

# Verb-Second and (Micro)Variation in Two Rhaeto-Romance Varieties of Northern Italy

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## 1 Introduction

One of the main syntactic differences between Germanic and Romance languages regards the position of the finite verb in main clauses. In all Germanic languages, except for English, the finite verb must follow the first sentence constituent in declarative and interrogative main clauses as a consequence of a syntactic constraint known as Verb Second (henceforth: V<sub>2</sub>,<sup>1</sup> see den Besten 1983, Tomaselli 1990, Branigan 1996, Holmberg 2015, Holmberg & Platzack 1995 among others). As is well-known, this constraint is not found in present-day Romance varieties, with the exception of some Rhaeto-Romance varieties (see Benincà 1985/6, 2006, 2013, Poletto 2000, 2002, Kaiser 2002, Anderson 2005, Salvi 2010 for the claim that Rhaeto-Romance varieties are V<sub>2</sub> languages, and Benincà 1984, 1985/6, 2006, 2013, Adams 1987, Vanelli 1987, Vance 1989, Fontana 1993, Salvi 2000, 2004, Poletto 2002, 2014, Benincà & Poletto 2004, Ledgeway 2005, 2007, 2008, Cognola 2013, 2015, Salvesen 2013, Wolfe 2015 a.o. for the idea that Old Romance languages were also V<sub>2</sub> languages).

The first aim of this chapter is to provide a rich empirical studies of the syntactic properties ascribed to V<sub>2</sub> in two Rhaeto-Romance varieties spoken

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1 In this chapter we use the following abbreviations: DO: Direct Object; DP: Determiner Phrase; G-inversion; German-like inversion; IND.OBJ.CL: Indirect Object clitic pronoun; IO: Indirect Object; OBJ.CL: Direct Object clitic pronoun; R-inversion: Romance-like inversion; Subj: Subject; SUBJ.CL.: Subject clitic pronoun; V<sub>2</sub>: Verb-Second; V<sub>3</sub>: Verb-Third; V<sub>4</sub>: Verb-Fourth; XP: Phrase.

in two valleys in South Tyrol (Northern Italy), Badiotto and Gardenese, and to establish whether they can both be considered V2 languages. This involves a review of the existing literature on the two varieties, followed by a discussion of sets of newly collected data which have important theoretical implications regarding microvariation and the overall syntax of V2 languages. We focus particularly on the presence of so-called Germanic inversion, i.e. the occurrence of the subject between the finite auxiliary and the past participle when it is not the sentence-initial constituent, and the syntax of the sentence-initial position, which is typically restricted in V2 languages. The second aim of the chapter is to compare Badiotto and Gardenese, and to establish whether they differ from each other with respect to the syntactic phenomena under consideration. This comparison allows us to identify important aspects of variation between the varieties which we account for by establishing the role of diatopic variation, and that of variables connected to informants' backgrounds in producing (micro) variation. This is particularly important for these Rhaeto-Romance varieties, which are characterised by a tension between low normativity (typical of non-standardised varieties, see Dorian 2010) and recent attempts at standardisation.

The chapter is organised in the following way. Section 2 describes our data collection methods and provides a sociolinguistic overview of the two varieties; Sections 3 and 4 describe their Germanic inversion and use of the sentence-initial position. In Section 5, we discuss the results reached in sections 3 and 4 and their relevance to the classification of the two varieties as V2 languages. Section 6 contains the conclusions.

## 2 Sociolinguistic Overview and Data Collection

Rhaeto-Romance is a cover term traditionally used to refer to three Romance groups (and their languages) who live in Switzerland (*Romansh*), the Italian Dolomites (*Ladin*) and Friuli (*Friulian*).<sup>2</sup> Ladin is spoken in five valleys: three in the south of the area (Fassa, Trentino; Livinallongo and Ampezzo, Veneto) and two in the north (Gardena and Badia, South Tyrol), see Pellegrini (1977), Salvi (2010).

2 In this paper we are not concerned with the relationship between these three groups. For a range of opinions, see Pellegrini (1991), Haiman & Benincà (1992), Goebel (2000), Vanelli (2004), Benincà & Vanelli (2005).

This chapter focuses on the latter varieties, Gardenese and Badiotto (respectively *Gherdëina* and *Badiot* in Ladin), each spoken by about 10,000 people according to the Province of Bolzano's 2011 census. Gardenese is homogeneous phonologically, morphologically and syntactically (although it exhibits signs of inter-generational and diatopic variation, see Casalicchio 2011), whereas Badiotto exhibits internal diatopic (micro)variation (Salvi 2010). Three sub-groups of Badiotto have therefore been individuated to date, on mainly phonological and morphological bases: High Badiotto, Central Badiotto and Marebano (*Mareo* in Rhaeto-romance), spoken in the homonymous lateral valley, see map 3.1.<sup>3</sup>

The above classification of Ladin varieties does not fully consider syntax, partly because this level of linguistic analysis is little studied, and the theoretical research that has been done focuses on single phenomena and single varieties (see Benincà 1985/6, Poletto 2000, 2002, Rasom 2008, Casalicchio 2013, Hack 2013). Our work is a first attempt to fill this gap, since it compares one particular syntactic phenomenon in two Ladin varieties—thus contributing to our understanding of their syntax and of the (micro)variation between them.

The chapter relies on the results of fieldwork which involved eight native speakers (aged between 25–40, average age: 30): six Badiotto speakers (representing all three groups discussed above) and two Gardenese. There are more Badiotto informants because of that language's diatopic (micro)variation, not present in Gardenese.<sup>4</sup> The data collection was carried out in two phases. In the first phase we worked with two speakers, one for each variety (MI, Badiotto; MD, Gardenese), and carried out single interviews of about one hour each in which both production and judgments were tested. The results from this first phase allowed us to outline the main properties of V2 in these varieties. In the second phase, we prepared a written questionnaire containing a range of key sentences to test the properties relevant to V2 on the basis of the results

3 Note that there is no such variety as Low Badiotto because German varieties are spoken in the lowest part of the Badia valley.

4 An anonymous reviewer notes that 8 speakers cannot be representative of the diatopic variation found in Gardenese and Badiotto V2. We acknowledge that a bigger number of informants would allow us to make statistically relevant considerations, but such a wider investigation could not be carried out within the frame of the present study. However, it has to be underlined that the present comparison is the first investigation into the microvariation in the Ladin V2 phenomenon within the framework of Generative Grammar, which allows us to draw some important, mostly unnoticed, generalisations. Whether our empirical generalisations prove to hold when a larger number of informants is considered, we leave open for future work.

TABLE 3.1 *Informants' sociolinguistic profile*

Informant	Variety spoken	Village (Ladin name in brackets)	Gender	Age	Notes on the personal history (if relevant)
LH	Marebbano	San Vigilio di Marebbe (Al Plan)	F	25	–
JC	Central Badiotto	Rina (Rina)	F	23	Her parents are both from San Martino, which is close to Rina
SI	Lower High Badiotto	San Leonardo (San Linert)	F	38	DI's and MI's sister. She now lives in San Vigilio, the same village as LH (where Marebbano is spoken)
DI	Lower High Badiotto	San Leonardo (San Linert)	F	33	SI's and MI's sister. She now lives in La Valle, which is close to her home village
MI	Lower High Badiotto	San Leonardo (San Linert)	F	40	SI's and DI's sister.
MR	Upper High Badiotto	Colfosco (Calfosch)	F	23	–
IK	Gardenese	Ortisei (Urtijëi)	M	28	–
MD <sup>5</sup>	Gardenese	Selva (Sëlva)	F	30	She learned Gardenese in the kindergarten.

