# Auxiliary selection in Southern Lazio Some implications for Romance microvariation and its limits 

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#### Abstract

The understudied languages spoken in Southern Lazio are sometimes said to constitute a 'transitional area' between the better-studied varieties spoken in central Italy and those spoken in the upper-south of Italy. In various domains of grammar, the varieties of Southern Lazio exhibit hybrid properties found in both central and upper-southern varieties; however, these hybrid systems are neither well-documented nor well-understood. The focus of this paper is on one such domain, namely systems of auxiliary selection in the perfective. Based on original fieldwork data from 21 varieties from Southern Lazio, I show that while some properties of these auxiliary selection systems are familiar from elsewhere in (Italo-)Romance (e.g. sensitivity to tense, mood, and the person and number of the subject), other such properties are not found elsewhere in the Romance literature (e.g. sensitivity to the gender of the subject). The facts presented here warrant a revision to existing analyses - specifically, existing parameter hierarchies - of auxiliary selection in Romance, which I take up in the second part of the paper. A parameter hierarchy approach allows us to model certain implicational relations among clusters of microparameters found in Southern Lazio specifically, but it also provides a means to predict the existence of possible and impossible auxiliary systems in Romance more generally.


## 1 Introduction

The languages spoken in the southern area of the Lazio region (i.e. Southern Lazio; henceforth SL) constitute an example of unexplored microvariation within Italo-Romance. Although there is an extensive literature dedicated to the area (especially from a phonological/phonetic perspective) ${ }^{1}$, the morphosyntax of these varieties has been mostly overlooked up to now. Owing to the linguistic fragmentation of the Lazio region (De Mauro and Lorenzetti 1991:310) and the absence of a regional 'Laziale' type (Colasanti 2018b:3-4), the southern area of Lazio has been particularly interesting for traditional dialectologists who classified it as a 'transitional' area between the varieties spoken in the central part of Italy (i.e. central Italian varieties) and those spoken in the upper southern part of Italy (i.e. upper southern Italian varieties) on the basis of phonological and phonetic features. In fact, a very important isogloss, the so-called Rome-Ancona isogloss, crosses the Lazio region and divides it in different subareas.

In more recent years, it has been argued from a morphosyntactic point of view that SL should continue to be considered a transitional area between central and upper southern varieties (Colasanti 2018b). This claim is mostly based on properties such as complementation and auxiliary selection. SL varieties exhibit complex systems of complementation, which are mostly typical of upper southern varieties ${ }^{2}$; witness the case of Abruzzese varieties (e.g. Arielli: D’Alessandro and Ledgeway 2010a; Lancianese: Manzini and Savoia 2005). However, SL varieties also present complex systems of auxiliation, which are in fact mostly found in central varieties (Cocchi 1995; Lorenzetti 1995) and only in some respects also in upper southern varieties (see Ledgeway 2019). Consequently, the fact that SL varieties present both complex systems of complementation and auxiliation justifies Colasanti (2018b) in advancing the hypothesis that this area represents an

[^0]inter-language microcontact between the varieties spoken in the centre and those spoken in the upper South of Italy. This, in turn, explains the presence of more hybrid and unique patterns of microvariation.

In this paper, I illustrate a number of patterns of variation found in SL perfective auxiliary systems, including some not previously attested in the Romance literature (e.g. gender sensitivity). On a par with other Romance varieties, the perfective auxiliary encodes a variety of grammatical information, including person and number of the subject, and tense/mood of the overall periphrasis (for an overview, see Loporcaro 1998; Ledgeway 2012:317-327, 2019, i.a.). In the second part of the paper, the clusters of microparameters and their different combinations found in SL auxiliary selection will be modelled in terms of parameter hierarchies, following recent work by Ledgeway (2019). While the main goal of this paper is descriptive, a parameter hierarchy approach allows us to explain how the microparameters found in SL varieties are implicationally related to each other and help us predict the existence of possible and impossible auxiliary systems in Romance.

The paper is organised as follows. In §2, I briefly review well-known patterns of variation in Romance perfective auxiliary selection. In §3, I introduce the different auxiliary systems found in SL varieties: pure argument-driven systems (§4), partial argument-driven systems (§5), hybrid argument-driven systems (§6), person-driven systems (§7), and tense-and-mood-driven auxiliary systems (§8). In §9, I present a microtypology of auxiliary systems in SL, and in §10 I model the variation found in SL auxiliary systems in terms of parameter hierarchies. In §11, I provide some conclusions.

