# Parallel changes in pronominal clitic systems: A view from heritage Romance and Slavic

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# **Chapter Abstract**

This study discusses the structure and the properties of pronominal clitics from the perspective of heritage Romance and Slavic languages, focussing in particular on changes in clitic paradigms of heritage Venetan and Bulgarian. While the former displays a peculiar distribution of subject clitics, the latter displays a parallel behaviour for object clitics. The two types of clitics are clearly very different, both in terms of grammatical function as well as placement restrictions, but they allow for parallel analyses in heritage varieties of the two languages. The behaviour of these clitics challenges previous models of structural deficiency of functional words, allowing for an analysis that takes into account predictable change patterns in heritage languages. The final goal of the present contribution is to propose a theoretical framework for the analysis of clitics in heritage languages, with respect to their structural and distributional properties.

Chapter Keywords: clitics, heritage language, syntax, pronouns, subject clitics, object clitics

#### 1. Introduction

The study of changes in the nominal domain has been the focus of a wide number of experimental and theoretical studies on bilingual and heritage speakers. The main contributions of these studies consist in the formulation of hypotheses and principles that have been tested on a variety of languages and phenomena in the past two decades. It is the case of the Interface Hypothesis (Sorace and Filiaci 2006), as well as principles such as cross-linguistic influence (Hulk and Muller 2000), incomplete acquisition (Montrul 2008) and competence divergence (Pires and Rothman 2007). The discussion revolving around such principles and hypotheses led to the establishment of predictable patterns of change, which drive the study of properties related to the overt realisation of the subject and objects, as well as case, gender and number in heritage languages. Conversely, the study of pronominal clitics in heritage languages has received far less attention and it is not clear whether the same change patterns can be identified in clitic systems. This chapter aims at formulating generalisations on the behaviour of heritage language clitics and analysing their structural and distributional properties. The present chapter also suggests that clitics display intriguing patterns of language change that crucially contribute to the broader discussion on the structure of heritage grammars.

The study discusses the structure and the properties of pronominal clitics from the perspective of heritage Romance and Slavic languages, focussing in particular on changes in clitic paradigms of heritage Venetan and Bulgarian. While the former displays a peculiar distribution of subject clitics, the latter displays a parallel behaviour for object clitics. The two types of clitics are clearly very different, both in terms of grammatical function as well as placement restrictions. However, both Venetan subject clitics and Bulgarian object clitics were analysed as agreement markers, based on their distribution. In this study, it will be shown that the same types of clitics in heritage varieties of Bulgarian and Venetan behave in a way that

cannot be captured by previous approaches: in heritage varieties, these clitics cannot be considered agreement-like elements, but true arguments of the verb. Besides, they do not display clear clitic properties, as their distribution resembles more closely that of strong pronouns. In particular, the behaviour of these clitics challenges previous models of structural deficiency of functional words such as the one presented in Cardinaletti and Starke (1999), according to which clitics lack parallel sets of syntactic, morphological, prosodic, phonological and semantic properties and are therefore analysed as reduced elements with no internal structure. The picture is complicated by the fact that object clitics in heritage Venetan do not display the same properties as subject clitics in the same variety, nor as object clitics in heritage Bulgarian; they rather display a more predictable clitic behaviour. The goal of such comparisons and of the analysis proposed in this chapter is to draw the attention to the complex patterns of language change displayed by clitics in heritage languages. Section 2 presents the aspects of Romance and Slavic clitics that will be relevant in the discussion of heritage languages: I will first discuss previous approaches to the structure and role of clitics, moving to placement properties of clitics, in particular clitic climbing. Section 3 discusses data from heritage Venetan and Bulgarian, showing a change in the complex set of constraints ruling the distribution of clitics in non-heritage varieties of the languages. In section 4, this change will be attributed to the argumental or agreement-like nature of clitics, in that only the latter allow for cliticisation in heritage languages; I also reflect on the reasons behind the change, providing a possible explanation consistent with previous analyses of heritage language change. Section 5 concludes the chapter.

#### 2. Pronominal clitics in Romance and Slavic

## 2.1 Cross-linguistic parallels among different types of clitics

Defining a clitic is a challenging task and different theoretical analyses were proposed for them in the generative tradition. The nature of clitics is ambiguous: when we talk about a clitic, we generally refer to an element with special phonological, morphological and syntactic properties. However, not all of these properties need to be present in a given element at the same time, in order to define it as a clitic.

A common classification, firstly introduced in Zwicky (1977) distinguishes "simple" and "special" clitics on the basis of their positioning inside a sentence: while simple clitics occur in positions that are predictable according to the grammar of a given language, the position of special clitics in a sentence is constrained by special rules that do not apply to non-clitic elements in a given language.

Pronominal clitics in Romance and Slavic belong to the class of special clitics, in that they are reduced counterparts of tonic pronouns and do not occur in the same position and contexts as their corresponding non-clitic forms, a phenomenon defined as clitic climbing. One may be tempted to end the discussion on common properties of Romance and Slavic clitics with their common "special" behaviour: in section 2.3 it will be shown that there are differences in uses and distribution that challenge a parallel analysis of Romance and Slavic clitics; however, it is possible to identify more common properties that will become particularly relevant in the discussion of heritage languages in section 3.

In view of the complications posed by the classification of different properties connected to clitics, the literature has somehow eluded the possibility of establishing a real category of clitic elements. The literature rather revolves around the possible, but not

necessary, properties that an element may encode, in order to be defined as a clitic. In the remainder of this section, I discuss some of these properties.

At the phonological and prosodic level, clitics are known to be generally unstressed and require a stressed host word to attach to. This property can be formally defined as a lack of word-like autonomy connected to the lack of stress and prosodic prominence. Clitics can however occasionally bear stress, as in the Macedonian example in (1):

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(1) Macedonian (Spencer and Luís 2012)
Ne mu gò dade
NEG to.him= it= gave.3SG
'He did not gave it to him'.
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The accusative clitic *go* is stressed because stress in Macedonian is always on the antepenultimate syllable; this means that the element in the antepenultimate position will bear primary stress, regardless of its clitic nature. A somehow similar process is represented by stress shift in some southern Italo-Romance languages, such as Neapolitan (2):

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(2) Neapolitan (Pescarini 2022)
Narra=mì=la
Tell.IMP=to.me=it
'Tell me that.'
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The dative clitic *mi* in (2) is stressed because it is incorporated in the penultimate-stress pattern of the word (Spencer and Luís 2012). In view of these facts, a better way to formally define phonological and prosodic properties of clitics is saying that they lack inherent stress and prosodic prominence, but can be stressed in certain environments according to language-specific rules. This seems to apply to both Romance and Slavic clitics, as shown in (1) and (2).