5 An anonymous reviewer asks whether MD should be excluded from the sample, since she is not a native speaker of Gardenese and falls out of the picture in different cases (see sections 3–4). This objection does not take into account the complex sociolinguistic situation of the Ladin valleys, which are characterised by diglossia. All speakers of Ladin also speak German and Italian. Therefore, most of the people involved in our study can be considered simultaneous (i.e. exposed to Ladin along with German and Italian from age 0) or successive (i.e. exposed to Ladin from 0 to 3 and German and Italian from 3) bilinguals. MD instantiates a third option, i.e. a case of a successive bilingual having German as her stronger language. This is not an uncommon situation in the valley and should, therefore, be taken into account in a study on language variation—especially in the light of the fact that imperfect acquisition is known to be a trigger for language change (see Mc Mahon 1994). Our data indicate that imperfect acquisition does play a role in the Ladin situation, because MD's judgements differ from those of all other speakers (see below).

reached in the first phase. The questionnaire was constructed around production tasks (8), judgment tasks (38 questions: sentences to be judged on a 1 (fully ungrammatical)–5 (fully grammatical) point scale) and some questions to establish the informants' sociolinguistic profiles. The questionnaire was emailed to informants, who completed it alone. We asked the informants to answer as spontaneous as they could, using everyday language and without considering normative grammar. In recent decades, in fact, most Ladin varieties have been subject to determined efforts to standardise them (see, for example, the normative grammars of Anderlan-Obletter 1991, Gasser 2000, Gallmann et al. 2008/2013), and we wanted to try to avoid as far as possible informants' use of an artificial language.

Our work provides a fully new picture of the V<sub>2</sub> phenomenon in contrast to that presented by normative grammars, and also provides an innovative contribution to the typological classification and understanding of microvariation in the Ladin varieties of South Tyrol. We thus believe that the results clearly indicate that the informants did not follow the rules of normative grammar.

In Table 3.1 we summarise the information used to define the informants' sociolinguistic profiles which is relevant to account for the observed microvariation (see Section 5 below). We show that diatopic variation is one of the two crucial factors that give rise to microvariation. Our data indicate that the standard classification of Badiotto varieties, which distinguishes between High and Low Badiotto, is not sufficient to account for syntactic microvariation. We thus introduce a further distinction between Lower High Badiotto, spoken by three informants from San Leonardo, and Upper High Badiotto, spoken by one informant from Colfosco (see map 3.1). The informants' personal histories (principally their movements from one area of the valley to another) represent the second factor in microvariation, as we will demonstrate.

### 3 On Subject-Finite Verb Inversion

#### 3.1 *Current Scholarship*

The presence of subject-verb inversion in all main clauses in which the sentence-initial constituent is not the syntactic subject is possibly the most noteworthy property (clearly linked to their V<sub>2</sub> character) distinguishing Badiotto and Gardenese from present-day Romance varieties.

According to the prescriptive literature (see Gallmann et al. 2013), subject-finite verb inversion is obligatory with both DPs and pronouns in Badiotto and Gardenese. Benincà (1994: 94, 2013) and Poletto (2002) show that inversion is



MAP 3.1 *The informants' villages in Badia (right side of the map, from North to South) and in Gardena (leftdown part, from East to West)*

found with pronouns and DP subjects in Badiotto. Poletto (2002) identifies three patterns of agreement that can appear with finite verb—DP subject inversion in the language (see also Gallmann et al 2013, all examples from Poletto 2002: 223). Subject—finite verb inversion can take place in the absence of clitic agreement on the finite verb (1a), or with a clitic pronoun fully (number, gender, person, 1b) or partially (person, number, 1c) agreeing with the DP subject.

- (1) a. *Duman mangia la muta pom* (Badiotto)  
 tomorrow eats the girl apples

b. *Duman mang-la la muta pom* (Badiotto)  
 tomorrow eats=she.SUBJ.CL the girl apples

c. %*Duman mang-l la muta pom*  
 tomorrow eats=it.SUBJ.CL the girl apples  
 (Badiotto, older generations only)  
 ‘The girl eats apples.’

In this chapter we focus on the type of inversion exemplified by (1a) establishing whether it is possible or obligatory.<sup>6</sup> This issue has only been explicitly addressed in the literature by Gallmann et al (2013), who claim that subject-finite verb inversion is obligatory, without, however, providing starred examples of sentences with no DP inversion.

Thus, the main question we want to answer in this section is whether the inversion found in (1a) is always obligatory, irrespective of the syntactic and pragmatic properties of the clause. In the following paragraphs we show that this is not the case, because inversion is ruled by both syntactic and pragmatic constraints. The following subsections show that the possibility of having inversion (1a) varies according to the type of constituent in the sentence-initial position (see asymmetries between sentences with a fronted adverbial or a fronted direct object), and to the subject’s discourse status (see asymmetries between sentences in which the subject is already present in the discourse (“given”) or it is introduced as a new element (“focused”), e.g. as an answer to a question).

### 3.2 *Subject-Finite Verb Inversion in Main Declarative Clauses*

This section provides evidence that DP subject-finite verb inversion is not obligatory in either variety, and shows that the distribution of the subject in both pre- and post-verbal positions is ruled by syntactic and discourse factors, which differ slightly in the two varieties, both between the two varieties and within the same variety (in the case of Badiotto). This phenomenon thus provides a neat illustration of both microvariation and inter-speaker variation.

We will now consider three possible positions of DP subjects in relation to the finite verb, which we exemplify in (2). The term G-inversion is used to refer to the so-called Germanic inversion (see Vance 1989, Salvesen 2013) found in V2 languages and in interrogative clauses in present-day English.

6 Subject-finite verb inversion is obligatory with subject clitic pronouns. Due to space constraints we focus on DP subjects, which have consistently received less attention in the literature than subject pronouns (see Benincà 1985/6, Poletto 2000, 2002, Salvi 2000).

In this construction, the DP subject follows the finite verb and precedes the past participle when a constituent different from the subject appears in the sentence-initial position (2a). We label the second possible position of the DP subject *no-inversion*, referring to the typical order found in non-V2 languages in which both a fronted constituent and the subject precede the finite verb, as in (2b), giving rise to linear V3. The third order we examine is Romance-inversion (henceforth: R-inversion, also known as “free inversion”, see Belletti 2004). In this construction, typical of non-V2 languages, the DP subject appears in inversion, always, however, positioned after the non-finite verb (unlike in G-inversion, 2c).

- (2) a. *Gestern hat Mario das Buch gekauft* (G-inversion, German)  
 yesterday has Mario the book bought
- b. *Ieri Mario ha comprato il libro* (no-inversion, Italian)  
 yesterday Mario has bought the book
- c. *Ieri ha comprato il libro Mario* (R-inversion, Italian)  
 yesterday has bought the book Mario  
 ‘Mario bought the book yesterday.’

The differences between G-inversion and R-inversion concern the position of the subject with respect to the past participle and to other arguments: in G-inversion (2a) the subject is always in third sentence-position and it immediately follows the finite verb and precedes all other constituents. In R-inversion (2c), instead, the subject follows the past participle and other arguments, if they are present.

### 3.2.1 The Syntax of DP Subjects in Main Declarative Clauses

In order to investigate the syntax of DP subjects, and to test whether there is a relationship between the position of the subject and syntactic/discourse factors, we considered various syntactic contexts in which there are two variables: the nature of the constituent in first position (scene-setter adverbial<sup>7</sup> or direct object) and the status of the subject in the discourse (i.e. whether it is already given in the discourse or new).

7 We use the term “scene-setter adverbial” to refer to an adverbial, usually of time or place, that i) precedes the finite verb and ii) constitutes the frame in which the event expressed by the matrix predicate takes place (see Benincà & Poletto 2004 a.o.).



