-Lodovici, V. 2015. The Interaction of Focus, Givenness, and Prosody. A Study of Italian Clause Structure. Oxford: OUP.
Samo, G. 2018. A Criterial Approach to the Cartography of V2. PhD dissertation, Université de Genève. https://doi.org/10.13097/archive-ouverte/unige:108925
Schweikert, W. 2005. The Order of Prepositional Phrases in the Structure of the Clause [Linguistik Aktuell/Linguistics Today 83]. Amsterdam: John Benjamins. https://doi.org/10.1075/la.83
Scott, G.-J. 2002. Stacked adjectival modification and the structure of nominal phrases. In Functional Structure in DP and IP. The Cartography of Syntactic Structures 1, G. Cinque (ed.), 91-120. Oxford: OUP.
Seiter, W. J. 1980. Studies in Niuean Syntax. New York NY: Garland.
Shlonsky, U. 1997. Clause Structure and Word Order in Hebrew and Arabic: An Essay in Comparative Semitic Syntax. Oxford: OUP.
Shlonsky, U. 2012. Notes on wh in situ in French. In Functional Heads. The Cartography of Syntactic Structures 7, L. Brugè, A. Cardinaletti, G. Giusti, N. Munaro \& C. Poletto (eds), 242252. Oxford: OUP. https://doi.org/10.1093/acprof:oso/9780199746736.003.0019

Shlonsky, U. \& Soare, G. 2011. Where's 'why'? Linguistic Inquiry 42(4): 651-669. https://doi.org/10.1162/LING_a_00064
Sigurðsson, H. A. 2000. The locus of case and agreement. Working Papers in Scandinavian Syntax 65: 65-108.
Sinopoulou, O. 2008. Multiple questions and apparent wh-in situ: Evidence from Greek. Proceedings of ConSOLE XV: 223-246.
Soh, H. L. 2005. Wh-in-situ in Mandarin Chinese. Linguistic Inquiry 36(1): 143-155.
Sportiche, D. 1998. Subject clitics in French and Romance: Complex inversion and clitic doubling. In Partitions and Atoms of Clause Structure, D. Sportiche, 308-378. New York NY: Routledge.
Starke, M. 2001. Move Dissolves into Merge: A Theory of Locality. PhD dissertation. Université de Genève.
Stepanov, A. \& Tsai, W.-T. D. 2008. Cartography and licensing of wh-adjuncts: A crosslinguistic perspective. Natural Language and Linguistic Theory 26(3): 589-638. https://doi.org/10.1007/s11049-008-9047-z
Stepanovic, S. 1999. What do Second Position Cliticization, Scrambling, and Multiple Wh-fronting Have in Common? PhD dissertation, University of Connecticut.
Suñer, M. 1991. Indirect questions and the structure of cP: Some consequences. In Current Studies in Spanish Linguistics, H. Campos \& F. Martínez-Gil (eds), 283-308. Washington DC: Georgetown University Press.
Svenonius, P. 2008. Projections of P. In Syntax and Semantics of Spatial P [Linguistik Aktuell/ Linguistics Today 120]. A. Asbury, J. Dotlašil, B. Gehrke \& R. Nouwen (eds), 63-84. Amsterdam: John Benjamins. https://doi.org/10.1075/la.120.04sve
Szabolcsi, A. \& Zwarts, F. 1992. Weak islands and an algebraic semantics for scope taking. Natural Language Semantics 1(3): 235-284. https://doi.org/10.1007/BFoo263545
Takita, K. \& Yang, B.C.-Y. 2014. On multiple wh-questions with 'why' in Japanese and Chinese. In Japanese Syntax in Comparative Perspective, M. Saito (ed.), 92-103. Oxford: OUP. https://doi.org/10.1093/acprof:oso/9780199945207.003.0008
Thornton, R. 2008. Why continuity. Natural Language \& Linguistic Theory 26(1): 107-146. https://doi.org/10.1007/s11049-007-9031-z
Torrego, E. 1984. On inversion in Spanish and some of its effects. Linguistic Inquiry 15: 103-129.
Tsai, W.-T. D. 1994. On Economizing the Theory of A-bar Dependencies. Cambridge MA: The MIT Press.
Tsai, W.-T. D. 1999. On lexical courtesy. Journal of East Asian Linguistics 8: 39-73.
Tsimpli, I.-M. 1998. Individual and functional readings for focus, wh- and negative operators: Evidence from Greek. In Themes in Greek Linguistics II [Current Issues in Linguistic Theory 159], B. Joseph, G. Horrocks \& I. Philippaki-Warburton (eds), 197-227. Amsterdam: John Benjamins. https://doi.org/10.1075/cilt.159.13tsi
Tual, L. 2017. The status of embedded wh-in-situ in French: An experimental investigation. Paper presented at RI 17: Romance Interrogatives, Konstanz Universität, Germany.
Uriagereka, J. 1996. Aspects of the syntax of clitic placement in western Romance. Linguistic Inquiry 26(1): 79-123.
van Riemsdijk, H. C. \& Corver, N. 1994. Studies on Scrambling: Movement and Non-movement Approaches to Free Word Order Phenomena [Studies in Generative Grammar 41]. Berlin: De Gruyter.
van Riemsdijk, H. C. \& Williams, E. 1986. Introduction to the Theory of Grammar. Cambridge MA: The MIT Press.

