

Article

Structural Change in Relative Clauses and the Autonomy of Heritage Grammars

Alberto Frasson 

Utrecht Institute of Linguistics-OTS, Utrecht University, 3512JK Utrecht, The Netherlands;
alberto.frasson1@hotmail.com

Abstract: This paper addresses the question of structural change in relative clauses in heritage speakers of two varieties of Venetan, a northern Italo-Romance language. It will be shown that appositive and restrictive relative clauses are not structurally distinguished in Brazilian Venetan, while they display different structural properties in Italian Venetan. It will be proposed that the phenomenon described in the paper does not depend on transfer from another language and it is not exclusively a matter of processing. The approach presented here aims to account for structural change in syntactic terms, without resorting to extra-linguistic factors. Heritage grammars are autonomous systems and follow predictable paths of language variation, as such, variation may take place at an interface level and at a syntactic level alike. This does not exclude possible influences from the dominant language, which, however, do not need to be taken as the only triggers of change.

Keywords: relative clauses; heritage languages; subject resumption



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1. Introduction

This paper analyses a case of structural change in relative clauses in heritage speakers of two varieties of Venetan, a northern Italo-Romance language. It will be shown that appositive and restrictive relative clauses are not structurally distinguished in Brazilian Venetan, while they display different structural properties in Italian Venetan. It is possible to observe a difference in the realisation of resumptive pronouns in the two varieties: Italian Venetan distinguishes appositive and restrictive relative clauses by the realisation of a resumptive subject pronoun in the first but not in the second type; Brazilian Venetan never realises resumptive pronouns, regardless of the relative clause type. Other observations concerning the scope of the head noun and the ordering of relative clauses confirm that appositive and restrictive relative clauses are not structurally distinguished in Brazilian Venetan. It is concluded that a process of structural change is responsible for the pattern displayed by Brazilian Venetan, regardless of sociolinguistic factors and conditions in which the language is spoken.

The fact that structural change happens independently of extra-linguistic factors is confirmed by the fact that the two varieties of Venetan considered in the paper are spoken in quite similar conditions. Both of them are spoken in bilingual contexts and underwent contact with another language: Italian in Italy and Portuguese in Brazil. Moreover, both varieties display at least some properties of heritage languages: they are not the dominant languages of the society and they are used exclusively in informal contexts. The phenomenon described in the paper does not depend on transfer from another language and it is not exclusively a matter of processing, unlike what was argued in previous studies on heritage grammars (Montrul 2004, 2008; Pires and Rothman 2007): if that would be the case, similar changes would be expected in both Venetan varieties, contrary to the empirical evidence discussed in this study. The approach presented here aims to account for structural change in syntactic terms, without resorting to extra-linguistic factors. It will be proposed that heritage grammars are autonomous systems and follow predictable paths

of language change; variation can take place in heritage languages, both at an interface level and at a syntactic level alike. Influence from the dominant language or simplification as a strategy to reduce processing costs is possible, but they should not be taken as the only triggers of change in heritage languages.

2. Venetan in Italy and Brazil

This paper considers two varieties of Venetan, an Italo-Romance language spoken in North-Eastern Italy, in its native settings, as well as in a number of other countries, where it is still used by the descendants of the Venetan speaking emigrants that left Italy in the second half of the 19th century. The first variety considered is the Central Venetan variety spoken in Treviso (Italy); this variety will be referred to as Italian Venetan. The second variety considered in the study is the Venetan variety spoken by the community of descendants of Venetan immigrants in Bento Gonçalves (Brazil); this variety will be referred to as Brazilian Venetan.

Both varieties qualify as heritage languages: despite being quite vital in both settings, their use is limited to informal contexts. Venetan is protected by regional laws¹ in Italy, but the language does not have an official recognition nor standardised forms; both Brazilian and Italian Venetan are not the dominant languages of the society. All Venetan speakers in Italy and Brazil are bilingual and are, respectively, dominant in Italian and Brazilian Portuguese. Following Rothman (2009), varieties spoken in these conditions can be considered as heritage languages.

The Syntax of the Subject in Venetan Varieties

The syntax of the two Venetan varieties considered in this paper does not present major differences as far as subject realisation is concerned: both Brazilian and Italian Venetan are continuations of the Venetan varieties spoken in North-Eastern Italy in the 19th century².

Both varieties are pro-drop languages and display two paradigms of subject pronouns. The first paradigm includes the tonic forms, which evolved from Latin oblique forms; the second paradigm includes reduced clitic forms that evolved from Latin nominative personal pronouns. The two paradigms are reported in Table 1.

Table 1. Strong and clitic paradigms of subject pronouns in Venetan.

	1sg	2sg	3sg	1pl	2pl	3pl
Tonic	Mi	Ti	M: Lu F: Ela	M: Nantri F: Nantre	M: Valtri F: Valtre	M: Lori F: Lore
Clitic	-	Te	M: El F: La	-	-	M: I F: Le

Notice that while the tonic paradigm is complete, the clitic paradigm is defective, including only second person singular and third person forms.

The second person singular clitic and the third person forms have a rather different distribution, as noticed by Vanelli (1998) and Benincà (1994). The second person singular clitic is always obligatorily realised with finite verbs, while the third person clitics are generally realised with finite verbs whenever there is no other overt subject available. This difference emerges in particular in the context of doubling³: while a second person singular subject clitic obligatorily doubles a tonic subject pronoun when present (1a), a third person subject clitic can be dropped (1b).

(1) Italian Venetan

- a. Ti te vien.
you you come.2SG
'You are coming.'

- b. Ela (la) vien.
 she she come.3SG
 ‘She is coming’.

Despite this crucial difference in their distribution, all clitic forms have been traditionally analysed as agreement markers realised on T, playing a role comparable to that of verbal morphology (see in particular [Poletto 1993, 2000](#)). While this analysis could be maintained for second person singular, more recent studies have challenged the agreement nature of third person clitics ([Pescarini 2020](#); [Schaefer 2020](#); [Frasson 2021](#)), evidencing their pronominal behaviour. The distribution of Venetan third person subject clitics resembles that of French subject clitics, which have been analysed as reduced pronouns (‘weak pronouns’, in the classification presented in [Cardinaletti and Starke 1999](#)) since the seminal works by [Kayne \(1975, 1983\)](#).

The nature of subject clitics will not be discussed in detail in this paper, but it will be maintained that, based on their distributional properties, an analysis of third person subject clitics as pronouns is to be preferred. This is particularly evident in Brazilian Venetan⁴, with respect to the discourse-related properties of subject clitics. Not only can third persons be dropped when another subject is realised, they can also be dropped in contexts of topic continuation when no other subject is realised, a behaviour that is typical of pronouns rather than of agreement markers.