Likewise, it is possible to draw some parallels between Slavic and Romance clitics at the morphological level. Zwicky and Pullum (1983) established criteria to distinguish clitics from affixes, the most important of which regards host selectivity: clitics exhibit a lower degree of selection with respect to the category of their hosts while affixes exhibit a higher degree of selection with respect to their stems. Thus, while affixes usually attach to words of a single class, clitics can attach to words of different classes. In section 2.3, I will come back to this point and show that only a partial parallel on host selectivity can be drawn cross-linguistically, in that clitics in some Slavic languages show a very low sensitivity to host category (second position clitics), while other Slavic languages pattern with Romance imposing a higher degree of selection on clitics (verbal clitics). A more intriguing parallel regards a second criterium established in Zwicky and Pullum (1983): morphophonological idiosyncrasies are characteristic of affixed words but not of clitic clusters. This means that alternations in the form that result from combination rules rather than regular phonological processes are typical of affixes but not of clitics. Italian and Serbian clitic clusters challenge this criterium in that single clitics may appear in different phonological forms when they are combined with other clitics in clusters:

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(3) Italian
a. Ti compro la pizza.
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to.you= buy.1sG the pizza 'I am buying you pizza.'
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b. Te/*ti la compro.to.you= her= buy.1SG'I am buying it.'
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(4) Serbiana. On je vidi.he =her.ACC see.3SG'He sees her.'

b. On ju/\*je je video. he =her.ACC =is seen.3sgm 'He saw her.'

The Italian dative clitic ti (3a) is realised as te when followed by an accusative clitic (3b). The Serbian feminine accusative clitic je (4a) is realised as ju when followed by an identical auxiliary clitic je (4b).

While it was possible to partially identify parallels between phonological, prosodic and morphological properties of Romance and Slavic clitics, the task of comparing their syntax is more complex and will be discussed throughout this paper with specific reference to clitics in heritage Romance and Slavic languages.

### 2.2. Structural properties of Romance and Slavic clitics

As introduced in section 2.1, Romance and Slavic clitics have special properties, in that they tend to appear in dedicated positions inside the sentence and, when more clitics appears inside the same sentence, they are generally ordered in clusters. However, the most relevant feature of clitics addressed in this study is their ambiguous behaviour as arguments or agreement-like morphemes. Chomsky (1994) defines clitics as elements that are at the same time phrases and heads and therefore display an ambiguous XP/X<sup>0</sup> status<sup>1</sup>. This ambiguity is reflected in the (im)possibility for clitics to be in complementary distribution with their non-clitic counterparts or to co-occur with them in doubling constructions. The present section aims to show how this distinction is reflected in the behaviour of pronominal clitics in different Romance and Slavic languages, focusing in particular on Venetan subject and object clitics and Bulgarian object clitics.

<sup>&</sup>lt;sup>1</sup> The application of Chomsky's definition to clitics is discussed in Bošković (2002), where Macedonian and Bulgarian clitics are defined as "non-branching" elements. This structural representation, which is assumed to hold cross-linguistically, builds on Chomsky's proposal that a phrase structure should allow for the existence of elements that are at the same time phrases and heads. The idea is formally captured for clitics by assuming that they do not head XPs, but are rather realised in a SpecXP, while the head X of XP is null. This way, it is X rather than the clitic that takes a complement, so the clitic remains an ambiguous non-branching XP/X<sup>0</sup> element. Notice also that Bošković's analysis is not compatible with some of the examples by Cardinaletti and Starke (1999) discussed in section 2.2, supporting the idea that different clitics should receive separate dedicated analyses.

The discussion presented in this section builds on Uriagereka's (1995) proposal of a precise categorisation and analysis of Romance clitics; he suggests that cliticisation is not a unitary process obeying a single principle and therefore different types of clitics may belong to specific paradigms and allow for dedicated analyses. He motivates such difference with the diachronic evidence that some Romance pronominal clitics (namely first and second person accusative clitics) derive directly from Latin personal pronouns, while others (third person accusative clitics) derive from reduced forms of Latin demonstratives. Uriagereka shows that this difference is synchronically relevant in that contemporary Romance clitics have different structures and different constraints on movement apply to specific types of clitics. In this work I am mainly concerned with the structure of clitics: in Uriagereka's approach, first and second person clitics in Romance are defined as "strong clitics", which are phrasal elements, while third person clitics are "weak clitics", whose structure is smaller than that of a phrase. This structural difference is reflected in the contexts in which two clitics co-occur in the same sentence: two strong clitics cannot co-occur, but a strong clitic can co-occur with a weak clitic.

Uriagereka captures this phenomenon as a restriction on doubling: while weak third person clitics necessarily double a strong pronoun, the same does not hold for strong clitics, which generally disallow doubling. This behaviour depends on the different structure of strong and weak clitics: while strong clitics are XP-like elements, weak clitics are X-like elements. This idea was further developed in Bleam (1999), who proposes a more fine-grained clitic classification, exemplified by different doubling contexts with dative and accusative third person clitics: Romance accusative clitics, unlike dative clitics, display specificity effects that constrain the contexts in which they can double a DP. Bleam generalises that some clitics can be analysed are determiners, as they realise a D layer in their structure, where specificity is encoded; conversely, other clitics do not encode specificity and are therefore better analysed as agreement markers. I will not discuss the details of Uriagereka's and Bleam's analyses, but I will maintain that clitics may belong to different classes in view of the type of features they encode; this approach suggests that the presence of certain features in a clitic reflects on their structure and their ability to double arguments or, conversely, behave as arguments themselves. The crucial point in this respect is that clitics, despite being often analysed as representing the same class of elements, may correspond to quite different syntactic representations. In the remainder of this section, I will show how the different syntactic representations discussed in Uriagereka (1995) and Bleam (1999) affect doubling contexts in Romance and Slavic languages.