TABLE 3.2 *The five syntactic contexts investigated in Section 3*

Context	Fronted constituent	Pragmatic role of the DP subject
1	Scene-setter adverbial	Focused
2	Scene-setter adverbial	Given
3	Given direct object	Focused
4	Given direct object	Given
5	Wh-element	Given

Table 3.2 lists the syntactic and discourse contexts that we consider in this section: sentences with a focused DP subject in which the fronted constituent is a scene-setter adverbial (Context 1); sentences with a given DP subject in which the fronted constituent is a scene-setter adverbial (Context 2); sentences with a focused DP subject in which the fronted constituent is a given direct object (Context 3); sentences with a given DP subject in which the fronted constituent is a given direct object (Context 4); main wh-interrogative clauses, in which the DP subject (like all constituents other than the wh-interrogative element, see Benincà 1988) is given (Context 5).

We tested the distribution of new-information focuses and given DP subjects in both production and judgment tasks. In production tasks, informants had to answer a subject interrogative wh-question, starting the answer with a given constituent (present in the interrogative) other than the subject. This allowed us to test the positions of both new-information focus and given subjects in relation to the finite and non-finite verb forms (see Cruschina 2006, Belletti 2004 on wh-interrogatives to elicit information focus).

The production data clearly indicate the presence of different strategies for the realisation of focused DP subjects according to the type of fronted constituent. The Contexts 1 and 2 allow us to establish whether the distribution of the DP subject (that is, the occurrence of G-inversion and R-inversion) is parasitic on information structure, and, more specifically, on the status of the DP subject as given or new. Let us first consider the syntax of focused subjects in sentences with a fronted scene-setter adverbial (Context 1). In (3) we reproduce the sentences given by informants in the production task. Three possible positions for the subject appear in the data: G-inversion (3a), no-inversion (3b) and R-inversion (3c).

- (3) *Who has always bought the flour in the shop?* [answer: the mum; begin with: in the shop]

- a. *Te botëga à tres la mama cumprè la farina*  
 in shop has always the mum bought the flour  
 (*G-inversion*, Badiotto)
- b. *Te butëiga mami à for cumprà la farina*  
 in shop mum has always bought the flour  
 (*no-inversion*, Gardenese)
- c. *Te butëiga, la farina l à for cumpreda la*  
 in shop the flour him-OBJ.CL. has always bought the  
*loma* (*R-inversion*, Gardenese)  
 mum  
 'It was always mum who bought the flour in the shop.'

The sentences in (3) are not equally distributed across informants and varieties: (3a) is the preferred option, used by the majority of informants (5/8), mostly from Badia (MI, DI, SI, JC and LH, 5/6). (3b) is used by MR (Badia) and by MD (Gardenese); (3c) is used by the Gardenese IK. Sentences (3a–b) were also tested in a judgment task. G-inversion (3a) gained the highest score by those informants that produced it and by the Gardenese MD, who produced (3b). The other two informants consider it completely ungrammatical (1).<sup>8</sup>

The results of the production and judgment tasks indicate that the distribution of the DP subject, in particular the grammaticality of G-inversion, is subject to variation. G-inversion is the *only* possible alternative for 5/6 speakers from Badia. For one speaker from Badia (MR), however, G-inversion is ruled out and the only possibility is the absence of inversion (V<sub>3</sub>). For IK, from Gardena, G-inversion is ruled out and R-inversion is the only possibility.<sup>9</sup> For MD, from Gardena, both orders are possible.

Now we consider sentences in which the sentence-initial constituent is again a given scene-setter adverbial but the subject is given (Context 2). If the discourse status of the DP subject plays a role in its syntactic position, it is expected that the sentences in Context 2 will exhibit a different syntax from those in Context 1 (3). When the subject is given, two word orders appear in production (4): no inversion (4a) and G-inversion (4b).

8 Sentences are considered possible/grammatical when judged either 5 or 4, impossible/ungrammatical when they are given 1 or 2 and marginal when they are judged 3.

9 Our data indicate that in main declarative clauses with a focused subject R-inversion is marginal for speakers from Badia, while IK consistently uses this word order, or judges it to be 4–5.

- (4) *What did Maria buy yesterday?* [answer: the potatoes; please begin with: yesterday]
- a. *Inier Maria à cumprè i soni* (no-inversion, Badiotto)  
yesterday Maria has bought the potatoes
- b. *Inier à Maria cumprè i soni* (G-inversion, Badiotto)  
yesterday has Maria bought the potatoes  
'Maria bought potatoes yesterday.'

As in the case of (3), the two word orders are not equally distributed across the varieties. (4a), i.e. the order in which inversion has *not* taken place, is the preferred order, used by 5/8 informants. This indicates that from a purely quantitative point of view, the absence of inversion is preferred when the DP subject is given, while G-inversion is preferred when the DP subject is focused. A qualitative analysis of the data confirms and refines this result. 3/6 informants from Badia (JC-MI-DI) only allow for G-inversion with focused subjects (see above), and do not produce G-inversion when the subject is given (4a). (4a) is also produced by MR and MD with focused subjects. G-inversion (4b) is produced by three informants: two from Badia (LH and SI who also have inversion with focused subjects) and one, IK, from Gardena. In the judgment task, (4b) is judged 5 by 6/8 informants (all those who used it in production, and DI, JC and MD), and 3 or 1 by MR and MI.<sup>10</sup>

Summing up the data on Contexts 1 and 2, DP subject-finite verb inversion is preferred in Context 1 (sentences in which a given scene-setter adverbial appears in the sentence-initial position and the DP subject is focused); when the DP is given and a scene setter is in the sentence-initial position (Context 2) no inversion is the preferred option.

Three groups of informants exhibiting three different patterns of microvariation can be identified.

Informants belonging to Group 1 instantiate a syntactic system which is insensitive to information structure (G-inversion as either obligatory in both contexts for LH, SI, Badia or ungrammatical/marginal for MR, Badia) irrespective of the discourse status of the DP subject. For the informants of Group 2, G-inversion is obligatory (MI, DI, JC, Badia) when the subject is focused and impossible (MI) or possible but not produced when it is given (DI, JC). The last pattern of variation is the opposite of group 2: inversion is obligatory with given, and ruled out with focused, DP subjects. It is exhibited by IK (Gardena;

<sup>10</sup> We cannot exclude possible normative pressure here.

TABLE 3.3 *The production and judgement of G-inversion (pr. = produced; n.p. = did not produce it. The number indicates the score in the judgment test: 1 = completely ungrammatical; 5 = perfectly fine)*

	Badiotto						Gardenese	
	LH	JC	SI	DI	MI	MR	MD	IK
G-inversion with focused subject	pr.; 5	pr.; 5	pr.; 5	pr.; 5	pr.; 5	n.p.; 1	n.p.; 5	n.p.; 1
G-inversion with given subject	pr.; 5	n.p.; 5	pr.; 5	n.p.; 5	n.p.; 1	n.p.; 3	n.p.; 5	pr.; 5

Group 3). One informant, MD (Gardena), falls out of this picture, since she does not produce G-inversion, although she always accepts it in the judgment tasks.

Interestingly, these patterns of microvariation only partially correspond to diatopic variation; there is a clear split between IK (representative of Gardeneſe) and the Badiotto informants. On the other hand, the microvariation within Badiotto is more complex: two speakers of Lower High Badiotto (DI, MI) pattern with the neighbouring variety of central Badiotto (JC). The third Lower High Badiotto informant (SI) patterns with Marebbano (LH) and with Upper High Badiotto (MR). We propose an explanation of these patterns in Section 5.<sup>11</sup>

Let us now consider sentences in which the focused DP subject appears in a sentence in which a given direct object is in the sentence-initial position (Context 3). As shown in (5), in this configuration informants produced three constructions: no-inversion (5a), a cleft structure (5b) and R-inversion (5c).