(2) Brazilian Venetan

La nona (la) ga nasesto en Alemanha. Dopo (la) se ga criado en Italia.
 the grandmother she have.3SG born in Germany then she REFL have.3SG grown in Italy
 ‘My grandmother was born in Germany. Then she grew up in Italy’

In the first part of example (2), the subject DP *la nona* is not doubled by the subject clitic *la*; if subject clitics were obligatory agreement markers realised on T, nothing would prevent the doubling. In the second part of the example, an overt subject clitic *la* is not felicitous in the context of topic continuation. These facts evidence the pronominal nature of subject clitics; this analysis will be adopted in the remainder of the paper. The pronominal nature of third person subject clitics allows to capture their peculiar distribution in relative clauses, as shown in Section 3.

3. Appositive and Restrictive Relative Clauses

A relative clause can be defined as a complex expression contained within another expression. [De Vries \(2001\)](#), following the traditional description of relative clauses, defines a relative clause as clausal modifiers of an NP, called an antecedent or head NP. Consider the following Portuguese example (3):

- (3) Portuguese
 O livro [RC que o Marcos leu].
 the book that the Mark read.PST
 ‘The book that Mark read.’

The relative clause in (3) is introduced by the relative pronoun *que*, which establishes a dependency with the head NP *livro*. Both the head NP and the relative clause are contained inside a DP; in the present analysis, the relative pronoun is taken to be a determiner (see [Bianchi 1999](#); [De Vries 2001](#) in this respect).

Different hypotheses have been proposed to explain the structural relation between relative clauses and their antecedent (the head NP). One hypothesis predicts that the head NP is merged outside the relative clause ([Chomsky 1977](#); [Safir 1986](#); [Browning 1991](#)). An alternative hypothesis predicts that the head NP is raised from inside the relative clause ([Kayne 1994](#); [De Vries 2006](#)). This study adopts a raising approach to relative clauses, namely [De Vries’s \(2006\)](#) promotion analysis, discussed in Section 3.1. In the two types of relative clauses taken into account in this study (appositive and restrictive relative clauses), the head NP is raised to the specifier position of the relative DP. Cross-linguistically,

appositive and restrictive relative clauses are superficially very similar; however, there are differences between the two structures at the interpretive and syntactic levels.

At the interpretive level, a restrictive relative clause restricts the reference of the head NP (4), while an appositive relative clause adds some information about the head NP (5).

(4) Portuguese

As meninas [RRC que tem dez anos] vão para escola
the girls that have.3PL ten years go.3PL for school
'Girls that are ten years old, go to school.'

(5) Portuguese

As meninas, [ARC que tem dez anos], vão para escola
the girls that have.3PL ten years go.3PL for school
'The girls, which are ten years old, go to school.'

The two structures are superficially very similar in Portuguese, but their interpretation is different; the restrictive relative clause limits the reference of the head NP only to the group of girls that are ten years old; the appositive relative clause adds some further specification or information about the girls that go to school, namely the fact that they are ten years old.

Several studies (see, for instance, [Demirdache 1991](#) in this respect) show that the different interpretations depend on a syntactic difference, in that the two structures are attached at different levels inside the DP.

In order to understand how the different interpretations are linked to the different attachment of the two relative clause types, consider example (6): a restrictive relative clause is in the scope of a determiner of a quantifier of the head NP, while an appositive relative clause is not.

(6) Italian

a. Tutti gli studenti [RRC che hanno passato l' esame] sono tornati a casa.
all the students that have.3PL passed the exam are.3PL come.PRT at home
'All the students that passed the exam came back home.'

b. Tutti gli studenti, [ARC che hanno passato l' esame], sono tornati a casa.
all the students that have.3PL passed the exam are.3PL come.PRT at home
'All the students, who passed the exam, came back home.'

In the restrictive relative clause in (6a), *tutti gli* takes scope over both the head NP and the relative clause; in the appositive relative clause (6b), *tutti gli* takes scope over the head NP but not the relative clause, triggering the difference in the interpretation. This difference depends on the fact that the scope of a determiner D is defined by its c-command domain; the appositive relative clause is not in the c-command domain of D, hence not in its scope. In most approaches, the difference in the two structures is ascribed to the different levels to which they are attached inside the DP: both structures are subordinate clauses embedded within a DP and form a constituent with it, but restrictive relative clauses are more deeply embedded, as shown in (7).

(7)

[DP [D NP RRC] ARC]

This structural difference explains the different scope of determiners and quantifiers of the head noun in (6a) and (6b).

The different attachment level also results in a precise relative order of the two structures: appositive relative clauses generally follow restrictive relative clauses.

(8)

a. La signora [RRC che è venuta in negozio], [ARC che è mia zia], ha comprato dei vestiti.
the lady that is come.PRT in shop which is my aunt has bought of.the clothes
'The lady that came to the shop, which is my aunt, bought some clothes.'

- b. *La signora, [ARC che è mia zia], [RRC che è venuta in negozio], ha comprato dei vestiti.
 the lady which is my aunt that is come.PRT in shop has bought of.the clothes
 ‘The lady, which is my aunt, that came to the shop, bought some clothes.’

This property follows from the fact that restrictive relative clauses, unlike appositive ones, are embedded inside the head NP. Restrictive relative clauses are more strictly dependent on the head NP in this respect. The approach presented in Section 3.1 (De Vries 2006) captures this difference between appositive and restrictive relative clauses in structural terms.

3.1. The Promotion Analysis

De Vries (2006) maintains that the two types of relative clauses have a different syntactic behaviour that depends on their attachment level; he proposes that both appositive and restrictive relative clauses have a similar internal structure (9):

(9) De Vries (2006)

- | | | | | | | | | | | | |
|----|-------------|----------|---------|-----|----|---------|---------|-----------------|--------|-----------------|-------------------------|
| a. | Restrictive | relative | clause: | [DP | [D | [CP-REL | [DP-REL | NP _i | [D-REL | RP _i | [NP _i]]]]] |
| b. | Appositive | relative | clause: | [DP | [D | [CP-REL | [DP-REL | Ø _k | [D-REL | RP _k | [(NP _i)]]]] |

In both structures, a relative pronoun (‘RP’) is in D-REL. In restrictive relative clauses, the relative pronoun is co-indexed with the head NP, which further moves to Spec-DP-REL (9a). In appositive relative clauses, the relative pronoun is co-indexed with an abstract null NP in Spec-DP-REL (9b); the head noun, in this case, is implicit and its position is empty. In other words, De Vries (2006) argues that the syntactic derivation of both constructions involves the promotion of an NP, but the relationship between the appositive relative clause and the head noun requires an additional step, because of the presence of a null pronominal element.