Among Slavic languages, Slovenian accusative pronominal clitics, on the one hand, have an argumental function, in that they cannot co-occur with their strong counterparts (5); Macedonian object pronominal clitics, on the other hand, double strong pronouns and are therefore more properly defined as affixes (6). The same distinction emerges in Romance, if we consider object clitics in Italian, where clitics appear in complementary distribution with strong object pronouns (7), and Spanish, where clitics double strong object pronouns (8).

### (5) Slovenian

Ona me je pogledala (\*mene). she =me.ACC =is look.PRT me.ACC 'She looked at me.'

## (6) Macedonian

Taa me pogledna mene. she me= look.PST me 'She looked at me.'

(7) Italian
Lei mi ha guardato (\*a me).
she me= has look.PRT to me
'She looked at me.'

(8) Spanish
Ella me miró a mí.
she me= look.PST to me
'She looked at me.'

Examples 5-8 show a quite striking difference in the distribution of clitics: on the one hand, Slovenian and Italian object clitics act as arguments; on the other hand, Macedonian and Spanish clitics double full pronominal arguments of the verb. Despite this fact, all clitics in examples 5-8 are often taken to represent the same class of elements. In section 2.2.1 I show how the distinction between argumental and agreement-like clitics challenges the influential classification of pronouns by Cardinaletti and Starke (1999).

# 2.2.1 Two possible challenges for structural deficiency

In the proposal by Cardinaletti and Starke (1999) of a tripartite model of pronominal structural deficiency, Slavic and Romance clitics are analysed as the same type of element. In this proposal, authors assume a strong correspondence of deficiency at all levels of linguistic analysis: the two classes of deficient pronouns (weak and clitic) are defined in view of the amount of syntactic, morphological, phonological and semantic properties they lack with respect to the class of strong pronouns. In other words, the authors claim that, in all respects, clitics represent proper subsets of the syntactic structure of strong (and weak) pronouns, which reflects in the lack of one or more morphemes, of stress and of certain interpretive properties. An alternative way of understanding this proposal is to assume that each morpheme corresponds to a head in syntax, hence strong pronouns realise more heads in view of their more complex morphological make-up. At the same time, clitics, as morphologically and syntactically deficient elements, lack the morpheme corresponding to the highest functional projection in syntax, the one associated with the semantic notions of reference and interpretation. Cardinaletti and Starke (1999) bring the examples of accusative masculine singular pronouns in Slovak (jeho) and Serbian (njega) and their clitic counterparts (respectively ho and ga) to exemplify this correspondence between morphological, syntactic and semantic deficiency.

(9) (adapted from Cardinaletti and Starke 1999) [xp je- [x ho]] [xp nje- [x ga]] Summarising Cardinaletti and Starke's proposal, unlike the clitics *ho* and *ga*, the strong pronouns *jeho* and *njega* realise the extra morphemes *je*- and *nje*-, which are syntactically realised in a specifier position. As predicted by their account of structural deficiency, the presence of an extra morpheme implies that strong pronouns are phrasal, while clitics lack the upper layer in the structure, corresponding to the extra morphemes *je*- and *nje*- at a morphological level. The fact that such extra morpheme is realised higher in the structure of the pronoun also means that strong pronouns have access to a number of possible interpretations that are excluded for clitics. At the same time, the head nature of clitics restricts their distribution and possible interpretations. The authors define this aspect as a semantic asymmetry: clitics must have a prominent discourse antecedent, while strong pronouns can introduce or refer to a non-prominent discourse antecedent<sup>2</sup>. Even though Cardinaletti and Starke's model elegantly captures the correspondence of clitic behaviour at various levels of linguistic analysis, the remainder of this section will present two potential challenges for their approach.

A first problem with the structural deficiency analysis is represented by the fact that, while it holds quite strongly for third person pronouns like *jeho* and *njega*, it is not clear how first and second person singular and plural pronouns in Slavic fit this model. Consider the Slovenian first person singular pronoun *mene*, in example (10), compared to its clitic counterpart *me*. Following Cardinaletti and Starke, it should have the following structure:

(10) 
$$\begin{bmatrix} x_P me - [x ne] \end{bmatrix}$$

(10) is clearly problematic for an analysis in which clitics lack the upper portion of the structure, as the first person singular clitic *me* in Slovenian seems to realise precisely the morpheme located in the specifier position<sup>3</sup>. This is clearly incompatible with Cardinaletti and Starke's proposal (but compatible with Uriagereka 1995 and Bleam 1999), as it implies that the clitic realises a portion of structure encoded in the highest structural level, the one that should be present in strong pronouns and absent in clitics. Here, the lower layer, the clitic one in Cardinaletti and Starke's model, is the one that is missing.

This structural mismatch directly correlates with a second problem in Cardinaletti and Starke's model, regarding the interpretation of clitics in Slovenian and Italian, on the one hand, and Macedonian and Spanish, on the other (examples 5-8). Based on the data discussed so far, Macedonian and Spanish *me* in examples (6) and (8) are correctly predicted to lack semantic

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<sup>&</sup>lt;sup>2</sup> In this approach, the semantic asymmetry also reflects the general impossibility for clitics to be stressed and used in ostension. I refer to Cardinaletti and Starke (1999) for possible exceptions to this rule.

<sup>&</sup>lt;sup>3</sup> Slovenian poses two further challenges to Cardinaletti and Starke's model. They will not be discussed in this work but it is worth briefly addressing them here:

<sup>-</sup> first and second person dual and plural pronouns distinguish clitic and strong forms only because the former, but not the latter lacks stress. However, strong and clitic forms display the same type of morphological complexity: the dual *naju* ('the two of us') and plural *nas* ('us') clitic forms are structurally identical to their strong counterparts *naju* and *nas*;

<sup>-</sup> aside of strong *njega* and clitic *ga* (which parallel the Serbian example in 9), third person singular masculine can be realized as *-nj*, a form that cliticises onto prepositions and formally represents a reduced version of the "specifier" morpheme.