Vlachos, C. 2014. Wh-inquiries into Modern Greek and their theoretical import(ance). Journal of Greek Linguistics 14(2): 212-247. https://doi.org/10.1163/15699846-01402003
Wahba, W. A.-F. B. 1991. LF movement in Iraqi Arabic. In Logical Structure and Linguistic Structure [Studies in Linguistics and Philosophy 40], C.-T. J. Huang \& R. May (eds), 253-276. Dordrecht: Kluwer. https://doi.org/10.1007/978-94-011-3472-9_9
Watanabe, A. 1992. Subjacency and s-structure movement of wh-in-situ. Journal of East Asian Linguistics 1: 255-291.
Watanabe, A. 2003. Loss of overt wh-movement in Old Japanese. In Syntactic Effects of Morphological Change, D. W. Lightfoot (ed.), 179-195. Oxford: OUP. https://doi.org/10.1093/acprof:oso/9780199250691.001.0001
Watters, J. 1979. Focus in Aghem: A study of its formal correlates and typology. In Aghem Grammatical structure. With special reference to noun classes, tense-aspect and focus marking [Southern California Occasional Papers in Linguistics 7], L. M. Hyman (ed.), 137-197. Los Angeles CA: University of Southern California.
Webelhuth, G. 1989. Syntactic Saturation Phenomena and the Modern Germanic Languages. PhD dissertation, University of Massachusetts.
Willis, G. 2000. On the distribution of resumptive pronouns and wh-trace in Welsh. Journal of Linguistics 36(3): 531-573. https://doi.org/10.1017/So022226700008380
Xu, L. 1990. Remarks on LF movement in Chinese questions. Linguistics 28: 355-382.
Yoshida, K. 1995. Syntax and Semantics of Wh-quantifier Interactions. Tokyo: Hituzi Syobo.