As shown in (9a), the head NP of restrictive relative clauses moves to Spec-DP-REL for case checking; the relative pronoun is directly bound by the head NP, which functions as an antecedent for it.

Appositive relative clauses have a parallel but more complex derivation: they are analysed as semi-free relative clauses attached in a coordination phrase CoP headed by a null &-head. The head NP is located in the first conjunct of the CoP, while the appositive relative clause is located in the second conjunct. What is promoted in this case is not the head NP, but a null abstract pronominal head Ø that functions as an antecedent for the relative pronoun.

(11)

[CoP [DP₁ NP_i] [Co' & [DP₂ [D [CP-REL [DP-REL Ø_k [D-REL RP_k [(NP_i)]]]]]]]

The two conjuncts, DP₁ and DP₂, of the CoP have the same referent. The appositive relative clause is contained in the second conjunct and modifies an abstract pronominal head Ø. The appositive relative clause behaves like a free relative clause whose pronominal head is empty. Note that the relative pronoun is syntactically linked to Ø, the abstract pronominal antecedent of the free relative. In turn, Ø refers to the overt head NP in DP₁ in the first conjunct, but this link cannot be established syntactically, as the head NP does not c-command the second conjunct. De Vries (2006) proposes that the antecedent and the referring element in an appositive relative are in a cospecification relationship. This analysis has one immediate advantage: since free relatives are a special type of restrictive relative clause and coordination exists independently of appositive relative clauses, De Vries (2006) concludes that there is no need to assume the existence of an independent type of appositive relative clause. However, the derivation of appositive relative clauses, despite showing similarities with that of restrictive relative clauses, is made more complex by the presence of an abstract Ø and an additional extra-syntactic operation defined as cospecification.

De Vries further notes that appositive relative clauses can marginally contain an NP that functions as an additional internal head, a fact that further supports the indirect link

of the relative clause with the head NP. This additional internal head cannot be realised in restrictive relative clauses, as the same position inside DP-REL in these structures is occupied by the head NP to be raised. An NP may, however, take the position of the implied head noun in a free relative, therefore in an appositive relative clause, too. This additional NP refers to the antecedent, instead of the pronominal element \emptyset .

(12) Dutch (De Vries 2006)

“Jonge sla”, welk gedicht van Rutger Kopland veel gelezen wordt, is herdrukt.
 young lettuce which poem of Rutger Kopland much read.PRT was is reprint.PRT
 “Young Lettuce”, which (poem by Rutger Kopland) is read by many people, has been reprinted.’

(13)

[CoP [DP1 “Jonge sla”] [Co’ & [DP2 [CP-REL [DP-REL \emptyset_k [D-REL welk_k gedicht]]]]]]

Summarising, appositive and restrictive relative clauses have a similar internal structure. However, there are some relevant differences. The attachment of an appositive relative clause is more complex than that of a restrictive relative clause: both structures are embedded into a DP, but in the case of the appositive relative clause, the DP containing it behaves as an apposition which is coordinated to a first DP containing the head NP. Moreover, the promoted element is different in the two types: the head NP is raised in restrictive relative clauses and an abstract null pronominal in appositive relative clauses. Finally, De Vries (2006) showed that an additional internal NP paired with the relative pronoun can be realised in appositive relative clauses.

4. Subject Resumption in Venetan Relative Clauses

The possibility of having an additional element realised in appositive relative clauses has been shown for Venetan in Benincà (1994): a subject clitic, functioning as a resumptive subject pronoun, appears in appositive relative clauses. Similar to the additional anaphoric epithet shown in (12) for Dutch, the additional subject clitic in Venetan does not refer to the empty pronominal head of the relative clause, but to the head noun. Therefore, it is possible to say that Venetan distinguishes appositive from restrictive relative clauses by means of a resumptive pronoun in the first but not in the second structure.

In McCloskey (1990), among others, a resumptive pronoun is defined as a personal pronoun that occupies the position corresponding to the grammatical function of the head noun. In the case under analysis, this is the subject. Being resumptive, this pronoun appears in a position in which a gap would appear in other contexts and is used to restate an antecedent, the head noun.

Note that subject resumption is not very common cross-linguistically, as suggested by Keenan and Comrie (1977): in the hierarchy of accessibility of resumptive pronouns’ antecedents, subjects occupy the leftmost position. Resumptive pronouns, however, are expected to occur more frequently when referring to antecedents in the rightmost positions, because of their greater processing difficulties.

(14) Accessibility hierarchy (Keenan and Comrie 1977)

Subject > Direct object > Indirect object > Oblique > Genitive

McCloskey (1990) defines the fact that a resumptive pronoun generally does not appear in the subject position immediately subjacent to the head noun as the Highest Subject Restriction (McCloskey 1990). In Italian Venetan, this restriction is violated, as a resumptive pronoun is realised precisely in this context.

Appositive and Restrictive Relative Clauses in Brazilian and Italian Venetan

Italian Venetan and Brazilian Venetan display a difference in the use of resumptive subject pronouns in relative clauses. In particular, while Italian Venetan realises a subject clitic in appositives, but not in restrictives, Brazilian Venetan never realises subject clitics, regardless of the relative clause type.

The distribution of subject clitics in appositive and restrictive relative clauses in Italian Venetan was studied by Benincà (1994). She noted that a subject clitic needs to be realised in appositive relative clauses (15), but it is not grammatical in restrictive relative clauses (16).

(15) Italian Venetan

Le tose, che le ga diese ani, le va scuola.
the girls which they have.3PL ten years they go. 3PL school
'The girls, which are ten years old, go to school.'

(16)

Le tose che ga diese ani, le va scuola.
the girls that have.3PL ten years they go.3PL school
'Girls that are ten years old, go to school.'

This situation parallels the one described by De Vries (2006) for Dutch: the subject clitic in Italian Venetan functions as an additional internal head and takes the position of the implied head noun, referring to the external head noun.

(17)

[CoP [DP1 Le tose_i] [Co' & [DP2 [CP-REL [DP-REL Ø_k [D-REL che_k [le_i] ...]]]]]]

This is not possible in restrictive relative clauses, as the NP complement position of D-REL is occupied by the head noun to be raised.