These issues further complicate the strict correspondence of sets of phonological, prosodic, morphological and syntactic properties that should be lacked in clitics, in that it seems that these clitics lack only stress or represent another type of deficiency.

information about the referent: they are simple agreement markers and they double the phifeatures of the strong pronoun, which represents the real argument and, as such, carries the referential information. Slovenian me (5) and Italian mi (7), however, do not double a strong pronoun; that is to say, they represent arguments of the verb and have to encode the information relative to the referent. Since they are assumed to lack the upper portion of the structure, the one encoding semantic information about interpretation, it is not clear where such information is realised and how. Again, while the case of Slovenian and Italian clitics can be captured in a model that allows for more clitic classes (Uriagereka 1995), it is not clear how Cardinaletti and Starke's model captures the nature of argumental clitics: if D encodes information about the semantic interpretation of a pronoun, it seems unlikely that it can also host agreement features: they would have to be realised lower in the structure of the pronoun, which is, however, not morphologically realised. In the case of Macedonian and Spanish, this also leads to the wrong conclusion that agreement features are realised in a specifier position and the morpheme that is lacked in the first person clitic corresponds to the head of third person clitics.

This section aimed at showing potential problems with our current understanding of classes of pronouns, providing evidence that clitics may represent different types of deficiency, even though they superficially allow for parallel analyses: the strict correspondence between morphological, syntactic and semantic deficiency proposed by Cardinaletti and Starke (1999) cannot be a general property of all clitics. Before discussing how heritage languages can shed light on this matter, I will briefly discuss different placement properties of clitics.

# 2.3. Clitic placement in Romance and Slavic

Aside from their status as arguments or agreement markers, the literature focussed on the fact that clitics are generally placed in a position that does not correspond to their base thematic position inside the sentence. This is shown in (11):

(11) Italian Arianna la /\*Stefania apprezza

\*la / Stefania

Arianna her= Stefania appreciate.3sg her= Stefania

'Arianna appreciates her/Stefania.'

The fact that the clitic la in (11) targets a position that is different from that of a lexical object is known as clitic climbing and it is generally assumed to be a defining property of clitics. In section 3, I will also show that the availability of clitic climbing in heritage languages obeys different rules.

In this section, I will show that clitic climbing is a quite complex phenomenon even in non-heritage varieties, in that it allows for a more fine-grained analysis than what is shown in (11). In Slavic, it is possible to draw a distinction between clitics of the Serbian and Slovenian type (second position clitics) and clitics of the Bulgarian and Macedonian type (verbal clitics). The present work will focus on verbal clitics of the Bulgarian type, as they allow for a better comparison with Romance verbal clitics. However, the placement of second position clitics is briefly addressed in this section.

Second position clitics can be defined as a special type of clitics, in that they obey the Wackernagel rule, a constraint that forces them to appear in the second position of a certain domain (which can be defined in phonological or syntactic terms, according to the different

analyses proposed for the phenomenon; see Bošković 2001 for an overview). Consider, for instance, the Serbian examples in (12):

- (12) Serbian
- a. Angelina je uvek prati. Angelina =her.ACC always follow.3SG
- b. \*Uvek Angelina je prati. always Angelina =her.ACC follow.3SG
- c. Uvek je prati Angelina. always =her.ACC follow.3SG Angelina
- d. Prati je uvek Angelina. follow.3SG =her.ACC always Angelina
- e. \*Je prati uvek Angelina. =her.ACC follow.3sG always Angelina 'Angelina is always following her.'

The accusative clitic *je* always needs to be realised after the first constituent, regardless of its category. A clitic realised after the second position as in (12b) or in the first position as in (12e) is not acceptable.

Pronominal clitics in Bulgarian are quite different in that they obey the Tobler-Mussafia law, a constraint that disallows clitics in the first position because of their phonologically weak nature. Bulgarian clitics have a higher degree of host selectivity, in that they need to attach to a verb. Pronominal clitics are generally proclitic to the verb (13a-d) and do not need to appear in the second position (Halpern 1995, Bošković 2001); the only restriction on their placement is represented by the impossibility of appearing in the first clausal position (13e).

- (13) (Bulgarian; Bošković 2001: 5)
- a. Petko mi go dade včera. Petko to.me= it= give.PST yesterday
- b. Včera Petko mi go dade. yesterday Petko to.me= it= give.PST
- c. Včera mi go dade Petko. yesterday to.me= it= give.PST Petko
- d. Dade mi go Petko včera. give.PST =to.me =it Petko yesterday
- e. \*Mi go dade Petko včera. to.me= it= give.PST Petko yesterday 'Petko gave it to me yesterday.'

Examples in (13) show that Bulgarian object clitic *go* is normally proclitic to the verb, expect for the case in which this would leave the clitic in the first position (13e): in this context, enclisis is triggered, resulting in a structure like the one in (13d). Different analyses for Serbian clitics on the one hand and Bulgarian clitics on the other are proposed in Kings and Rudin (2005). While the Serbian second position clitics are arguments of the verb, Bulgarian clitics are better analysed as agreement markers. The main evidence in this respect comes from doubling: unlike Serbian accusative clitics, Bulgarian object clitics are involved in doubling constructions: rather than appearing in complementary distribution with strong pronouns and lexical objects, a clitic can co-occur with an associate nominal, which represents the real argument of the verb.

A similar analysis was proposed for subject clitics in northern Italo-Romance varieties. Starting from Brandi and Cordin (1981) and Rizzi (1986), it was shown that subject clitics in northern Italo-Romance varieties, such as Venetan, have peculiar placement properties that distinguish them from clitic subject pronouns of the French type: these properties regard the placement of subject clitics with respect to preverbal negation (14) and their placement in coordinated structures (15).