## Index

| A | F | Mendrisiotto 29, 35, 40, 41, 45, |
| :---: | :---: | :---: |
| Adriana Belletti 26,56-59, 117 | Focus movement 108-114, | 170-172 |
| Aghem 99-101 | 115-121, 231 | Monnese 30, 36-37, 41, 45, |
| Ancash Quechua 199-200, 215-216 | $\begin{aligned} & \text { French } \quad 7,16-17,23-24,37,69 \\ & \quad 137-138,167-168,171-173,184 \end{aligned}$ | 75,123 |
| Arsalan Kahnemuyipour108-114 | 186-187, 190-191, 218 | N |
|  |  | Nicola Munaro 24-25, 47-49, |
|  | G | 208-212 |
| B | German 198-199 | Nominative clitics 10-11, 131-133 |
| $\begin{aligned} & \text { Bellunese (Pagotto) 25, 41, 45, } \\ & 47-49,76,166-170,174,183 \\ & 208-212 \end{aligned}$ | Grammar of Q 79-86, 121-126, |  |
|  | 212-214, 222-224, 231-235 | O |
|  | Greek 102-106 | Olgiate 39, 41, 45 |
| $\begin{aligned} & \text { Bellunese type } \quad 47-49,163,203 \text {, } \\ & 208-212 \end{aligned}$ | $\begin{aligned} & \text { Grumellese } \quad 41-43,45,51,153, \\ & 175-177 \end{aligned}$ | Optional wh-in situ $6-8,12$ |
| Borghese 36, 42-43, 45, 50 |  | P |
| Brazilian Portuguese 74, 185, | H | Passiranese 39, 41, 43, 45, 123 |
| 189-194 | Hindi-Urdu 95-97 | Periphery of $v \mathrm{P} \quad 26,56,59-60$, 225-228 |
| C | I | Persian 106-114 |
| $\begin{aligned} & \text { C.-T. James Huang } \quad 1,6-8 \text {, } \\ & \quad 195-196 \end{aligned}$ | Illasiano $27,34,41,45$ | Pure wh-in situ 6-8, 195-197 |
|  | Imbabura Quechua 199 |  |
| Cecilia Poletto \& Jean-Yves | Intelvino 41-42, 45 | R |
| Pollock 25, 75-77, 166-175 | Islands 15, 147-162, 169, 175- | Remnant-IP movement |
| $\begin{aligned} & \text { Chinese } \quad 6,195-197,217-218, \\ & 223 \end{aligned}$ | 175, 189-194, 196, 221 | hypothesis 24, 166-175, |
| Civate 33, 41, 43, 45 | J |  |
| Colognese 32, 45 | Japanese 82, 216-218, 223 | S |
| Comunnuovese 45 |  | Sanrocchese 36, 38, 41-43, 45 |
| Cortese 45 | L | Sentence-final requirement 13, |
| Covert movement hypothesis | Left periphery 56 | 26, 48, 50, 169-170, 183-185, |
| 7, 24, 175-178 | Luigi Rizzi 56-57, 86-87, 116, | 195-196, 209, 225 |
|  | 139-142 | Seth Cable 18, 79-82, 222 |
| D |  | $\mathrm{Se}_{\mathrm{WH}}$ (indirect questions) |
| $\begin{aligned} & \text { D-linked/non-D-linked } \\ & \text { asymmetry } 47,184,195-196 \text {, } \\ & 210 \end{aligned}$ | M | 14, 33, 134-145 |
|  | Malay 200 | Sinhala 149-150 |
|  | Malayalam 93-94 | Spanish 76, 186-187, 189-194 |
|  | Maria Rita Manzini 20, 26, 57, | Standard Italian 16,58-59, 71, |
| E | 70, 182, 206, 225, 230 | 115-118, 142, 245-236 |
|  | Maria Rita Manzini \& Leonardo | Strozzense 31, 33, 37-39, 41-43, |
| European Portuguese 185,189-194 | Maria Savoia 24,50-51, | 45, 50, 135-137, 144, 162 |
|  | 175-178 | Subject-clitic inversion 11, |
|  | Mary A. Kato 26, 70, 73-74 | 44-46 |

## T

Tlingit 80, 89, 149-150, 156-158, 160
Trevisan $10-15,31-33,45,58$, 62-68, 70-74, 89-90, 118-120, 132-158, 161, 178-182, 225-228
Trevisan/Lombard type 50-51, 163, 203-208

## W

Wh-doubling 34-44, 134-145
Wh-in situ (embedded) 32-34,
134-146, 169, 176-177, 188189, 193, 196
Wh-in situ (long construals)
30-31, 176-177, 187-188, 196,
210
Wh-in situ (matrix) 29-30,
185-187, 195, 210

Wh-to-Foc 19-20, 61-62, 70-75, 85-86, 91-129, 203208, 225-228, 230-235

## Z

Zoldoaltino 45
Zulu 98
98
en en

This monograph offers an innovative understanding of the mechanisms involved in Romance 'optional' wh-in situ. New supporting evidence in favour of Cable's (2010) Grammar of $Q$ is presented, as well as novel implementations of his original theory. In particular, it is claimed that wh-in situ idioms are characterised not only by language-specific choices between Q-projection and Q-adjunction, and between overt and covert movement of Q, but also in terms of the locus where they check the features relevant to wh-questions: while some languages check both [q] and [focus] in C, others make use of the clause-internal vP-periphery to check [focus]. Thanks to the vast amount of data presented and discussed, along with the predictions and theoretical contributions made, this monograph will be of interest to a wide range of experts in human language, from typologists to Romance specialists and formal syntacticians, but also to the many experts in languages with overt Q-particles who wonder why Romance specialists have long been so resistant to the implementation of silent Q-particles in their theoretical models.