(18)

[DP Le tose_i [D [CP-REL [DP-REL NP_i [D-REL che_i [NP_i/*le_i]]]]]]

The data contained in the Microcontact corpus of Brazilian Venetan⁵ display a different situation. Speakers of Brazilian Venetan do not distinguish the two structures by realising a subject clitic in appositive relative clauses. Both structures are realised without a resumptive pronoun and are therefore distinguished only by intonation.

(19) Le tose, [ARC che ga diese ani], va scuola.
the girls which have.3PL ten years go.3PL school
'The girls, which are ten years old, go to school.'

(20) Le tose [RRC che ga diese ani], va scuola.
the girls that have.3PL ten years go.3PL school
'Girls that are ten years old, go to school.'

The two types of data are, of course, very different: Benincà's data refer specifically to Paduan, a variety of Italian Venetan; the data from the Microcontact corpus come from a semi-guided production task carried out with elderly speakers of Brazilian Venetan in different locations. There are many linguistic and extra-linguistic variables that could have altered the way speakers produced the sentences in the corpus. In order to obtain more comparable data, a short online questionnaire was carried out for the present study, involving speakers of Italian and Brazilian Venetan with comparable sociolinguistic profiles.

5. Data

5.1. Speakers

The short online questionnaire was carried out by speakers of Venetan in Italy and Brazil. The goal of the questionnaire was to check the distribution of resumptive subject pronouns in appositive and restrictive relative clauses in heritage varieties of Venetan in Italy and Brazil. As already discussed in Section 2, the target speakers in both countries are native speakers of Venetan, that are, however, dominant in the contact language: Italian in Italy and Portuguese in Brazil. Recall that, regardless of the country, Venetan speakers qualify as heritage speakers, as per the definition given in Rothman (2009): heritage speakers have some command of their native heritage language, but their competence differs from that of native monolinguals as a consequence of language contact. Hence, both

Brazilian and Italian Venetan qualify as heritage languages, in particular for the younger generations of speakers⁶. The questionnaire was carried out by four speakers of Venetan in Italy and three speakers of Venetan in Brazil, all under the age of 40 and dominant in the contact language. The sociolinguistic profile of the speakers is summarised in Table 2.

Table 2. Sociolinguistic data of the speakers in Italy and Brazil.

Informant	Country	Gender	Age	How Often Do You Speak Venetan during the Day?
1	Italy	Male	28	50%
2	Italy	Female	30	20%
3	Italy	Male	21	50%
4	Brazil	Male	30	20%
5	Italy	Female	30	50%
6	Brazil	Female	27	40%
7	Brazil	Male	30	50%

As already noted in Frasson (Forthcoming), it is important to point out that comparing Brazilian Venetan speakers with a baseline group of speakers or to a homeland monolingual standard of the language is impossible. In the first case, there are no first-generation immigrants left; the parents and grandparents of the Brazilian informants were also born and raised in Brazil and are dominant in Brazilian Portuguese; therefore, the system that was acquired by the informants was already subject to contact with the dominant language. In the second case, Venetan generally qualifies as a heritage language also in Italy, in its native settings: there are no monolingual speakers, and the language is mainly used in informal and familiar contexts.

5.2. Methodology

Informants were provided with three different contexts for each type of relative clause, for a total of six contexts. Each context contained a short explanation of the situation and two possible sentences, among which informants had to choose the one they would use to describe the situation. Summing the answers of all the informants, a total of 24 sentences were analysed for Italian Venetan (12 appositive relative clauses, 12 restrictive relative clauses) and a total of 18 sentences for Brazilian Venetan (9 appositive relative clauses, 9 restrictive relative clauses).

Instructions were given in the dominant language, following Matthewson's (2004) methodology. According to this methodology, an explanation in the target language (Venetan) could potentially provide informants with a clue on which structure they need to use; the use of an unambiguous explanation in a meta-language (Portuguese for the Brazilian informants, Italian for the Italian informants) has the advantage of not influencing the informants in the choice. The two answers to the explanation were given in Venetan. (21) and (22) represent two contexts used in the task, respectively, for appositive and restrictive relative clauses.

(21)

Contesto: Stai parlando alla tua famiglia di una tua amica che vuole comprare una macchina nuova. La tua famiglia non conosce questa tua amica. Nel descrivere la tua amica, decidi di specificare che lei abita a Venezia. Scegli la frase che useresti in questo contesto.

Contexto: Você está conversando com a sua família sobre uma amiga sua que deseja comprar um carro novo. A sua família não conhece essa sua amiga. Ao descrever a sua amiga, você decide especificar que ela mora em Veneza. Escolha a frase que você usaria neste contexto.

[Context: You are telling your family about a friend of yours that wants to buy a new car. Your family does not know your friend. While describing your friend, you decide to specify that she lives in Venice. Choose the sentence you would use in this context.]

a. Me amiga, che la sta Venesia, la vol crompar na machina nova.
my friend that she stay.3SG Venice she want.3SG buy.INF a car new

- b. Me amiga, che sta Venesia, la vol crompar na machina nova.
 my friend that stay.3SG Venice she want.3SG buy.INF a car new
 'My friend, who lives in Venice, wants to buy a new car.'

(22)

Contesto: Stai parlando ai tuoi amici di un gruppo di ragazzi a cui hai chiesto informazioni a Venezia. Due dei ragazzi lavoravano al museo e ti hanno spiegato come arrivare in Piazza San Marco. Nel descrivere la situazione, decidi di dire ai tuoi amici che solo i ragazzi che lavorano al museo ti hanno indicato la strada per piazza San Marco. Scegli la frase che useresti in questo contesto.

Contexto: Você está falando com seus amigos sobre um grupo de jovens para quem você pediu informações em Veneza. Dois dos jovens trabalhavam no museu e disseram para você como chegar à Praça de São Marcos. Ao descrever a situação, você decide contar a seus amigos que apenas os jovens que trabalham no museu indicaram o caminho para a Praça de São Marcos. Escolha a frase que você usaria neste contexto.

[Context: You are telling your friends about a group of young men to whom you asked for directions in Venice. Two of the men worked at the museum and told you how to get to Saint Mark's Square. While describing the situation, you decide to tell your friends that only the men that worked at the museum indicated to you the way to Saint Mark's Square. Choose the sentence you would use in this context.]