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(14)
a. Ils
              savaient pas parler
                                      de certaines choises.
        ne
  they= NEG= know.PST NEG speak.INF of certain things
b. No i
             savea
                      parlar
                                 de serte robe.
  NEG they= know.PST speak.INF of certain things
'They did not know how to speak about certain things.'
(15)
a. Elle chante et danse.
 she= sing.3sG and dance.3sG
b. La canta
                          bala.
                   la
                e
  she= sing.3sG and she= dance.3sG
'She is singing and dancing.'
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The French subject pronoun in (14a) is realised before preverbal negation ne, while the Venetan subject clitic i is realised after preverbal negation no. In the coordination context in (15), the French subject pronoun elle is realised in the first coordinated conjunct, while the Venetan subject clitic la is repeated in both coordinated conjuncts. On the basis of such distributional facts, Venetan subject clitics have been analysed as the reflex of quite different structural properties with respect to their French counterparts. The analysis presented in Brandi and Cordin (1981) and Rizzi (1986), as well as subsequent studies (see in particular Benincà 1994, Poletto 2000, Roberts 2010) defines subject clitics of the Venetan type as heads that cliticise on the verb, rather than phrasal pronouns. Conversely, Rizzi's study shows that French subject clitics are real phrasal arguments of the verb and their clitic nature is only a phonological property. Subject clitics of the Venetan type are rather part of the inflection, on par with

agreement morphology on the verb, and are therefore agreement markers doubling any type of subject (overt or null).

In conclusion, both Bulgarian object clitics and Venetan subject clitics have been analysed as agreement-like heads, rather than argument clitics (see Franks and Rudin 2005 on Bulgarian; Rizzi 1986, Poletto 2000, Roberts 2010 on Venetan<sup>4</sup>) because of their peculiar distribution and their participation in doubling constructions. In the remainder of the chapter, I will show how these properties are affected in heritage varieties of Venetan and Bulgarian.

## 3. Clitics in bilingual and heritage speakers

In this section, I will show how structural and distributional properties of Venetan and Bulgarian clitics are affected in heritage varieties of these languages. Even though the literature on language change has touched upon the realisation of clitics in bilingual and heritage speakers, the number of studies dealing with this question is still scarce. Besides, the majority of the studies on clitics mainly focussed on cross-linguistic influence and processing costs at the interface level, whereas the question of how the structure and syntactic distribution of clitics are affected in bilingual speakers of heritage languages has somehow been eluded so far.

A study by Pérez-Leroux et al. (2011), for instance, shows that bilingual Spanish-English children tend to avoid proclitic (preverbal) objects and extend the use of enclitic (postverbal) ones in Spanish; they attribute this change to a priming effect, in that English does not allow for preverbal objects, which in turn leads to a shift in lexical items. The authors further propose that lexical activation is not language-selective, so both the Spanish and the English lexicons remain active, allowing for cross-linguistic priming from the dominant language (English). Working in a similar framework, Rinke and Flores (2014) analysed the acquisition of clitics in heritage speakers of European Portuguese and found that, even though there is a tendency to accept ungrammatical clitic placement, there is no overgeneralisation of enclisis to contexts that require proclisis and that priming cannot explain the differences.

In fact, the data in this section assume that native competence in heritage varieties of a language may diverge from native competence in the homeland variety of the same language (Kupisch and Rothman 2018). Therefore, the varieties spoken by heritage bilingual speakers of Venetan and Bulgarian are not treated as incomplete systems that develop under the constant influence of a dominant language and are not compared to their homeland (monolingual) counterparts<sup>5</sup>; the two varieties are treated as autonomous and complete grammars that follow their own grammatical rules and constraints, which are the focus of the present study. This approach inspired recent works in the field of heritage language syntax that deal with innovation in heritage languages (Frasson 2022a, Frasson 2022b, D'Alessandro and Frasson 2022); building on such works, the present study will test the hypothesis that certain changes in the distribution of pronominal clitics in heritage languages do not depend on cross-linguistic influence, but represent a common path of change in heritage languages, regardless of their contact language.

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<sup>&</sup>lt;sup>4</sup> The participation in doubling phenomena shows that an analysis of Bulgarian object clitics and Venetan subject clitics has to be preferred. See however Bošković 2001 on Bulgarian and Poletto 1993 on Venetan for alternative analyses of the same types of clitics as argumental heads.

<sup>&</sup>lt;sup>5</sup> In this respect, I follow Rothman et al. (2022), who show that monolingual varieties of a language cannot be taken for granted as an appropriate comparison. The approach on language change I adopt here is neutral with respect to the relationship between homeland and heritage varieties. I compare heritage and homeland clitic systems, and analyse the change in linguistic terms, without resorting in any way to 'monolingual normativity'.

In particular, the data discussed in the study show that pronominal clitics in heritage Venetan and Bulgarian do not display clear agreement-like properties, but they rather behave as arguments.

## 3.1 Subject clitics in heritage Venetan

The analysis of Venetan subject clitics as agreement markers discussed in section 2 builds on examples such as (16), where the subject clitic doubles a strong pronoun.

```
(16) Venetan
Ti te ga ciamà to fradel.
you you= have.2sG call.PRT your= brother
'You called your brother.'
```

The subject clitic *te* in (16) cannot be dropped and is truly doubling the strong pronoun *ti*. However, as shown in previous studies (Benincà 1983, 1994; Poletto 1993; Frasson 2022b), doubling is obligatory in Venetan only for second person singular. In this study I will refer to third person subject clitics, leaving an analysis of doubling in second person singular for future research. In the case of third person, previous studies show that the subject clitic is not obligatory in the same construction. This discrepancy in the behaviour of second and third person subject clitics becomes even more evident in the heritage variety of Venetan spoken in Brazil. In this variety, third person subject clitics are generally banned in sentences where a strong subject pronoun is present, as shown in (17). Besides, Frasson (2022b) shows that subject clitics can be dropped even if no other overt subjects are present, giving rise to a canonical null subject configuration (18) and that they are in complementary distribution with strong pronouns (19):

```
(17) Lore (*le) ga ciamà so fradel. they they= have.3PL called.PRT their= brother 'They called their brother.'
```

```
(18) (La) ze vegnesta sola.
she= is come.PRT alone
'She came alone.'
```

```
(19) Ela / La ga ciamà me pare.
she she= have.3SG call.PRT my= father
'She called my father.'
```

If subject clitics are in complementary distribution with strong pronouns and lexical subjects, as in (19), and there is no doubling function (17) nor obligatory realisation of subject clitics (18), then their analysis as agreement-like clitics is extremely weakened.