## 2 Background: auxiliary selection in Romance

Data from SL varieties show multiple language-specific parameters of variation in perfective auxiliary selection ${ }^{3}$. In fact, different SL varieties show a mixture of the patterns already found across the Romània. Before describing the patterns of auxiliary selection in SL (§3), I briefly describe five different dimensions of variation which can be found across Romance, i.e. split systems driven by argument structure, person, tense, and mood, as well as a complete lack of auxiliary alternation ${ }^{4}$.

Argument structure can determine the choice between the two auxiliaries in Romance ${ }^{5}$. For instance, transitive/unergative predicates with Agent subjects select HAVE (1b), whilst unaccusatives with non-Agent subjects select BE (1a), regardless of TAM (i.e. Tense-Aspect-Mood) values. In particular, auxiliary selection in Romance may draw a distinction between active (1b) and stative (1a) subjects ( $\mathrm{A} / \mathrm{S}_{\mathrm{A}}$ vs $\mathrm{S}_{\mathrm{O}}$ ).

## (1) Standard Italian

3 The data were collected between September 2015 and September 2019 by the author. Where not otherwise specified, all the data belong to the Author.
4 For an exhaustive account of auxiliary distribution across Romance, see Loporcaro (2007) and Ledgeway (2019), i.a.
5 In my discussion below, following a widely accepted typological distinction (Dixon 1994:6-8; La Fauci 1988:12; see also Comrie 1989:110-116), I refer to the three core clausal participants as 'A' ('subject of transitive verb'; experiencers included), 'O' ('object of transitive verb') and 'S' ('subject of intransitive verb'). Moreover, I also take into consideration ' $\mathrm{S}_{\mathrm{A}}$ ' ('subject of unergative verb') and ' $S_{O}$ ' ('subject of unaccusative verb'). To varying degrees, languages encode these core participants mostly (but not only) through verb marking systems (agreement, auxiliaries, and voice distinctions), which organise these sentential participants into three typological alignments (La Fauci 1988:12):
(i) a. A is formally distinguished from O and, in turn, shares the same formal marking as $\mathrm{S}_{\mathrm{A}} / \mathrm{O}$ (nominative-accusative alignment);
b. $\quad \mathrm{O}$ is formally distinguished from A , and, in turn, shares the same formal marking as $\mathrm{S}_{\mathrm{A}} / \mathrm{O}$ (ergative-absolutive alignment);
c. $\quad \mathrm{A}$ is formally distinguished from O , but the formal marking of S is split between $\mathrm{A}\left(=\mathrm{S}_{\mathrm{A}}\right)$ and $\mathrm{O}\left(=\mathrm{S}_{\mathrm{O}}\right)$ (active-stative alignment).

This list is not meant to be exhaustive. See Dixon (1994) and Comrie (1989).
a. Sono arrivato
I. $\mathrm{S}_{\mathrm{O}}$.am arrived.M.SG
'I have arrived.'
b. Ho mangiato (una pizza).
unergative/transitive
I.A/S ${ }_{A}$.have eaten.M.SG a.F.SG pizza.F.SG
'I have eaten (a pizza).'

In a number of different Romance varieties, we can find person-driven auxiliation. In particular, in a large number of central varieties (e.g. Ariellese: (2); D'Alessandro and Roberts 2010:42-44), southern varieties (e.g. Barese: Andriani 2017:171), northern varieties (Alessandria variety), and some northern Catalan dialects (Badia i Margarit 1951; Tuttle 1986; Ledgeway 2012, 2013; Mateu 2016), auxiliary selection is sensitive to the grammatical person of the nominative subject, yielding a nominative-accusative system which distinguishes all types of subjects (i.e. $\mathrm{A} / \mathrm{S}_{\mathrm{A}}, \mathrm{S}_{\mathrm{O}}$ ) from O . The general tendency is that BE aligns with $1^{\text {st }}$ and $2^{\text {nd }}$ persons and HAVE with $3^{\text {rd }}$ persons (see Tuttle 1986; Cocchi 1995; Ledgeway 2000; 2019; Bentley and Eythórsson 2001; Manzini and Savoia 2005; Loporcaro 2007; D’Alessandro and Ledgeway 2010b; Cennamo 2010; i.a.).
(2) Ariellese (D'Alessandro and Roberts 2010:42-44)
so' / si / a / seme / sete / a cascate / fatijate / fatte
I.am you.are s/he.has we.are you.are they.have fallen.M.SG worked.M.SG done.M.SG
na torte.
a cake
'I am, you are, s/he has, we are, you are, they have fallen / worked /done a cake.'
However, some varieties with person-driven auxiliation exhibit some variation on this classic split (see $\S 6, \S 7$ for SL varieties). For instance, many of them present person extension of BE to $3^{\text {rd }}$ persons singular and plural (e.g. San Benedetto del Tronto, Viticuso: Manzini and Savoia 2005:II,682-683; Ledgeway 2019:37), or loss of HAVE in the $3^{\text {rd }}$ singular (e.g. Campli: Manzini and Savoia 2005:II, 320; Ledgeway 2019:37), or are subject to temporal and modal restrictions (cf. §6.3, §7.1; see Ledgeway 2019 for details).