(5) *Who wrote the letter to the newspaper?*

[answer: the mum; please begin with: the letter]

a. *La lëtra al foliet, la uma ti à scrit*  
 the letter to.the newspaper the mum it.IND.OBJ.CL. has written  
 (*no-inversion*, Badiotto)

11 Recall that SI now lives in Marebbe; this could explain why she patterns with the other Marebbano speaker in this context.

- b. *La lëtra al foliet é-l sté la mama che*  
 the letter to.the newspaper is=it.OBJ.CL been the mum that  
*ti à scrit* (cleft, Badiotto)  
 it.IND.OBJ.CL. has written
- c. *La lëtra tla zaita l'à scritta la l'oma*  
 the letter in.the newspaper her.OBJ.CL.=has written the mum  
 (R-inversion, Gardenese)  
 'It is the mum who wrote the letter to the newspaper.'

It is striking that in (5) no informant produced G-inversion. The cleft construction (5b) was produced by 4/6 informants from Badia (SI, DI, MI, JC); (5a) was produced by MR (Badia) and MD (Gardena) and (5c) by IK (Gardena).<sup>12</sup> If we compare the sentences produced in (3) and (5), we see that the informants who produced G-inversion in (3), who are mostly from Badia, produced a cleft structure in (5). The other informants, on the other hand, stick to the syntax they used in (3) to realise a focused DP subject, i.e. either lack of inversion (MR, MD), or R-inversion (IK). We tested the grammaticality of inversion in Context 3 in a judgment task, and found that G-inversion is marginal for most informants, except for SI and LH (Group<sub>1</sub>) and MD.

The data on Context 3 indicate that all the informants belonging to Group 2 and the informant in Group 1 for whom G-inversion is obligatory with focused subjects (SI), change their strategy (Group 2) or prefer another strategy (SI of Group 1: cleft is used, G-inversion is accepted) for the realisation of focused subjects (from G-inversion to cleft) according to the type of fronted constituent. Thus, a fronted direct object seems to be incompatible with G-inversion when the subject is focused, while it is compatible with R-inversion and with no-inversion.

Let us examine sentences in which the sentence-initial XP is a given direct object and the DP subject is also given (Context 4), to discover whether the pattern discussed for example (5) in Context 3 is fed by information structure, syntactic configuration (given object in the sentence-initial position), or a combination of the two. In sentences in which the sentence-initial constituent is a given object, and the subject is given (Context 4), informants produce the orders in (6): no inversion (6a), G-inversion (6b) and R-inversion(6c).

<sup>12</sup> Informant LH did not answer.

(6) *When did mum buy the book?* [answer: yesterday; please begin with *the book*]

a. *Le liber, la uma l à cumprè inier*  
 the book the mum he.OBJ.CL. has bought yesterday  
 (*no-inversion*, Badiotto)

b. *Le liber à la mama cumprè inier* (*G-inversion*, Badiotto)  
 the book has the mum bought yesterday

c. *L liber l à cumprà la l'oma inier*  
 the book he.OBJ.CL. has bought the mum yesterday  
 (*R-inversion*, Gardenese)  
 'It was yesterday that mum bought the book.'

(6a) is produced by the two informants who consistently produce sentences without inversion (MR, MD) and by LH (Badia); (6b) is produced by a single informant from Badia (SI); (6c) is produced by three informants (IK—Gardena, DI, MI, Badia).<sup>13</sup> The lack of any kind of inversion coupled with R-inversion are the preferred options for the realisation of the given subject in this context. From a qualitative point of view, the division in three groups persists. Informants belonging to Group 1 (which are insensitive to information structure) either never produce inversion (MR, Badia) like in Contexts 1 and 2, or allow for G-inversion in both Contexts 3 and 4 (SI).<sup>14</sup> For informants in Group 2 (MI, DI, JC, Badia), G-inversion is ruled out and a cleft is used instead to realise focused DP subjects, whereas given subjects are either pre-verbal or post-verbal (R-inversion). For the Group 3 informant (IK, Gardena), G-inversion is ruled out in all contexts, except for Context 2, in which the DP subject is given and the fronted constituent is a scene setter. Informant MD again falls outside this picture, since she does not produce G-inversion, although she accepts it irrespective of the discourse context.

### 3.2.2 Subject-Finite Verb Inversion in Main *wh*-Interrogative Clauses

In the previous section we saw that the distribution of subject-finite verb inversion in main declarative clauses is ruled by an interaction between subtle syntactic and discourse constraints, which are subject to diatopic (see the asym-

13 Informant LH did not translate this sentence correctly.

14 Unfortunately, we have no data on informant LH's intuitions—which makes it impossible to know if she would pattern with SI, as she did in Contexts 1 and 2.

metries between Group 2, Badia, and Group 3, Gardena,) and inter-speaker (see the asymmetries between Badiotto speakers from Group 1 and 2) variation.

Let us investigate whether the type of variation documented for main declarative clauses is also found in *wh*-interrogatives (Context 5). We tested interrogatives in three production tasks (translation) and in a judgment task. The production task focused on three types of interrogative clause: adverbial clauses (*when*), object interrogatives (*what*) and a *why*-interrogative. Two orders appear in all three interrogative types: G-inversion (7a) and right dislocation (7b).

(7) a. *Can à pa Mario lit le liber?* (G-inversion, Badiotto)  
when has PART Mario read the book

b. *Can à-l pa lit le liber Mario?*  
when has=he.SUBJ.CL. part read the book Mario  
(right-dislocation, Badiotto)

‘When did Mario read the book?’

G-inversion (7a) is the preferred option, used in at least two interrogative clauses by all but two of the informants, JC and MI, who only produced (7b) in all the tested sentences. The informants who produce G-inversion also produce (7b). G-inversion is produced by all the speakers of Group 1 (MR, LH, SI) and Group 3 (IK), and also by DI (Group 2). Among the other two speakers of Group 2, JC does not produce G-inversion but accepts it, while MI considers it ungrammatical.

### 3.2.3 Summary of the Results

Table 3.4 and 3.5 summarise the data on the syntax of DP subjects. Note that no-inversion is ruled out in just one context (Context 5, see empty box) in which G-inversion is felicitous for all informants. The second thing that should be noted is that Contexts 3 and 4 are quantitatively the least felicitous for G-inversion (see Section 5 below for a complete list of generalisations).

From a qualitative point of view, Table 3.5 allows us to divide speakers into three groups according to their intuitions. Speakers of Group 1 are characterised by their insensitivity to information structure: they either use/accept G-inversion in all contexts (SI, Lower High Badiotto, LH, Marebbano), or do not use/reject it in most contexts (MR Upper High Badiotto). Speakers in Group 2 require G-inversion with focused subjects in sentences with a fronted scene setter (Context 1, DI, JC, MI, Lower High Badiotto), the speaker in Group 3 requires G-inversion with given subjects and a fronted given object (Context 2, IK, Gardnese). Informant MD (Gardnese) does not belong to any group.