Besides, there is another property displayed by heritage Venetan subject clitics that makes their analysis as agreement markers impossible: third person subject clitics can be separated from the verbal host by non-clitic material, like adverbs (20).

```
(20) El pena ze rivà.
it= just is arrive.PRT
```

'It has just arrived.'

With this behaviour, a syntactic analysis of Venetan subject clitics as agreement-like heads cannot be maintained. Despite being phonologically reduced, the subject clitics in (17-20) behave as regular strong pronouns, rather than obligatory agreement markers: they appear in complementary distribution with other types of subjects, they can be dropped given the appropriate discourse conditions and adverbs can be interpolated between them and the verb. The idea that at least some Venetan subject clitics can have an argumental function is not absent in literature (see Poletto 1993). However, the heritage data provide final evidence that they not only are argumental, but they are most likely not structurally distinguished from strong pronouns, as proposed in Frasson (2022b).

## 3.1.1. Heritage Venetan object clitics

Before moving to the discussion of Bulgarian object clitics, one may wonder whether the same type of behaviour is attested in heritage Venetan object clitics<sup>6</sup>. Data from Brazilian Venetan show that this is not the case: it is impossible to draw a parallel between the behaviour of subject and object clitics in heritage Venetan. Evidence in this respect come again from the obligatory realisation of a doubling clitic in a dedicated preverbal position (clitic climbing) (21) and the impossibility of adverb interpolation (22).

```
(21) *(Te) vardo sempre ti.
you= watch.1sG always you
'I am always watching at you.'
```

(22) Ghe (\*pena) go (pena) dato el libro a ela. to.her= just have.1sg just give.PRT the book to her. 'I have just given her the book.'

The object clitic *te* (21) and the indirect object clitic *ghe* (22) obligatorily climb to a dedicated position and, in the proposed examples, double strong pronouns that are realised postverbally, in their canonical argumental position. Besides, the clitic in (22) cannot be separated from the verb by non-clitic material, showing that it is indeed an agreement markers realised on a verbal head via head movement (see Roberts 2010 in this respect).

In conclusion, only subject clitics in heritage Venetan allow for an analysis as argumental clitics, which further display a peculiar strong pronominal use; heritage Venetan object clitics, conversely, are better an analysed as agreement-like clitics, supporting the need for a more fine-grained classification of clitics.

# 3.2 Object clitics in heritage Bulgarian

An interesting behaviour, parallel to the one identified in Frasson (2022b) for heritage Venetan subject clitics, is attested for object clitics in heritage Bulgarian.

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<sup>&</sup>lt;sup>6</sup> For reasons of space, Venetan object clitics were not discussed in section 2, where I decided to focus on elements that displayed different behaviours in heritage varieties with respect to previous descriptions of the same language. Object clitics do not differ significantly in heritage Venetan and the literature on Romance object clitics is vast; it would not have been possible to include all the different approaches to the phenomenon in this study. I refer to the recent work by Pescarini (2021) for an overview of previous literature and a novel approach to the study of Romance object clitics.

Changes in the distribution of object clitics were noticed by Ivanova-Sullivan (2019) in heritage Bulgarian spoken in the United States<sup>7</sup>. As shown in section 2, pronominal clitics in Bulgarian are adverbal and obey the Tobler-Mussafia law: they are generally proclitic to the verb, but they can be enclitic in contexts in which they would be otherwise end up in the first position in the sentence. The data presented in Ivanova-Sullivan (2019), however, show that this is not the case in heritage Bulgarian. Heritage speakers produce mainly enclitic objects, even if the verb is not the first constituent in the sentence:

```
(23) Heritage Bulgarian (adapted from Ivanova-Sullivan 2019) Toj vze go.
he took it= 'He took it.'
```

What is relevant in (23), is that the clitic does not climb: the generalisation of a post-verbal position for object clitics, means that they are realised in a canonical object position where strong object pronouns would be otherwise realised:

```
(24)
Toj vze nego.
he took it
'He took it.'
```

The strong object pronoun *nego* in (24) cannot be distinguished from the clitic *go* in (23) on the basis of their distributional properties, as there is no clitic climbing in heritage Bulgarian<sup>8</sup>.

The realisation of both strong and clitic objects in a postverbal position allows to predict that the two types of objects will be in complementary distribution in heritage Bulgarian. This prediction is confirmed in Ivanova-Sullivan's (2019) data: heritage Bulgarian object clitics pronouns can be used interchangeably.

```
(25) (adapted from Ivanova-Sullivan 2019)
Ne zakačaj men / me.
not bother me me=
'Do not bother me.'
```

The complementary distribution of strong *men* and clitic *me*, rather than their co-occurrence, allows for an even stronger parallel with heritage Venetan subject clitics: heritage Bulgarian object clitics do not display the typical behaviour of agreement-like clitics, but that of argumental clitics and further allow for a parallel strong pronominal use.

<sup>&</sup>lt;sup>7</sup> In this chapter I report the data in Ivanova-Sullivan (2019) because of their relevance for the analysis of structural and distributional properties of clitics in heritage languages and for the study of heritage grammars in general. I refer to her original work for all implications related to the acquisition of clitics in heritage speakers.

<sup>8</sup> Strong pronouns are expected to have different interpretive properties in Bulgarian, as predicted by

Cardinaletti and Starke (1999). In absence of more detailed data on the interpretation of object strong and clitic pronouns, I remain agnostic regarding the possibility for the same interpretive properties to be present in heritage Bulgarian as well.

In conclusion, data presented in this section show that Venetan subject clitics and Bulgarian object clitics in heritage varieties of the languages have quite similar distributional properties, in that they display a tendency to appear in positions in which their tonic counterparts would normally appear, rather than in the position normally expected for clitics as a consequence of clitic climbing.

Besides, the complementary distribution of clitics and strong pronouns can be interpreted as a tendency to behave as arguments of the verb, rather than appearing in doubling constructions. In other words, clitics in heritage Venetan and Bulgarian represent argumental, rather than agreement-like clitics.