- a. I tosi che i lavorava al museo, i me ga dito come rivar in piassa San Marco
 the boys that they worked at.the museum they me have told how arrive.INF in square Saint Mark
 'The boys that worked at the museum told me how to get to Saint Mark's Square.'
- b. I tosi che lavorava al museo, i me ga dito com rivar in piassa San Marco
 the boys that worked at.the museum they me have told how arrive. INF in square Saint Mark
 'The boys that worked at the museum told me how to get to Saint Mark's Square.'

The results of the questionnaire will be discussed in Section 5.3.

5.3. Results

The questionnaire confirmed the situation described by Benincà (1994) for Italian Venetan and the one attested in the Microcontact corpus of Brazilian Venetan. A summary of the answers given by the informants for the short online questionnaire is reported in Figure 1a,b⁷.

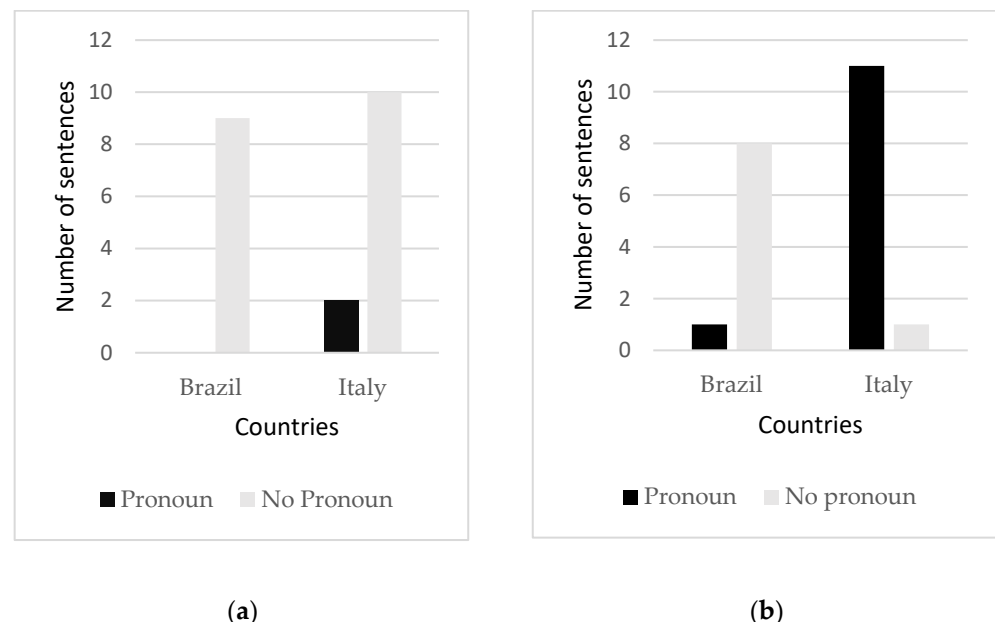


Figure 1. Realisation of resumptive pronouns in relative clauses in Brazilian and Italian Venetan; restrictive (a) and appositive (b) relative clauses. Number of informants: Italian Venetan, $n = 4$; Brazilian Venetan, $n = 3$. Number of tested items: 6 (3 restrictive relative clauses, 3 appositive relative clauses). Sentences analysed in total: Italian Venetan, $n = 24$ (12 appositive relative clauses, 12 restrictive relative clauses); Brazilian Venetan, $n = 18$ (9 appositive relative clauses, 9 restrictive relative clauses).

The results show that all Brazilian informants and 10 out of 12 restrictive relative clauses produced by Italian informants⁸ do not include a resumptive subject clitic, such as (23):

(23) Brazilian and Italian Venetan

Me	amiga	che	sta	Venesia,	la	vol	crompar	na	machina	nova.
my	friend	that	stay.3SG	Venice	she	want.3SG	buy.INF	a	car	new

'My friend that lives in Venice, wants to buy a new car.'

Appositive relative clauses display a contrasting behaviour in the two varieties of Venetan. While Italian Venetan speakers realised 11 out of 12 appositive relative clauses with a resumptive subject clitic (24), Brazilian Venetan speakers realised 8 out of 9 appositive relative clauses without a resumptive subject clitic (25), on par with restrictive relative clauses.

(24) Italian Venetan

Me	amiga,	che	la	sta	Venesia,	la	vol	crompar	na	machina	nova.
my	friend	that	she	stay.3SG	Venice	she	want.3SG	buy.INF	a	car	new

'My friend, who lives in Venice, wants to buy a new car.'

(25) Brazilian Venetan

Me	amiga,	che	sta	Venesia,	la	vol	crompar	na	machina	nova.
my	friend	that	stay.3SG	Venice	she	want.3SG	buy.INF	a	car	new

'My friend, who lives in Venice, wants to buy a new car.'

In sum, the questionnaire confirmed that the two Venetan varieties do not display differences in the realisation of restrictive relative clauses, while they behave differently with respect to subject clitic realisation in appositive relative clauses: while Italian Venetan generally realises a subject clitic, Brazilian Venetan does not.

6. Analysis

In this section, it will be proposed that the difference between the two Venetan varieties is structural: crucially, the two types of relative clauses are not distinguished at a syntactic level in Brazilian Venetan, maintaining however the interpretive difference discussed in Section 3.

In Italian Venetan, appositive and restrictive relative clauses are structurally distinguished because of their attachment in the clause. While restrictive relative clauses are the complement embedded within the DP, appositive relative clauses are analysed as free relative clauses realised in a coordination phrase. A simplified version of this structural difference, addressed in Section 3, is given in (26):

(26)
[CoP [DP DP [RRC]] [Co' & [ARC]]]

This difference implies that the restrictive relative clause is embedded in the DP headed by the head noun, while the appositive relative clause is not. Moreover, the relationship of the appositive relative clause with the head noun is more complex: it does not refer directly to the head noun, but to an abstract null pronoun, which in turn is in a cospecification relationship with the head noun. In this respect, the derivation of appositive relative clauses is then more complex both at the structural and processing level. Appositive relative clauses are structurally more complex in the sense of Roberts and Roussou (2003): an apposition is a form of adjunction, and the presence of adjuncts makes the syntactic structure more complex, in that, an extra segment of structure needs to be added; conversely, restrictive relative clauses are complements of DP, hence no extra structure is added. Moreover, at the level of processing, Sorace (2011) showed that syntactic relationships are less costly to process than interface processes; the relation of cospecification required in the appositive relative clause is a type of discourse linking and as such, it requires additional processing efforts by the speakers⁹.