TABLE 3.4 *Summary of the distribution of DP subject-finite verb inversion (quantitative)*

Context	Fronted constituent	Pragmatic role of the DP subject	Gardenese	Badiotto (quantitative data)
1	Scene-setter adverbial	Focused	R-inversion (obligatory)	G-inversion 5/5
2	Scene-setter adverbial	Given	G-inversion (obligatory)	No inversion 3/5 G-inversion 2/5
3	Given direct object	Focused	R-inversion (obligatory)	Cleft 5/5
4	Given direct object	Given	R-inversion (obligatory)	R-inversion 3/4 G-inversion 1/4
5	Wh-element	Given	G-inversion	G-inversion 3/4 R-inversion 4/4

TABLE 3.5 *Summary of the distribution of DP subject-finite verb inversion (qualitative)*

Context 1	G-inversion	No-inversion	R-inversion/right dislocation
Main declarative clauses with fronted scene setter & focussed subject	OBLIGATORY for SI, LH (Group 1) MI, DI, JC (Group 2) POSSIBLE for MD	OBLIGATORY for MR (Group 1); POSSIBLE for MD	OBLIGATORY for IK (Group 3)
Context 2	G-inversion	No-inversion	R-inversion/right dislocation
Main declarative clauses with fronted scene setter & given subject	POSSIBLE for SI, LH (Group 1), IK (Group 3), MD. MARGINAL for DI, JC (Group 2)	OBLIGATORY for MR (Group 1), MI (Group 2) POSSIBLE for DI, JC (Group 2), MD	POSSIBLE for DI, JC (Group 2).



TABLE 3.5 *Summary of the distribution of DP subject-finite verb inversion (qualitative) (cont.)*

<b>Context 3</b>	<b>G-inversion</b>	<b>No-inversion</b>	<b>R-inversion/right dislocation</b>
Main declarative clauses with fronted given object & focussed subject	POSSIBLE for SI, LH (Group 1), MD; IMPOSSIBLE / MARGINAL for IK (Group 3), MI, DI, JC (Group 2)	OBLIGATORY for MR (Group 1); POSSIBLE for MI, DI, JC (Group 2)	POSSIBLE for MI, DI, JC (Group 2); IK (Group 3)
<b>Context 4</b>	<b>G-inversion</b>	<b>No-inversion</b>	<b>R-inversion/right dislocation</b>
Main declarative clauses with fronted given object & given subject	POSSIBLE for SI (Group 1), MD	POSSIBLE for MR (Group 1), MD	POSSIBLE for MI, DI, JC (Group 2), IK (Group 3).
<b>Context 5</b>	<b>G-inversion</b>	<b>No-inversion</b>	<b>R-inversion/right dislocation</b>
Main Wh-interrogative clauses	POSSIBLE for IK (Group 3), SI, MR (Group 1), DI, JC (Group 2), MD.		POSSIBLE for IK (Group 3), SI, MR, (Group 1), DI, JC, MI (Group 2), MD.

## 4 Restrictions on Constituents Preceding the Finite Verb

### 4.1 *Current Scholarship*

A second remarkable property of Badiotto and Gardenese that can be linked to their V<sub>2</sub> nature concerns the syntax of the sentence-initial position.<sup>15</sup> The pos-

15 This section draws mainly upon grammaticality judgements, due to the marked character of the phenomenon under investigation. When producing sentences, informants either avoid or systematically change (by eliminating one of the fronted constituents) sentences

sibility of moving constituents to the sentence-initial position in  $V_2$  languages is generally recognised to be highly restricted by the so-called “bottleneck-effects” (Poletto 2002, Wolfe 2015).

Poletto (2002) proposed that Badiotto exhibits quite a robust bottleneck-effect in main declarative clauses (but not in *wh*-interrogative clauses, where  $V_3$  and  $V_4$  are possible, see Section 4.3), since usually only one constituent can precede the verb. Poletto claims there to be one exception to this restriction: a focused constituent can be preceded by either a scene-setter adverbial or by a hanging topic.<sup>16</sup> While her informants marginally accepted the combination “Adverbial—Focalised XP— $V$ ”, they judged the order “Hanging Topic—Focalised XP— $V$ ” to be fully grammatical.<sup>17</sup>

- (8) a. *ʔDuman, GIANI vaighest* (Badiotto, Poletto 2002: 231)<sup>18</sup>  
 tomorrow Gianni see=you.SUBJ.CL.  
 ‘It is Gianni who you’ll see tomorrow.’

- b. *L liber, A GIANI ti l a-i*  
 the book to Gianni him.IND.OBJ.CL. him.OBJ.CL. have=I.SUBJ.CL.  
*bel dè* (Badiotto, Poletto 2002: 231)<sup>19</sup>  
 already given  
 ‘It is to Gianni that I already gave the book.’

However, the data reported in Section 3 (for instance the grammaticality for many Badiotto speakers of  $V_3$  word orders with two fronted given constituents, the subject and a scene-setter or object, see the “no-inversion” answers in

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with two fronted constituents. It was therefore necessary to ask for grammaticality judgements to test this property of their grammars.

- 16 Another exception to the  $V_2$  word order, found mainly in Gardenese but also in some Badiotto varieties, concerns  $V_1$  orders, which are possible when the subject is null (both Gardenese and some Badiotto varieties are partial pro-drop languages). Further research is needed on this order.
- 17 Note that Poletto argues that the example in (8b) involves a Hanging Topic and not a Left Dislocation. However, as we discuss later in this section according to our informants Hanging Topics are ruled out in Badiotto, while Left Dislocations are grammatical in some contexts.
- 18 Both Badiotto and Gardenese have subject clitics, which can replace the subject, or double it when the lexical subject is dislocated, as in the sentences described in this section.
- 19 Note that in both varieties indirect objects always have to be doubled by a clitic, irrespective of the position of the argument. Direct objects, on the other hand, do not have to be doubled by a clitic.

Table 3.5) already point to the fact that Poletto's generalisation needs some refinement.

This is further confirmed by the specific data collected for the syntax of the sentence-initial position. V<sub>3</sub> word orders involving a scene-setter, for example, are ruled out in Badiotto if both the scene-setter and the preverbal argument are given, as predicted by Poletto's analysis (9a); however, in Gardenese this is not the case (9b).

- (9) a. *Who did you bring the book yesterday?*  
 \*Inier le liber l à-i purtà al  
 yesterday the book him.OBJ.CL. have=I.SUBJ.CL. brought to.the  
 Luis (Badiotto: all speakers)  
 Luis

- b. *Who has always bought the flour in the shop?*  
 Te butëiga, la farina là for cumpreda la  
 in shop the flour her.OBJ.CL. has always bought the  
 l'oma (Gardenese)  
 mum  
 'It was always mum who bought the flour in the shop.'

V<sub>3</sub> word orders in sentences with a given element and a focus are also rejected by speakers of lower High Badiotto (MI, SI, DI), contrary to Poletto's (2002) predictions, although the other Badiotto speakers (LH, JC, MR) accept them (10a,c). In Gardenese, V<sub>3</sub> word orders are grammatical if the focused element is not an argument, see the contrast between (10b) and (10d).

- (10) *Who did you call yesterday?*  
 a. %Inier la Maria à-i cherdè sö  
 yesterday the Maria have=I.SUBJ.CL. called up  
 (Badiotto: ok for LH, JC, MR)  
 b. \*Inier Maria é-i cherdà su (Gardenese)  
 yesterday Maria have=I.SUBJ.CL. called up  
 'Yesterday I called Maria'

- When did you buy the book?*  
 c. %Le liber, inier l à-i cumprè  
 the book yesterday him.OBJ.CL. have=I.SUBJ.CL. bought  
 (Badiotto: ok for LH, JC, MR)

- d. *L liber, inier l é-i cumprà*  
 the book yesterday him.OBJ.CL. have=I.SUBJ.CL. bought  
 (Gardenese)  
 ‘I bought the book yesterday.’

The second context for  $V_3$  orders described by Poletto (2002) is that in which a Hanging Topic and a focus co-occur before the finite verb. Our Badiotto informants all reject Hanging Topics, regardless of the informational role of the second constituent (11a). On the other hand, Gardenese speakers are divided here: MD accepts sentences with  $V_3$  when there is a Hanging Topic, while IK considers them marginal (11b).