## 4. The syntactic status of pronominal clitics in heritage languages

The data presented in section 3 showed that it is not possible to distinguish clitics from their strong counterparts based on their distributional properties. This applies both to heritage Venetan subject clitics and to heritage Bulgarian object clitics. At this point, one may wonder whether it is necessary to maintain the analysis of special clitics proposed in previous studies for Venetan and Bulgarian. In the present section, I will show that the analysis of clitics proposed in Cardinaletti and Starke (1999) cannot be maintained for argumental clitics in heritage Venetan and Bulgarian; I will also show that agreement-like clitics too allow for a different analysis, supporting the discussion developed in section 2 on the crucial relevance of the contrast between argumental and agreement-like clitics. I will first consider the case of heritage Venetan subject clitics and heritage Bulgarian object clitics and finally move to the contrast with heritage Venetan object clitics.

In view of the data presented in section 3, I propose that heritage Venetan subject clitics and heritage Bulgarian object clitics have the status of pronouns, rather than clitics. It was shown that they are in complementary distribution with strong pronouns and therefore should be analysed as arguments of the verb. Besides, their distribution and position inside the sentence makes it unnecessary to analyse them as special clitics. I build on the analysis carried out in Frasson (2022b) and propose that a clitic analysis along the lines discussed in section 2 should be limited to elements that display special phonological, prosodic, syntactic and semantic properties. In the case of heritage Venetan and Bulgarian, clitics are morphologically reduced with respect to their strong counterparts, but there is no conclusive evidence that the lack of certain phonological and morphological properties systematically correspond to the lack of a portion of syntactic structure. The syntactic representation of clitics in heritage Venetan proposed in Frasson (2022b) is inspired by Déchaine and Wiltschko's (2002) model, consisting in a classification of pronouns into three different types: DP,  $\varphi$ P or NP. Each pronoun type is associated with a syntactic projection, as shown in (26).

```
(26)
a. [DP [φP [NP] (DP-pronouns)
b. [φP [NP] (φP-pronouns)
c. [NP] (NP-pronouns)
```

DP-pronouns function like regular definite referring expressions and correspond to strong pronouns in Cardinaletti and Starke (1999), while clitics have a reduced structural representation, in that they lack the DP layer and are better defined as φP-pronouns. Heritage

Venetan subject clitics and heritage Bulgarian object clitics are better analysed as DP-pronouns because of their argumental nature and distribution. The discussion of the alternation between clitics and strong pronouns should be moved to the different interpretive properties encoded by the two types of pronouns. This possibility is explored in Frasson (2022b and this volume) and correctly predicts the distribution of different types of subject pronouns in heritage Venetan. The question of whether a parallel analysis could be applied to heritage Bulgarian object clitics is a matter of future research.

Section 3.1.1. showed that heritage Venetan object clitics display a behaviour consistent with the analysis as agreement-like clitics discussed in section 2. Besides, the distribution of object clitics in heritage Venetan is consistent with previous accounts of the phenomenon (Bonet 1991, Kayne 1991, Manzini and Savoia 2000). An interesting proposal about the nature of Romance object clitics is discussed in Pescarini (2021). He argues that the structure of object clitics is as complex as that of strong pronouns (DP-pronouns in Déchaine and Wiltschko 2002). The special distributional properties of clitics derive from the fact that an object pronoun is attracted and frozen in a dedicated topical position, which the author identifies with the Wackernagel position, the one occupied by clitics of the Serbian and Slovenian type. The pronoun cannot receive sentence stress in this position, so it undergoes a process of phonological reduction and may, subsequently, undergo incorporation into the verb. In this approach, incorporation is intended in Matushansky's (2006) terms as a morphological operation resulting in the conflation of two adjacent elements into a single morphophonological unit. Incorporation explains the ban on interpolation in examples (21-22), whose structure is represented in (27).

```
(27) (adapted from Pescarini 2021: 177)
[C... [I ... [Z clitic + V] Adv ]]
```

The Z position in (27) was originally proposed by Ledgeway and Lombardi (2005) and is analysed as an evolution of the original Wackernagel position; clitics move to Z as phrasal constituents and are then incorporated into a verb moving through it.

Object clitic placement in heritage Venetan allows for an analysis along the lines of Pescarini (2021), while the same type of approach cannot be maintained for subject clitics, as well as heritage Bulgarian object clitics. The distinction between argumental and agreement-like clitics is crucial in this respect. I propose that cliticisation, as defined in Pescarini (2021) is available in heritage languages for pronouns that participate in doubling constructions. Heritage Venetan subject clitics and heritage Bulgarian object clitics do not have this function and therefore do not climb to a dedicated position nor incorporate into the verb.

Heritage data are relevant in two respects. On the one hand, they confirm that clitics do not lack a portion of internal syntactic structure and can therefore behave as free pronouns. In other words, the case of heritage Venetan and Bulgarian supports an analysis in the style of Pescarini (2021) and challenges Cardinaletti and Starke's (1999) model, in that there is no consistent correspondence between phonological, morphological and syntactic constraints on the distribution of clitics. On the other hand, heritage data support the idea that different clitics belong to different classes, as evidenced by the contrast between the behaviour of argumental and agreement-like clitics in heritage languages. Argumental clitics do not display a clitic behaviour in heritage Venetan and Bulgarian; the distributional properties of argumental clitics in the two varieties allow to analyse them on par with strong pronouns. However, heritage

Venetan object clitics do not display different distributional properties with respect to previous descriptions based on the homeland variety of the language, as they retain their clitic-like behaviour. As a last point, I will address the question of why only argumental clitics behave differently and what makes such difference in heritage languages so evident.

## 4.1 Clitics in heritage languages: a hypothesis on language change

In the course of this chapter, I have shown that more than one clitic class exists and that it is not possible to include all clitic types into the same category because of the variety of structural and distributional properties they display. There is a number of potential factors that can tell apart different types of clitics; in this contribution, I focussed on the argumental vs agreement-like distinction. This contrast is particularly relevant in the case of heritage Venetan subject clitics and Bulgarian object clitics, which, unlike their homeland counterparts, do not display clear clitic properties. At this point, one may wonder what can the heritage perspective tell us about the fact that agreement-like clitics tend to retain their properties, while argumental clitics do not.

In this section, I build on Polinsky (2018) and Scontras et al. (2018) and explore a hypothesis on the reorganisation of heritage grammars.