In the case of Brazilian Venetan, both appositive and restrictive relative clauses display the same structure and do not allow resumptive subject clitics. Appositive relative clauses are analysed as regular restrictive relative clauses, possibly also in view of the similarity between the two structures. The two structures are still distinguished in their interpretation and intonation; however, at the syntactic level, the two structures are not distinguished. This proposal captures the different distribution of subject clitics in the two varieties of Venetan. If appositive and restrictive relative clauses are not structurally different in Brazilian Venetan, in that they both behave as restrictive relative clauses, there is no empty position for the subject clitic to be realised. Recall that restrictive relative clauses have the structure in (27):

(27)
[DP NP_i [D [CP-REL [DP-REL NP_i [D-REL RP_i [NP_i/*SCl_i]]]]]]]

A subject clitic is not allowed in the subject position inside the relative clause as it is already occupied by the head noun, which will be subsequently moved to the specifier of the relative DP.

Further Evidence and Possible Problems for the Analysis of Structural Change

Informants that took the questionnaire were also asked to judge¹⁰ some further sentences in Venetan¹¹, to check for possible factors that could support or contradict my hypothesis on structural change.

The first property is the order of relative clauses in sentences in which both a restrictive and an appositive relative clause are found. As shown in Section 3, appositives follow restrictive relatives. This order depends on the fact that restrictive relative clauses are embedded within the maximal projection of the antecedent DP, while appositive relative clauses are in the second conjunct of a coordination phrase; therefore, restrictive relative clauses cannot be separated from the head NP by an appositive relative clause. This is the case in Italian Venetan:

(28) Italian Venetan

- a. Le tose [RRC che riva ancuò], [ARC che le ga dieze ani], le va scuola.
the girls that arrive.3PL today which they have.3PL ten years they go.3PL school
'The girls that arrive today, that are ten years old, go to school.'
- b. *Le toze, [ARC che le ga dieze ani], [RRC che riva ancuò], le va scuola.
the girls which they have.3PL ten years that arrive.3PL today hey go.3PL school
'The girls, which are ten years old, that arrive today, go to school.'

The Brazilian Venetan informants, however, accepted both orders:

(29) Brazilian Venetan

- a. Le tose [RRC che riva ancuò], [ARC che ga dieze ani], va scuola.
the girls that arrive.3PL today which have.3PL ten years go.3PL school
'The girls that arrive today, that are ten years old, go to school.'
- b. Le toze, [ARC che ga dieze ani], [RRC che riva ancuò], va scuola.
the girls which have.3PL ten years that arrive.3PL today go.3PL school
'The girls, which are ten years old, that arrive today, go to school.'

This fact supports the hypothesis of a structural change in Brazilian Venetan relative clauses: the possibility of inverting the order of the two relative clauses shows that they stand in the same relation with the head NP, in that they are both embedded inside a DP; the ordering in (29b) cannot be accounted for if we maintain that appositive relative clauses are realised in the second conjunct of a coordination phrase. For a comparison, notice that the same inversion of the order of the two types of relative clauses is possible in other heritage Italo-Romance varieties spoken in Brazil, such as Calabrian:

(30) Brazilian Calabrian

- a. I calabresə [RRC ch' avianə venutə prima 'ra guerra], [ARC che nun arlavano italiano].
 the Calabrians that had.3PL come.PRT before the war that not spoke.3PL Italian
 'The Calabrians that had come before the war, who did not speak Italian.'
- b. I calabresə, [ARC che nun parlavano italiano], [RRC ch' avianə venutə prima 'ra guerra].
 the Calabrians that not spoke.3PL Italian that had.3PL come.PRT before the war
 'Calabrians, who did not speak Italian, that had come before the war.'

Examples (30a,b) suggest that the structural change displayed by Brazilian Venetan could be a common process among heritage languages. More data are necessary in order to pursue this hypothesis.

A second property of appositive relative clauses is opacity for variable binding, which was discussed in Demirdache (1991) and De Vries (2006). This opacity depends on the fact that in coordinated structures, such as appositive relative clauses, the first conjunct does not c-command the second conjunct; as a consequence, variable binding in appositive relative clauses is not possible. However, this is possible in restrictive relative clauses. Consider the Italian Venetan examples in (31):

(31) Italian Venetan

- a. Qualcheduni_i ga parlà dela cesa [RRCi che gavea visità].
 somebody have.3PL talk.PRT of.the church that had.3PL visit.PRT
 'Somebody talked about the church that they had visited.'
- b. Qualcheduni_i ga parlà dela Basilicade Sant'Antonio, [ARCⁱ_i/j che i gavea visità]¹².
 somebody have.3PL talk.PRT of.the Basilicaof Saint Anthony that they had.3PL visit.PRT
 Anthony
 'Somebody talked about the Basilica of Saint Anthony, which they had visited.'

As already shown in Section 3, a restrictive relative clause is c-commanded by the head NP; in (31a), the relative clause is also c-commanded by the QP *qualcheduni*, being therefore interpreted under the scope of the quantifier. In the case of the appositive relative clause in (31b), there is no c-command relationship with the antecedent: the relative clause is adjoined in the second conjunct of the CoP. The impossibility of establishing syntactic dependencies holds also for the higher QP *qualcheduni*: the appositive relative clause cannot be interpreted under its scope and the subject clitic *i* can only be referential.

The situation in Brazilian Venetan is different, as speakers accepted both structures. Both appositive and restrictive relative clauses can be interpreted under the scope of the quantifier *qualcheduni*.

(32) Brazilian Venetan

- a. Qualcheduni_i ga parlà sora la cesa [RRCi che gavea visità].
 somebody have.3PL talk.PRT over the church that had.3PL visit.PRT
 'Somebody talked about the church that they had visited.'
- b. Qualcheduni_i ga parlà sora la Basilicade Santo Antonio, [ARCi che gavea visità].
 somebody have.3PL talk.PRT over the Basilicaof Saint Anthony that had.3PL visit.PRT
 'Somebody talked about the Basilica of Saint Anthony, which they had visited.'

The grammaticality of (32b) confirms that the relative clause is embedded in the antecedent DP; only this configuration allows the c-commanding relationship that exists between the relative clause and the quantifier. If appositive relative clauses were realised in a different coordinated conjunct, (32b) would be ungrammatical.

7. Alternative Analyses and Possible Problems with Them

This paper assumes that heritage languages function as independent systems and changes in heritage grammars and follow the general pattern of language variation. In other words, variation attested in heritage grammars do not necessarily depend on the contact language. Changes that go in the direction of a stronger similarity with the dominant

language of heritage speakers can be coincidental, and the influence of the dominant language cannot be generalised.