- (11) a. \**L Giani, CUN L PIERE / cun l Piere à-i*  
 the Gianni with the Piere / with the Piere have=I.SUBJ.CL.  
*baià de chël cretino* (Badiotto)  
 spoken of that idiot
- b. %*Giuani, CUN PIERE / cun Piere é-i rujenà de*  
 Gianni with Piere / with Piere have=I.SUBJ.CL. spoken of  
*chël cretino* (Gardenese)  
 that idiot  
 ‘As for Gianni, it is with Pietro that I spoke of that stupid.’

In order to fully account for these results, which are partly unexpected within Poletto’s (2002) account, we decided to test all possible combinations of preverbal constituents (arguments and scene setters, topics and foci) in order to establish whether the bottle-neck effects are due to syntactic or discourse-related factors, or both.<sup>20</sup> As we demonstrate, both varieties are sensitive both

20 According to the generative literature, in this section we use the following terms:  
 – “Focus”: a constituent that is either new in the discourse or contrasted (see Benincà & Poletto 2004, Cruschina 2010, Rizzi 1999, Frascarelli 2000):  
 (i) *GIANNI ha chiamato (non Maria)* (Italian)  
 Gianni has called (not Maria)  
 ‘It is Gianni that called (not Maria)’  
 – “Topic”: With this label, we refer to a thematised constituent realizing old/given information; following Lopez (2009) and Cruschina (2010), we assume that the core property of all types of topics is their presuppositional character, that is their being part of the presupposition of the speaker (D-linking in Pesetsky 1987). We further assume that topics are split into two classes according to the property of [givenness]: some topics are compatible

to syntactic configuration and to information structure in this respect, since the overall co-occurrence of two topicalised arguments is judged more grammatical than the co-occurrence of a topic and a focus. Moreover, the co-occurrence of some types of argument (typically the subject and the indirect object) yields better results than other combinations.

#### 4.2 Main Declarative Clauses

Let us first consider the co-occurrence of a topicalised and a focalised argument in the preverbal position (Context 1) in Gardenese. For IK, a focus can only be marginally preceded by a Hanging Topic, but not by other types of Topic, as the contrast shows:

(12) a. *Who has written the letter?*

?*La lëtra mami l'à scritta* (Gardenese)  
 the letter mum her OBJ.CL. has written  
 'It is mum who wrote the letter.'

b. *Who has given Maria a book?*

\**A Maria, mami ti à dat n liber*  
 to Maria, mum her.IND.OBJ.CL. has given a book

(12a) is ambiguous, because the first constituent could be either a Hanging Topic or a left-dislocated Topic with clitic resumption. However, IK does not accept sentences like (12b), which are clear instances of a left dislocated topic.<sup>21</sup>

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with an out-of-the-blue sentence, in which they are simply presupposed, whereas other topics are grammatical only if they have already been introduced into the linguistic context (Frascarelli & Hinterhölzl 2007 and reference therein). Topics precede the finite verb in the sentence-initial position (see Rizzi 1997, Benincà 2001).

(ii) *A Maria, (le) ho dato un libro*  
 to Maria, her.CL I.have given a book  
 'I gave Maria a book'

– "Hanging Topics" are also thematised constituents which appear in the sentence-initial position. Hanging Topics can only be DPs (Benincà 2006):

(iii) (\**A Maria, ho dato un libro a lei / a quella bella ragazza*  
 (\*to) Maria, I.have given a book to her / to that nice girl  
 'Maria, I gave a book to her / to that nice girl'

21 The interpretation of (12a) as involving a Hanging Topic is also confirmed by the fact that the first constituent is resumed by a clitic, while initial topics are generally not doubled by a clitic in Gardenese. MD did not judge sentences like (13), thus it is unclear if in her case also left dislocated Topics are possible.

This confirms that (12a) is interpreted by him as involving a Hanging Topic, thus judged marginal like the cases in (11b).

In Badiotto, more options are open. Speakers of Lower High Badiotto (DI, SI, MI) do not admit any additional constituent preceding the finite verb. The other speakers (LH, JC, MR) accept V<sub>3</sub> word orders in some contexts. Although there is a great deal of variation, we believe that a general pattern can be discerned: in general, these speakers restrict possible orders, based on the following underlying hierarchy:<sup>22</sup>

(13) Indirect Object > Direct Object > Subject

Thus, a given indirect object can precede both focused direct objects and subjects, while a given direct object can only precede a focused subject (14 a,b).<sup>23</sup> Moreover, speakers in this second group accept cases in which a scene-setter is involved (14c). See also discussion in (3) above.

(14) a. *Who wrote the letter?*

*La lëtra la mama l'à scritta*  
 the letter the mum her.OBJ.CL. has written  
 (Badiotto: ok for MR and LH)  
 'It is mum that wrote the letter.'

b. *Whom has your brother given the bracelet?*

\**Le bracialet, a Monika ti l à scinchè*  
 the bracelet to Monika her.IND.OBJ.CL. him.OBJ.CL. has given  
*ti fra* (Badiotto: all speakers)  
 your brother  
 'It is to Monika that your brother gave the bracelet'

c. *Who did you call yesterday?*

%*Inier Maria à-i cherdè sò*  
 yesterday Maria have=I.SUBJ.CL. called up  
 (Badiotto: ok for LH, JC, MR)  
 'It is Maria that I called yesterday.'

22 Note that the order in (13) is *never* attested but can be inferred, since speakers were asked for judgments on sentences involving two, not three, fronted constituents.

23 There are some neutralisations to this order: MR exhibits the order IO>DO/Subj (DO and Subject can co-occur in any order), JC has IO/DO>Subj (both IOs and DOs can precede the Subject, but they cannot co-occur).

The co-occurrence of two topics in the preverbal position (Context 2; for the co-occurrence of a given argument and a scene-setter, see 9) is possible with severe restrictions for most Badiotto speakers and MD (Gardenese). For these speakers, the co-occurrence of two given arguments is only possible when their syntactic roles are those of subject and indirect object, with no ordering restrictions (16). On the other hand, MR (Upper High Badiotto) does not exhibit any restrictions: two arguments can co-occur freely in any order, provided that they are doubled by a clitic (16c–f). The last pattern is that of IK (Gardena). He shows clear-cut ordering restrictions, which are based on the following (not attested, see footnote 23) underlying order (16b,c,e).

(15) Direct Object > Subject > Indirect Object

(16) a. *Tati, a Maria ti à-l dé n liber*  
 daddy to Maria her.IND.OBJ.CL. has=he.SUBJ.CL. given a book  
 (SUB-IO: ok for everyone)

b. %A *Maria, tati ti à dé n liber*  
 to Maria daddy her.IND.OBJ.CL. has given a book  
 (IO-SUB: ok for anyone except IK)  
 ‘Dad gave Maria a book.’

c. %L *pan, mami l à cumprà inier*  
 the bread mum him.OBJ.CL. has bought bought yesterday  
 (DO-SUB: ok for IK and MR)

d. %Mami, *l pan l à-la cumprà*  
 mum the bread him.OBJ.CL. has=she.SUBJ.CL. bought  
*inier* (SUB-DO: ok for MR)  
 yesterday  
 ‘Mum bought the bread yesterday.’

e. %L *mëil, a Marco ti l à dat*  
 the apple to Marco him.IND.OBJ.CL. him.OBJ.CL. has given  
*Paul* (DO-IO: ok for MR and IK)  
 Paul

- f. %A *Marco, l mël ti l à dat Paul*  
 to Marco the apple him.IND.OBJ.CL. he.OBJ.CL. has given Paul  
 (IO-DO: ok for MR only)

‘Paul gave Marco the apple.’

The above demonstrates that Ladin speakers also divide into three groups in the syntax of V<sub>3</sub> orders of main declarative clauses (see Table 3.5): one such grouping is represented by IK, the Gardenese native speaker.