[^0]:    1. Throughout, I use solid arrows to illustrate pre Spell-Out movement (= overt movement), dashed arrows to illustrate post Spell-Out movement (= covert movement), and bi-directional dashed arrows for Agree relations.
[^1]:    4. Variety spoken on the right bank of the Piave river.
    5. Variety spoken on the left bank of the Piave river.
[^2]:    6. The reader interested in the pronouns of Trevisan will find a detailed description in Bonan (2019).
[^3]:    7. Note that, throughout, the compulsory insertion of an element $x$ is signalled by means of the traditional notation ${ }^{*}(\mathrm{x})$, while the infelicity of an element is shown as $\left({ }^{*} \mathrm{x}\right)$.
[^4]:    9. One might wonder if the wh-words in (15) and (16) are at the rightmost edge of the clause, with the following constituents right-dislocated. In Chapter 2, for reasons related to the movement properties of arguments and adverbials in the declaratives of Trevisan, I shall argue that they are not.
[^5]:    10. Readers unfamiliar with Rizzi and Belletti's work and more generally syntactic cartography will find a concise overview of the framework in Chapter 2.
[^6]:    11. Throughout, I make a distinction between two varieties of European French: Standard French and Contemporary Spoken French. I shall claim that this distinction is crucial: while wh-in situ is restricted in Standard French, in the Contemporary Spoken variety wh-in situ is widespread and virtually unconstrained.
[^7]:    14. Note that, throughout, I provide English glosses and translations for Manzini \& Savoia's (2005) examples, which were originally translated into Italian. Any mistakes are my own.
[^8]:    15. Note that Manzini \& Savoia (2005) do not discuss the status of the corresponding ex situ counterparts of (13).
[^9]:    18. Munaro explained examples such as (34) in terms of the ability of wh-elements in subordinate clauses to correctly establish an interpretive connection with the 'abstract operator in the matrix CP that is legitimised by the interrogative inflection on the matrix verb [my translation]'. However, it should be noted that the existence of wh-in situ in long construals is problematic for the remnant-IP movement analysis, where wh-in situ is expected to target a left-peripheral wh-projection systematically. I discuss this issue further in Chapter 5.
[^10]:    19. Note that, as Ur Shlonsky (pc.) pointed out, Example (41a) and the Bellunese example in (37a) are not proper minimal pairs. Indeed, in (41a) the subject is postverbal: the comparison should instead be made with a clause that contains an unergative verb and a preverbal subject. Unfortunately, I am not in possession of examples of the sort.
[^11]:    20. In this book, I shall instead use the label QembP, to avoid any possible confusion: I use the label WhP as a general term to refer to the lexical category projected by wh-elements.
[^12]:    22. Here, following Cable's (2010) discussion, I instead assume that the feature relevant to wh-questions is [q], not [wh]. However, regardless of the labels that we choose for the features relevant for interrogative wh-movement, the only important notion here is that there are at least two features at play, and that they can either be both encoded in C , or be scattered between C and T .
[^13]:    23. In Cheng \& Downing (2012), parentheses indicate prosodic phrasing, while the numbers in the glosses refer to noun agreement classes. I keep both, although they are not relevant to my discussion.
    24. A focused direct object precedes the indirect object, and is resumed by an object agreement prefix on the verb (bolded).
[^14]:    25. I oversimplify the spelling of Aghem here. I hope Aghem speakers will forgive me.
[^15]:    26. RA is a differential object marker whose primary function is to mark the accusative object.
[^16]:    27. Since I am not interested in focus fronting here, I shall not make a distinction between contrastive and corrective focus.
[^17]:    28. Note that totally-fronted contrastive focus is construed with ip-internal 'clitic resumption' in Trevisan. This fact, which I believe constitutes evidence that Trevisan fronted foci are actually topicalised, is discussed in detail in Bonan (2020).
[^18]:    29. In indirect wh-questions in Northern Italian dialects, the obligatory presence of the complementiser with fronted wh-elements suggests that the targeted functional projection might actually be FinP. Indeed, in the approach developed by Rizzi starting from his (1997) paper, the left-peripheral projections relevant for complementation are ForceP and FinP. In a further development of the theory, Shlonsky (2014) argued that the that-complementiser of Paduan (and by extension, Northern Italian) embedded wh-questions are overt realisations of so-called Nominative Fin, à la Rizzi \& Shlonsky (2007). Another possibility is that the complementiser in question is indeed generated in FinP, but then raises to QembP (or even higher, if necessary). I leave the investigation of this observation for future work.
[^19]:    'Whose books did you read?'