This section briefly considers two alternatives to this notion, showing that they cannot be applied to the case of Venetan. The potential counterarguments for the present analysis of change consist of the problem of language representation and transfer and the role of processing of discourse-related information. These factors could potentially play a role in the change, but arguments in favour of such alternative causes of change cannot be maintained in the case of relative clauses.

The problem of language representation in bilingual speakers is addressed, among others, in [Hulk and Müller \(2000\)](#). They proposed that bilingual speakers are able to distinguish their two languages from very early on, but this does not exclude the possibility of an influence from one language to the other. This phenomenon, labelled cross-linguistic influence, is most likely to occur if one of the two languages spoken by the bilingual has a syntactic construction that seems to allow for more than one syntactic analysis and the other language contains evidence for only one of these two possible analyses. [Montrul \(2004\)](#) further proposed that, in heritage languages, structures of the dominant language are most likely transferred to the heritage language when the input evidence from the two languages is conflicting. This proposal cannot be applied to the case under analysis for various reasons. First of all, the hypothesis that Venetan and Portuguese provide speakers with conflicting evidence with respect to the realisation of relative clauses is untenable: there is no evidence that Brazilian Portuguese has a simplified (or anyway different) realisation of appositive and relative clauses, therefore it could not trigger the change process in Brazilian Venetan, too.

The question of whether transfer from the dominant language took place could possibly be moved to the distribution of overt subject pronouns. Venetan and Brazilian Portuguese differ in that the first is a consistent null-subject language, while the second is a partial null-subject language and it generally does not allow for third-person referential null subjects (see [Holmberg 2005](#) for an overview); therefore, Venetan speakers receive different information from the two languages. In the case of subject resumption in relative clauses, however, the hypothesis cannot be maintained. In this sense, Brazilian Portuguese should provide speakers with conflicting influence with respect to the realisation of subject pronouns in appositive relative clauses. This is not necessarily the case. [Kato and Nunes \(2009\)](#) showed that subject resumption is possible in appositive relative clauses in non-standard varieties of Brazilian Portuguese:

(33) Brazilian Portuguese (adapted from [Kato and Nunes 2009](#))

Uma	amiga,	que	ela	é	muito	engraçada.
a	friend	that	she	is	very	nice

‘A friend, which is very nice.’

Example (33) shows that in non-standard Brazilian Portuguese, it is possible to have a subject pronoun realised in the relative clause. Recall that in Italian Venetan, this is also the case: a subject clitic is realised in appositive relative clauses. I take both cases to depend on the availability of an empty subject position, which is taken by the head NP in restrictive relative clauses.

A second problem with this hypothesis is represented by the fact that subject resumption is not possible in Italian. Recall that Italian Venetan speakers are all dominant in Italian, so we should expect to see effects of language contact in this variety, too. Italian, however, does not allow for subject resumption in appositive relative clauses:

(34) Italian

Ho	un’	amica,	che	(*lei)	è	molto	simpatica.
have.1SG	a	friend	that	she	is	very	nice

‘I have friend, which is very nice.’

Being in contact with a language that disallows subject resumption in appositive relative clauses, Italian Venetan should favour subject drop in the same contexts, if transfer

from the dominant language happened. However, Italian Venetan realises subject clitics; as shown throughout the paper, Brazilian Venetan, which is spoken in contact with a language that allows for resumptive pronouns, displays subject clitic drop. Therefore, comparing the data from the two Venetan varieties to the dominant languages spoken by Venetan speakers in Italy and Brazil, it is clear that the transfer hypothesis cannot be maintained: the system displayed by Brazilian Venetan cannot be the result of transfer from Brazilian Portuguese, which also displays subject resumption in appositive relative clauses. At the same time, if a change was to be caused by transfer, there is no clear explanation as to why Italian Venetan does not display a simpler system, too.

A second possibility related to the distribution of null and overt subjects regards the problems with the processing of information at the syntax-discourse interface by bilingual speakers. This notion is fundamental in the last version of the interface hypothesis (Sorace 2011), according to which the processing of discourse information is problematic for bilingual speakers of null-subject languages, especially when the second language of such speakers has a different distribution of null subjects or does not allow for null subjects at all. In the case of null subjects, this hypothesis predicts that bilingual speakers extend the use of overt subjects to contexts that would otherwise favour a null subject. This ‘simplification’ depends on the fact that null subjects are referentially more ambiguous and more costly to process, while overt subjects are not ambiguous and therefore easier to process. In the case under analysis, we would expect to see an extension of overt subjects to contexts in which a null subject would be the preferred choice. However, this is not the case in Brazilian Venetan relative clauses. The data does not show an extension of overt subjects, but an extension of null subjects to a context that otherwise requires an overt subject in Italian Venetan. This situation contradicts the studies on the realisation of subjects in bilingual speakers: the extension of null subjects would make the system more ambiguous, instead of decreasing the level of referential ambiguity. It is concluded that, while the processing of pragmatic and discourse-related information needs to be always taken into account while addressing change in contact (as in the case of cospecification described in Section 3), the perspective of structural change also needs to be accounted for, especially in cases in which the change does not directly depend on interface conditions. Moreover, while the contact language can play a role at some levels of language representation, it is not the case that all cases of convergence in heritage languages depend on direct transfer from the dominant language.

The Autonomy of Heritage Grammars

Given the impossibility of reconciling the data presented in this study with previous studies on the role of language representation, transfer and processing, the case of relative clauses in Brazilian Venetan is taken to represent a peculiar case of divergent attainment (Kupisch and Rothman 2018; Pascual y Cabo and Rothman 2012; Polinsky 2018; Putnam and Sánchez 2013). Heritage grammars are not incompletely acquired (as earlier proposed in Montrul 2008), but are internally consistent grammars, organised by systematic principles (Polinsky 2018). Heritage speakers are native speakers of their language, which is complete but may potentially diverge from other varieties of the same language (Kupisch and Rothman 2018).

The case of heritage Venetan varieties, however, requires a further specification of the concept of divergence. As shown in Section 2, Italian Venetan cannot be taken as a prototypical homeland variety and there are no baseline speakers of Venetan in Brazil to identify the starting point of divergent properties in the structure of relative clauses. Moreover, both varieties underwent contact with another language, even though there is no direct effect of language contact on the structure of relative clauses. In this situation, it does not seem the case that Brazilian Venetan ‘diverged’ from Italian Venetan; it is rather the case that the two varieties followed autonomous paths of development which led to the establishment of different structural properties. Both varieties are spoken by unbalanced bilinguals that are dominant in another language (Italian in Italy, Portuguese in Brazil): it

is therefore not possible to confirm that the simpler structure of Brazilian Venetan is the result of a simplification process triggered by language contact, as such process should be expected in Italian Venetan, too. In conclusion, the reduction of structural complexity attested in Brazilian Venetan is better captured as a diachronic process of structural change, in which simpler syntactic structures are preferred to more complex ones, as shown in Roberts and Roussou (2003)¹³.