This result is expected because of diatopic variation. Within Badiotto speakers we again find inter-speaker variation. One group is formed by the speakers of Lower High Badiotto (MI, DI, SI), while the other is represented by MR alone. The informants from the lower part of the valley (LH, JC), in contrast, do not belong to one, stable, group: their behaviour depends on the syntactic context. When a given constituent and a focus co-occur, these speakers pattern with MR; when two given arguments are in the preverbal position, they fall into the Lower High Badiotto group. The Gardenese informant MD also oscillates between two different groups: when there are two fronted topics she behaves like the major Badiotto group, while when a focus and a topic are fronted she gives the same judgements as IK.

#### 4.3 Main Interrogative Clauses

In main interrogative clauses introduced by a *wh*-item, V<sub>3</sub> word orders consisting of any constituent followed by the *wh*-item are judged acceptable in both varieties, provided that the fronted argument is resumed by a clitic. There appear to be no restrictions in either variety, which confirms Poletto’s (2002) description:

- (17) a. *L pan, ulà l es’a cumprà?* (Gardenese)  
 the bread where him.OBJ.CL. have PART bought

- b. *Le pan, olà l as-te cumprè?*  
 the bread where him.OBJ.CL. have=you.SUBJ.CL. bought  
 (Badiotto)

‘Where did you buy the bread?’

In *wh*-interrogatives, even V<sub>4</sub> word orders are possible, where two topicalised arguments precede the *wh*-item (“XP–XP–*wh*–V”), although with some restrictions. Since V<sub>3</sub> word orders seem to be unrestricted (17), we focused instead on V<sub>4</sub> word orders, again testing constituents with different syntactic roles. Once more, we found that the speakers can be divided into three groups, cutting across Gardenese and Badiotto.



IK is the only member of the first group. He judges V4 word orders in *wh*-interrogatives to be possible with the same restrictions on the order of given arguments discussed in (16) above, see (18a,b).<sup>24</sup> LH, JC and MR form the second group. These speakers show a general preference for the co-occurrence of the subject and the indirect object, in any order (18a,b), which—like for IK—resembles the judgments they gave for main declarative clauses. The other informants (MD, MI, DI, partially SI) belong to the third group, which places no restrictions on the types of argument: any type of argument can precede the *wh*-element, in any order, although sometimes yielding marginal results (18a–f).<sup>25</sup>

- (18) a. %*Tati, a Maria, cie ti à-l pa*  
 dad to Maria what her.IND.OBJ.CL. has=he.SUBJ.CL. PART.  
*dat?* (S>IO: ungrammatical for MR, marginal for IK and SI)  
 given
- b. %*A Maria, tati, cie ti à-l pa*  
 to Maria dad what her.IND.OBJ.CL. has=he.SUBJ.CL. PART.  
*dat?* (IO>S: ungrammatical for IK, marginal for SI)  
 given  
 ‘What did dad give Maria?’
- c. %*L pan, mami, ulà l à-la pa*  
 the bread mum where he.OBJ.CL. has=she.SUBJ.CL. PART.  
*cumprà?* (DO>S: ungrammatical for LH, marginal for JC, SI and IK)  
 bought
- d. %*Mami, l pan, ulà l à-la pa*  
 mum the bread where him.OBJ.CL. has=she.SUBJ.CL. PART.  
*cumprà?* (S>DO: ungrammatical for IK, marginal for SI, LH, MR)  
 bought  
 ‘Where did mum buy the bread?’

24 Note that for IK, V4 orders are always marginal. This may be because they are very unnatural in the language, as discussed in footnote 10.

25 The co-occurrence of a direct object and an indirect object is the least acceptable context.

- e. %L *mëil, a Marco chi ti l à*  
 the apple to Marco who him.IND.OBJ.CL. him.OBJ.CL. has  
*pa dat?*  
 PART. given  
 (DO>IO: ungrammatical for IK and MR, marginal for SI, DI, LH, JC)
- f. %A *Marco, l mëil chi ti l à*  
 to Marco the apple who him.IND.OBJ.CL. him.OBJ.CL. has  
*pa dat?*  
 PART. given  
 (IO>DO: ungrammatical for IK, LH, MR, marginal for JC, DI, SI)  
 ‘Who gave Marco the apple?’

A recurrent pattern is thus revealed in all the contexts described in this section and our Ladin informants can be divided into three groups. The first consists of one Gardenese speaker, IK. The core variety in the second group is Upper High Badiotto (MR), and in the last group, Lower High Badiotto (MI, DI, SI).

The other varieties, represented by LH, JC (Badia) and MD (Gardenese), oscillate between groups 2 and 3. In the cases of LH and JC, this may be due to geographical factors: their varieties are geographically close to Lower High Badiotto, and it is thus unsurprising that they converge with the varieties of this group on some points. On the other hand, when they agree with group 2 (MR) they are displaying a pattern in which the geographically peripheral areas differ from the more central ones (here, Lower High Badiotto).

Note that the speakers belonging to the groups identified in this section only partially correspond with the speakers included in the groups identified for G-inversion: speakers do not behave coherently in both phenomena (see Section 5 below for an explanation). Table 3.6 summarises the patterns identified for the three groups of speakers.

## 5 On V2 and Microvariation

The data discussed in the two previous sections allow us to draw some important conclusions about Badiotto and Gardenese, and, we believe, confirm and refine the claim made in the literature that both languages should be analysed as V2.

With regard to the first phenomenon—the possibility of G-inversion in sentences in which the syntactic subject does not appear in the sentence-initial position—we can generalise as follows, for all varieties, and all groups (see Table 3.4 and 3.5):

TABLE 3.6 *Informants' judgements in the three selected contexts*

Context 1: Top + Foc	Group 1 (MR)	Group 2 (SI, DI, MI)	Group 3 (IK)
	Grammatical with ordering restrictions, or if a scene-setter is involved (LH, JC, MR)	always ungrammatical (SI, MI, DI)	marginal (IK) or fully grammatical (MD) when the first constituent is a Hanging Topic
Context 2: Top+Top	everything goes, no ordering restrictions (MR)	only IO+S, in any order (SI, MI, DI, LH, JC, MD)	ok with ordering restrictions (IK)
Context 3: Top+Top in wh-interrogatives	IO+S in any order, others marginally and with some idiosyncrasy (LH, JC, MR)	everything goes (MD, MI, DI, marginally SI)	ok with ordering restriction (IK)

- (19) a. it is one of two possible options (along with right dislocation) in wh-interrogative clauses (Context 5);
- b. it is virtually impossible in main declarative clauses with a fronted given direct object and a focused subject (Context 3);
- c. it is marginal in main declarative clauses with a fronted given direct object and a given subject (Context 4).

The generalisations in (19) indicate that G-inversion is grammatical for all varieties, but is constrained by syntactic factors, since it is possible in wh-interrogative clauses, but not in main declarative clauses in which a direct object is fronted. This pattern is fully absent in present-day non-V2 Romance

varieties—a fact which supports a V<sub>2</sub> analysis of Badiotto and Gardenese and indicates, moreover, that *wh*-interrogative clauses lie at the heart of the V<sub>2</sub> phenomenon, since they favour the presence of G-inversion (see Rizzi 1996 and the presence of G-inversion in interrogative clauses in English as an example of residual V<sub>2</sub>).