Auxiliary selection in Romance may also show sensitivity to tense (especially, but not exclusively) in person-based auxiliation systems (cf. Loporcaro 2017:813). Campanian (Ledgeway 2003, 2009; Cennamo 2010), Apulian (Torcolacci 2015; Loporcaro 2017), and Abruzzese (Giammarco 1973; D’Alessandro and Roberts 2010) varieties generalise one of the two auxiliaries depending on the tense but regardless of verbal class. For instance, one can find the generalisation of BE in non-present perfect contexts (i.e. pluperfect, counterfactuals included), e.g. in some Campanian dialects (e.g. Procidano, San Leuciano: Iannace 1983; Ledgeway 2003, 2009), Apulo-Barese varieties (e.g. Martinese: Manzini and Savoia 2005:II,793; (3)), and SL varieties (e.g. Acquafondatese: Cocchi 1995:124). However, the generalisation of HAVE (typically in upper-southern varieties) and BE (typically in central varieties) to all predicates in non-present perfect contexts can be found in varieties which have person-driven auxiliation, especially (but not only) in ApuloBarese (Gravinese: Manzini and Savoia 2005:III,26; (4)).
(3) Martinese (Manzini and Savoia 2005:II,793)
erə / irə / erə / ermə / irvə / ierne lavetə.
I.was you.were s/he.was we.were you.were they.were washed.m.sG 'I was, you were, s/he was, we were, you were, they were washed.'
(4) Gravinese (Manzini and Savoia 2005:II,26)
avajə / aviəvə / avajə / avaimə / aviəvə / avainə vənəutə / dərməutə / I.had you.had s/he.had we.had you.had they.had come.M.SG slept.M.SG lavətว. washed.M.SG
'I had, you had, s/he had, we had, you had, they had come / slept / washed.'
Mood may also play a role in auxiliary selection in Romance. In particular, some varieties show a mood restriction in person-driven split auxiliary systems; namely there is a contrast between realis contexts (i.e. present/pluperfect; indicative mood) and irrealis contexts (i.e. counterfactual).

For the purposes of this paper, we put aside the diachronic perspective, for which the marker of active syntax (i.e. HAVE) initially permeated stative syntax via irrealis contexts, and then spread to other realis contexts, e.g. in early Neapolitan (Formentin 2001; Ledgeway 2003, 2009), early Sicilian (La Fauci and Rosen 1992; Ledgeway 2003), early Abruzzese (Ledgeway 2003; cf. Giammarco 1973:162ff.), and early Spanish (Stolova 2006). Synchronically, auxiliary BE is found in varieties with generalised HAVE for irrealis, e.g. optative contexts (e.g. Altamurano: (5); Loporcaro 2017:813) and counterfactuals (e.g. Sant'Andrese, Latin American Spanish and southern Spanish varieties: Ledgeway 2000, 2012). Moreover, certain person-driven split systems generalise BE (e.g. San Benedettese, Pontecorvano: Cocchi 1995:14; Ledgeway 2019:28) or HAVE in counterfactuals (e.g. eastern Abruzzese: Giammarco 1973; Ledgeway 2019:31). However, in Romanian, auxiliary choice is entirely dictated by the realis (i.e. HAVE) vs irrealis (i.e. BE) mood distinction (Dobrovie-Sorin 1994:ch.1; Avram and Hill 2007; Dragomirescu and Nicolae 2013; Ledgeway 2013:6-7): while finite verbal forms can only select HAVE (6), non-finite forms can only select BE (7).
(5) Altamurano (Loporcaro 2017:813)

Fwessə $\int v t ə ~ / v$ fwessə dittə la sour.
be.IMP.SBJV.3SG gone.M.SG CL be.IMP.SBJV.3SG said.M.SG the sister 'S/He would have gone / S/He would have said it to the sister.'
(6) Romanian
$\mathbf{A m} / \mathbf{A i} / \mathbf{A} / \mathbf{A m} / \mathbf{A t ̧ i} / \mathbf{A u}$ mâncat / plecat.
I.have you.have s/he.has we.have you.have they.have eaten.M.SG left.M.SG
'I have, you have, s/he has, we have, you have, they have eaten / left.'

## (7) Romanian

a. Vor / Ar fi mâncat / plecat.
they.will they.would be.InF eaten.M.SG left.M.SG 'They will / would have eaten / left.'
b. Nu cred să fi mâncat / plecat. not they.believe that be.SBJV eaten.M.SG left.M.SG 'I don't believe that we would have eaten / left.'
c. Înainte de a fi mâncat / plecat, citeam ziarul. before of to be.INF eaten.M.SG left.M.SG I.read newspaper.the 'Before we eat/leave, I read the newspaper.'