8. Conclusions

This paper discussed the realisation of appositive and restrictive relative clauses in two varieties of the same language: Italian Venetan and Brazilian Venetan. The final goal of the paper was to test the possibility of accounting for heritage language change in syntactic terms, excluding possible sociolinguistic or interface issues. It was shown that what could superficially be ascribed to a difference in the availability of resumptive pronouns in appositive relative clauses in the two varieties requires a more detailed analysis of structural change. This is shown by a number of facts related to the scope and ordering of relative clauses. It was proposed that the different interpretations of appositive and restrictive relative clauses are maintained in both Venetan varieties, while the difference between them can be interpreted in purely structural terms.

Brazilian Venetan underwent a process of structural change similar to the diachronic process described in Roberts and Roussou (2003): appositive relative clauses, being adjuncts, are structurally more complex than complements, being, therefore, more prone to change. Such complexity is not the result of transfer from the dominant language of Brazilian Venetan speakers and can be only partially ascribed to pure processing factors: Brazilian Portuguese does not display a similar phenomenon and it was not possible to identify difficulties in the processing of the structures under analysis. It was concluded that in the case under analysis, the change is structural: such change does not require a special analysis, as it conforms to general diachronic syntactic change. Brazilian Venetan grammar followed an autonomous development along a prototypical diachronic path. The case of Venetan varieties shows that heritage grammars are autonomous systems and follow predictable paths of language variation, as such, changes may take place at an interface and at a syntactic level alike. This does not exclude possible influences from the dominant language, which, however, do not need to be taken as the only triggers of change.

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Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Publicly available datasets (Sections 2–4) were analyzed in this study. This data can be found here: <http://microcontact.hum.uu.nl/#home> (accessed on 12 January 2022). The data presented in Section 5 are available on request from the corresponding author. The data are not publicly available due to privacy requirements.

Conflicts of Interest: The author declares no conflict of interest.

Notes

¹ Regional law number 8, 13 April 2007 on the protection, enhancement and promotion of the linguistic and cultural heritage of the region of Veneto: <https://bur.regione.veneto.it/BurvServices/pubblica/DettaglioLegge.aspx?id=196722> (accessed on 13 February 2022).

² Informants included in this study carried out a sociolinguistic questionnaire, aiming at showing that the Venetan variety they speak originated in the same Central Venetan area in north-eastern Italy.

- 3 For a complete discussion of subject doubling in Venetan and other northern Italo-Romance varieties, the reader can refer to Poletto (2000) and Poletto and Tortora (2016). These studies discuss the conditions in which a subject clitic may or may not appear in a doubling construction, such as the position of the subject (preverbal or postverbal) and the type of subject (null, lexical, pronominal, quantified).
- 4 This study refers specifically to speakers in Brazil, whose heritage variety of Venetan aligns with Paduan as far as the realisation of subject clitics and relative clauses are concerned. In other words, the selected heritage speakers in Brazil are the descendants of immigrants from the Italian province of Padua and neighbouring areas.
- 5 The data is available on the Microcontact Atlas: <https://microcontact.hum.uu.nl/#home> (accessed on 3 January 2022).
- 6 See Casalicchio and Frasson (2018) for an analysis of different fluency levels in different generations of Venetan speakers in Italy.
- 7 An anonymous reviewer asked whether the different patterns evidenced in Figure 1a,b could be linked to different speaker-profiles. While I assume this is always a possibility, this study does aim to show how inter-speaker variation affects language change; it rather aims to show how change in heritage languages can be analysed at the level of syntactic structure.
- 8 Recall that, regardless of the variety, Venetan is a non-standardised language, used only in informal and colloquial environments. Given the lack of a standard variety and the fact that it is not possible to receive formal education in Venetan, some degree of variation is inevitable in the results. I do not take the small number of contrasting answers to be significant in this respect.
- 9 It is possible to encode cospecification in syntax too, following Miyagawa's (2010) Strong Uniformity Principle: discourse features play a parallel role in the syntactic derivation to that played by ϕ -features, participating in the same types of dependencies. In the case of appositive relative clauses, however, further research is needed to define the nature of the discourse feature involved in cospecification and to check for possible syntactic effects of such feature. Even if it were possible to encode the relationship between the abstract pronominal and the head noun in syntax, it would still be necessary to resort to some interface mechanism along the lines of Context Scanning (Sigurðsson 2014) to explain how the discourse feature is assigned to specific lexical items. The processing of discourse information involved in linking in appositive relative clauses would remain more costly than the syntactic dependency established in restrictive relative clauses.
- 10 An anonymous reviewer expressed some doubts on the validity of the tests used in this section to support the analysis carried out in the present study. In particular, the reviewer's concerns regarded the semantic interpretation of examples (29) and (30) and the variable binding test in (32). A better way to test these properties is a matter of current investigation.
- 11 These judgments were asked informally and were not part of the original questionnaire on subject clitic realisation.
- 12 Notice that in some varieties of Italian Venetan, the same appositive relative clause improves significantly if the subject clitic is dropped:
- (i)
- | | | | | | | | | | | |
|---|--------------------------|-----|--------|--------|-------------|---------------|-------------------|------|-------|---------|
| # | Qualcheduni _i | ga | parlà | dela | Basilica de | Sant'Antonio, | [ARC _i | che | gavea | visità] |
| | somebody | has | talked | of.the | Basilica of | Saint Anthony | | that | had | visited |
- 'Somebody talked about the Basilica of Saint Anthony, which they had visited.'
- Without the subject clitic, the appositive relative clause can marginally be interpreted under the scope of the quantifier. This fact may depend on the specific referential or argumental properties of the subject pronoun or, alternatively, on the fact that the process of structural change is incipient in Italian Venetan too. This is a question for future research.
- 13 An anonymous reviewer suggested an alternative proposal, referring to the "adjunct first" hypothesis. According to this hypothesis, language acquisition proceeds from adjuncts to complements (Tavakolian 1978), hence making adjuncts simpler and more economical than complements. In the data presented in the current study, however, the data does not seem to confirm such hypothesis.

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