However, syntax does not govern the distribution of G-inversion in Badiotto and Gardenese alone: discourse is also a key factor. These varieties differ in the ways in which discourse interplays with the distribution of G-inversion, as shown by the diatopic differences summarised in the following generalisations:

- (20) a. Generalisation on the distribution of G-inversion valid for Gardense (Group 3):  
G-inversion is possible when the DP subject is given and the fronted XP is a *wh*-element (Context 5) or a scene-setter (Context 2).
- b. Generalisation on the distribution of G-inversion valid for Badiotto (Groups 1 and 2):  
G-inversion is possible when the DP subject is a focus and the fronted XP is a scene-setter adverbial (Context 1: exception: MR), and when the DP is given and the fronted XP is a *wh*-element (Context 5).

The generalisations in (19) and (20) indicate that G-inversion is possible in both varieties, and is ruled by both syntactic and discourse factors, with the former, however, appearing to play the greater role—consider, for instance, the ungrammaticality of G-inversion in sentences with a fronted object irrespective of the discourse status of the DP subject. The generalisations on G-inversion indicate that Badiotto and Gardenese exhibit a trait typical of V<sub>2</sub> languages (although they differ from Germanic V<sub>2</sub> languages in partially allowing for no inversion in some specific contexts).

In both varieties, the presence of G-inversion correlates with the reduced possibility of having multiple constituents before the finite verb, as expected within the V<sub>2</sub> analysis. As summarised in the following generalisations, this ban is subject to the following syntactic (type of main clause) and discourse factors:

- (21) Generalisations on multiple elements preceding the finite verb valid for all varieties (based on all groups):
- a. The co-occurrence of multiple constituents before the finite verb is possible in *wh*-interrogative clauses, and highly restricted in main declarative clauses;
- b. in main declarative clauses, the order topic-focus is highly restricted (possible only with a subset of constituents and constructions).

We also find clear diatopic differences between the two varieties with regard to the multiple co-occurrence of constituents before the finite verb:

- (22) a. Generalisation on the distribution of multiple constituents preceding the finite verb valid for Gardenese (based on Group 3):
- two topics can precede the finite verb in both interrogative and main clauses;
  - in all cases in which two topics can precede the finite verb, ordering restrictions among them are found, irrespective of the syntactic context.
- b. Generalisation on the distribution of multiple constituents valid for Badiotto (all groups):
- two topics can precede the finite verb with no ordering restrictions only in interrogative clauses;
  - the possibility of having two topics in main declarative clauses is highly restricted.

All the generalisations indicate that Badiotto and Gardenese differ greatly from present-day non-V<sub>2</sub> Romance languages with regard to the phenomena under consideration, and should, in our view, be considered V<sub>2</sub> languages (even though the syntax of the sentence-initial position has a specific characteristic not shared with Germanic V<sub>2</sub> languages).

We will now address the presence of micro-variation among speakers of the same variety, which, in our view, does not constitute a problem for the above generalisations, since these are based on the most consistent (or representative, in the case of Gardenese) patterns.

- (23) a. Microvariation in Badiotto:
- Speakers of Group 1 identified for G-inversion are insensitive to information structure, and either reject (MR: exception: wh-interrogative clauses) or generalise (SI, LH) G-inversion to all contexts;
  - Speakers of Group 1 identified for the syntax of the sentence-initial position (LH, JC, MR) are much more liberal than other Badiotto speakers in allowing for multiple constituents before the finite verb.
- b. Micro-variation in Gardenese:
- Speaker MD is much more liberal than the other Gardenese speaker (IK).

We account for the microvariation within varieties as follows. Informants LH, JC and MR live in different villages and therefore speak different Ladin vari-

eties. We propose that the inter-speaker variation observed in their language is due to microdiatopic differences, resulting from the fact that they come from Marebbano, Central Badiotto and Upper High Badiotto, respectively. On the basis of our data we suggest that a distinction be made between Upper High and Lower High Badiotto, since the speaker from Colfosco (MR) patterns differently from the speakers from S. Leonardo di Badia, a fact which calls for a further specification of “High Badiotto”, based on syntax.

Given these microdiatopic differences, it is expected that these three speakers will not pattern like other Badiotto speakers. Note that these differences do not manifest themselves in both phenomena. On the possibility of having multiple constituents before the finite verb, all three speakers differ from Lower High Badiotto speakers; however, with regard to G-inversion, only LH (Marebbano) and MR (Upper High Badiotto) make judgements that differ from the other Badiotto speakers.

Two particular individual cases need to be discussed. The first is that of SI, a speaker of Lower High Badiotto, who consistently patterns with the Marebbano speaker, and not with her sisters from S. Leonardo for G-inversion. We suggest that this is not due to her age or gender (she is almost in the same age as her sisters, see Table 3.1) but rather to the fact that she now lives in S. Vigilio, where Marebbano is spoken, and might have changed some microaspects of her original grammar. It is important to note that the microchanges introduced by SI only affect G-inversion, for the other phenomenon considered she belongs to Group 2, like her sisters. This indicates that not all grammatical environments are equally vulnerable in contact situations.

The case of MD, the Gardenese speaker who falls outside all generalisations and only partially patterns with the other Gardenese speaker, is different. We suggest that the specificities of her grammar are due to the fact that she acquired Gardenese as an early L2, at kindergarten. Our hypothesis is, therefore, that her idiosyncrasies in both of the phenomena considered may result from her exposure to Ladin from the age of 3. The acquisition of Gardenese as an early L2 did not prevent this speaker from apparently reaching full proficiency in the language (she uses Ladin in her everyday life), but when it comes to the very subtle judgements required in our study, it seems that her competence differs from that of the other speakers.

## 6 Conclusions

In this chapter we have examined two properties typically ascribed to V2 languages, the presence of G-inversion and of bottleneck-effects, in two Rhaeto-

Romance varieties of South Tyrol, Badiotto and Gardenese. We have demonstrated that these two properties are present in the languages, and their co-occurrence confirms the claim made in the literature that both languages should be considered V<sub>2</sub>.

Our novel description of the two varieties has not only allowed us to confirm the claim that Badiotto and Gardenese are V<sub>2</sub> languages, but also to broaden the scope of the hypothesis, in three directions. First, we have increased our understanding of the typology of V<sub>2</sub> languages and of the limits of variation among them, by providing a new perspective on two understudied V<sub>2</sub> varieties. These languages have much in common with other (Germanic and Old Romance) V<sub>2</sub> languages, but do not fully pattern with any of them. G-inversion, for example, is present in both Badiotto and Gardenese, but is constrained by syntactic and discourse factors—unlike in present-day Germanic V<sub>2</sub> languages. Moreover, the syntax of the sentence-initial position is also specific to these varieties, since the constraints we find are less strict than those of Germanic V<sub>2</sub> varieties (or of Old French, see Salvesen 2013), and less liberal than those of Old Italian (see Benincà 2006, Poletto 2014).

The chapter also contributes to our understanding of variation between close varieties. We have demonstrated that, despite sharing some core properties, Badiotto and Gardenese differ slightly from each other in the way these properties are instantiated. Consider G-inversion: in both varieties its distribution is ruled by syntactic and discourse factors, but in Badiotto G-inversion is favoured when subjects are new information, whereas in Gardenese it is restricted to given subjects. These differences, which we have been the first to identify, provide a small but very elegant showcase for diatopic variation.

And finally, this work contributes to our understanding of microvariation within the Badiotto variety. Using the novel data collected for this study, we have proposed that the traditional distinction between High and Central Badiotto cannot alone account for syntactic microvariation and so we have introduced a further distinction, between Lower High Badiotto, spoken by three informants from San Leonardo, and Upper High Badiotto, spoken by one informant from Colfosco. This finding confirms and refines the hypothesis that microdiatopic differences play a crucial role in determining variation in Badiotto. The role of microdiatopic variation is also confirmed by our detailed analysis of the syntax of some individual informants, who moved from one village to another in the valley and subsequently made a number of small changes to the grammar of their native variety, by adapting it to the variety spoken in the villages to which they moved.

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