[^20]:    30. For the sake of clarity, I shall first use an instance of wh-doubling in Mendrisiotto (Poletto \& Pollock 2009). However, the Mendrisiotto example will not be sufficient for our purposes, since this variety does not have subject-clitic inversion in genuine questions. Consequently, a Bellunese instance of wh-in situ will be analysed, and an explanation provided for why D-linked wh-elements are not felicitous clause-internally in this variety. The following derivations that I shall discuss are taken from earlier work, Poletto \& Pollock (2000), meaning that the labels used by the authors are slightly different. Nonetheless, the reader should not find it difficult to understand the mechanisms behind these derivations, since only minor details of the remnant-IP movement analysis have changed over the years.
[^21]:    31. Poletto and Pollock use traces. Here, I prefer to use copies to make the complex derivation easier to understand.
    32. In the input, the doubling wh-items ( $s a$ and $c u s i ̀)$ are merged as a complex wh-element, the predecessor of ClPs.
[^22]:    33. As in Example (11), the clause-internal wh-item cusè in (15) could be phonetically silent.
    34. Remember that in Bellunese as described in Munaro (1999), only non-D-linked wh-elements surface clause-internally, while D-linked ones are systematically totally fronted.
[^23]:    35. I choose an example of wh-in situ because it is most relevant for my discussion.
[^24]:    37. Context of use is not the subject of this book, hence I shall not go into detail regarding the concepts of 'presuppositional' and 'given'. As long as a question is associated with a true question reading (as opposed to an echo reading), it belongs in this discussion. For further details on the pragmatics and semantics of wh-questions, see for example Kayne (1972, 1983), Obenauer (1994), Chang (1997), Sportiche (1998), Boeckx (1999), Mathieu (1999, 2004), Cheng \& Rooryck (2000), Starke (2001), Baunaz (2011), Etxepare \& Uribe-Etxebarria (2005, 2012), Biezma (2018), among many others.
[^25]:    38. Very interestingly, the displayed linear order suggests that in Spanish there might be Tre-visan-like short movement of clause-internal wh-elements (1):
    (1) Spanish

    Juan dijo [ que a quién habían invitado ] (adapted from Suñer 1991: 285 (4))
    John said that to whom had 3pp invited
    If this was the case, the fact that in Spanish, contrary to Trevisan, clause-internal wh-elements target a position higher than the finite verb, could be linked to different movement properties of finite verbs and past participles in the two languages (Cinque 1999).

[^26]:    39. All judgements on island extraction in Contemporary Spoken French discussed in this section were provided by my colleague Lucas Tual, to whom I am thankful.
[^27]:    41. Note that I do not draw a clear-cut distinction between European and American varieties here: to the best of my knowledge, the differences observed among varieties of the two families are not significant for the present discussion.
[^28]:    42. For a discussion of the presence of phi-features in the interrogative C , which are realised at Spell-Out as interrogative nominative enclitics, refer to the introduction of Chapter 4, or to Bonan (2019).
[^29]:    RELEVANT FEATURES IN LOMBARD INTERROGATIVES
    $\left[_{\text {ForceINT }}\right.$ Force $\left[_{\text {Focushigh }}\right.$ Focus $_{[\text {EPP }] ;[q][ \pm \text { phi] }}\left[_{\text {FinP }}\right.$ Fin $[$ TP $\ldots$ $\left[\right.$ Foclow $\left.\left.\left.\left.\left.\left.\operatorname{Foc}_{[? \text { ePP];[?foc] }}\right]\right]\right]\right]\right]\right]$

[^30]:    43. I am thankful to Hiromune Oda for pointing this out.
[^31]:    A. STAGE I: overt QP-fronting (wh-fronting); = Tlingit, English, (?) Old Japanese $\rightarrow$ possible evolution (i)
    B. STAGE II: (mixed stage) overt QP-fronting alternates with covert QP-fronting; caused by loss of EPP in C; = Spoken French
    C. STAGE III: generalisation of covert QP-fronting (wh-in situ). = Sinhala $\rightarrow$ possible evolution (ii)
    D. STAGE II: (mixed stage) Qp-fronting coexists with Q-adjunction;
    i. STAGE IIA: Focus-Agreement + Wh-to-Foc; = Northern Italian dialects like Trevisan, Archaic Chinese, (?) Old Japanese
    ii. STAGE IIB: Focus-Agreement without Wh-to-Foc; caused by loss of EPP in T. = Northern Italian dialects like Lombard, Ancash Quechua
    E. STAGE III: Generalisation of unmoved Q-adjunction. = Japanese, Korean