Polinsky (2018) discusses two possible triggers for heritage language change that are compatible with the case presented in this chapter. The first possible trigger concerns specifically different working-memory costs for the processing of arguments and agreement markers. The second possible trigger regards the syntactic status of clitics as heads and their reanalysis as phrases in heritage languages.

As far as working-memory costs are concerned, Polinsky's (2018) approach predicts argumental clitics to be more resistant to processes of change typical of heritage languages (e.g.: attrition, see Montrul 2008) than agreement markers; this difference depends on the fact that the type of relationship established by agreement markers is more costly than the one established by arguments; this approach captures the case of heritage Venetan and Bulgarian, in that argumental clitics are, at least in some cases, preferred to agreement-like ones because they do not need to establish an agreement relationship with an element they double. Agreement markers, on the other hand, need to match features that are located on the constituents they double, which are often not so close to them in the syntactic structure.

As for the status of clitics as heads, Polinsky (2018: 57) discusses cases in which heritage speakers of English display a tendency to reanalyse verbal particles of phrasal verbs (heads) as phrasal adverbs. As a consequence, particles display distributional properties of free adverbs, in that they do not comply with any placement restrictions and allow for variability in word order. A similar process was discussed for Venetan in Frasson (2021) for subject clitics and emerges from the heritage data discussed in the present chapter as well.

The two hypothesis discussed by Polinsky can be considered in a unitary perspective. The starting point is that the doubling of arguments via extra agreement markers realised on the verb presents speakers with extra costs for working memory. According to Polinsky (2018), this may have to do with transparency and compositionality (see also Ramchand and Svenonius 2002 in this respect): as long as newly introduced structures (in the case under analysis, argumental clitics instead of agreement-like clitics) are transparent and compositional, they do not pose any problem for speakers of heritage languages. Compositional constructions, whose parts can be clearly identified and therefore easily separated (such as heritage Venetan subject clitics) or moved more freely (such as heritage Bulgarian object clitics), are morphologically

transparent and are preferred to constructions that behave as single units, formed by different inseparable but identifiable parts (such as the clitic-verb complex). This tendency to avoid morphological complexity results in the reanalysis of clitics as phrases: heritage speakers do not substitute clitic forms with strong forms, but they do not distinguish the two forms at a structural level. This reanalysis allows for a more free distribution of clitics with respect to their placement. Subject clitics in heritage Venetan and object clitics in heritage Bulgarian still exhibit some clitic properties at the morphological and phonological level, but they resemble the 'strong' clitics described by Uriagereka (1995), the argumental clitics. Such clitics are analysed as phrasal elements in heritage languages, in that they impose less constraints on their placement than clitics.

Polinsky's approach explains why heritage Venetan subject clitics and heritage Bulgarian object clitics are reanalysed as free pronouns: the ambiguous XP/X<sup>0</sup> status of clitics is resolved in favour of an XP realisation, which is less costly for working-memory and more transparent at the morphological level. However, this approach still does not explain why heritage Venetan object clitics do not undergo a parallel change. While the data analysed in the present chapter do not allow for a conclusive answer in this respect, in the remainder of this section I will draw some preliminary hypotheses. A first possibility is to analyse the pattern displayed by heritage Venetan as an ongoing change; such process started from subject clitics because of a mechanism that is reminiscent of McCloskey's (1990) Highest Subject Restriction, which disfavours the doubling of immediately subjacent subjects. Therefore, the restriction on subject doubling, as well as the subsequent change attested in heritage Venetan subject clitics, are intended as the first step in a process of change that is not yet completed. Alternatively, it is possible to interpret the contrast between heritage Venetan subject and object clitics as a different strategy to reduce working-memory costs. I have previously proposed, building on Polinsky (2018), that the tendency to reduce processing costs led subject clitics to be reinterpreted as phrasal pronouns. Scontras et al. (2018) propose that the same tendency may have the opposite outcome, in that agreement-like clitics could further reduce in view of a principle of representational economy; this approach predicts that features of object clitics in heritage Venetan are not valued independently, but bundle together with other features of the verb and are retrieved in memory as one single unit, in which single sub-units are no longer independently identified. In Scontras et al. (2018), such process leads to an amalgamation of features and a reinterpretation as a single-valued constituent, finally resulting in a loss of feature specification of the clitic. A conclusive answer on whether either of these hypotheses is plausible for heritage Venetan object clitics cannot be provided based on the data presented in this chapter; I leave this question open for further investigation.

This section showed that some processes of change and reanalysis in heritage grammars are transparent and easily captured, while others are more mysterious and are still poorly understood. The reasons behind the change attested in the systems of heritage Venetan subject clitics and heritage Bulgarian object clitics can be captured by combining syntactic and processing approaches to language change; it is however more difficult and elusive to understand why heritage languages also allow for a complexification of the system of clitics as the one displayed by heritage Venetan object clitics (see also Frasson 2022b in this respect).

# 5. Conclusion

Analysing clitics has posed a number of challenges for linguistic theories in the past decades. In section 2, I attempted to capture a little portion of the complexity represented by the

phenomenon of cliticisation in Romance and Slavic languages. If anything, section 3 showed that things become even more complex in heritage languages, where clitics display unpredictable behaviours, pointing to different change paths even inside the same variety; conversely, they may display converging properties in quite distant varieties. The former case is represented by heritage Venetan subject and object clitics; the latter is represented by heritage Venetan subject clitics and heritage Bulgarian object clitics. I proposed that this last case can be analysed as an instance of change from agreement-like to argumental clitics, triggered by a combination of processing and structural factors. Finally, I tentatively proposed that similar considerations could capture also capture the different behaviour of heritage Venetan object clitics, possibly in the perspective on an ongoing change.

The case presented in this study does not presume to represent an exhaustive discussion of how clitic systems change in heritage varieties. The main goal of this contribution is to shed light on formal properties of clitics, regardless of their level of similarity (as in the case of Venetan and Bulgarian), and identify a predictable change path in heritage languages, regardless of extra-linguistic factors. The account proposed here for linguistic facts in heritage languages moves away from the perspective in which heritage languages are viewed as strictly dependent on their homeland and contact varieties.

In conclusion, heritage languages display intriguing change patterns that can challenge or confirm previously established principles of heritage grammars and provide clear answers to more general questions on the nature of clitics cross-linguistically.

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