The last auxiliation paradigm involves generalisation of either HAVE or BE to all contexts. Within Romance, the generalisation of HAVE into stative syntax across all temporal, aspectual, and mood dimensions (with the exception of passives) is found in most Ibero-Romance varieties, in many upper and extremesouthern Italian varieties (e.g. Mottolese; (8)), in advanced varieties of Neapolitan (Ledgeway 2009:ch.15), Sicilian (La Fauci 1992), and in some extinct varieties of Dalmatian (e.g. Vegliot: Ive 1886; Bartoli 1906; Doria 1989). However, certain Romance varieties generalise BE at the expense of HAVE. For instance, Terracinese (Tuttle 1986:267) and Bovese ((9); Squillaci 2017:56-74; Schifano et al. 2016) both employ BE as the only auxiliary in present perfect and pluperfect contexts respectively.
(8) Mottolese (Imperio 1993:201)
agghjə / a / à / amə / atə / anə zappétə / vənùtə.
I.have you.have s/he.has we.have you.have they.have hied.m.SG come.m.SG
'I have, you have, s/he has, we have, you have, they have hied / come.'
(9) Bovese (Squillaci 2017:55-56)
eru / eri / era / eramu / eravu / eranu cucinatu / leggiutu. I.was you.were s/he.was we.were you.were they.were cooked.M.SG read.M.SG
'I was, you were, s/he was, we were, you were, they were cooked / read.'

In Romance, some of these patterns, namely splits driven by argument structure, person, mood, and tense as well as auxiliary generalisation, can co-occur within the same variety. For instance, in argument-structuredriven and person-driven split auxiliary systems, mood and tense can play a role as well. When present, mood and temporal restrictions on auxiliation are subordinate to those of person and argument structure. However, as I show in $\S 3$, the selection of the auxiliary in SL can be influenced by argument structure, person, mood, and tense as well, and these can further be combined with additional restrictions based on tense, mood, number, gender, and discourse vs non-discourse participants.

As shown above, the wide range of variation in auxiliary selection found in Romance (for a detailed account, see Ledgeway 2019) is also attested within Italo-Romance (Rohlfs 1969; Giammarco 1973; Tuttle 1986; see also Loporcaro 1995, 2001, 2007, 2010; Lorenzetti 1995; Kayne 1993; Cocchi 1995; Bentley and Eythórsson 2004, 2001; Legendre 2010, i.a.). However, southern Italo-Romance, in particular, exhibits an especially high degree of variation in this domain. Many systems combine: for instance, person-driven and argument-structure-driven split auxiliary systems. Data from Manzini and Savoia (2005:II,III; see Lorenzetti 1995:ch. 3 for Castelli Romani's varieties) highlight, for example, how the choice of auxiliary HAVE in the $3^{\text {rd }}$ person depends on the argument structure of the verb (i.e. transitive/unergative vs unaccusative), while the $1^{\text {st }}$ and $2^{\text {nd }}$ always appear with BE. This pattern is attested in e.g. Ortezzanese (10), Collemacinese, Amandolano, Ortezzanese, Tufillese, Torricellese, and Borgorosese (Manzini and Savoia 2005:II,728), where with unaccusatives we find BE in every person (10a) and in unergatives we find BE in the $1^{\text {st }}$ and $2^{\text {nd }}$ persons, but HAVE in the $3^{\text {rd }}$ person (10b).
(10) Ortezzanese (Manzini and Savoia 2005:II,728)
a. Unaccusatives
 'I am, you are, s/he is, we are, you are, they are come.'
b. Unergatives
so / si / a / semo / sete / a durmito. I.am you.are s/he.has we.are you.are they.have slept.M.SG 'I am, you are, s/he has, we are, you are, they have slept.'

## 3 Auxiliary systems in Southern Lazio

All the patterns found in Romance auxiliary selection can be found in SL. In what follows, I show that the high degree of microvariation present in SL reflects different possible combinations of split auxiliary systems not found elsewhere in Romance and Italo-Romance. In fact, certain SL varieties even reveal new patterns of auxiliation (e.g. gender-driven). SL data are essential to establish more possible combinations of these systems, thereby offering a more complete picture of the variation in auxiliary selection, both in Italo-Romance and in Romance more broadly.

I divide SL varieties into the following kinds of split auxiliary 'systems': pure argument-driven systems (§4), partial argument-driven systems (§5), hybrid argument-driven systems (§6), person-driven systems
(§7), and tense-and-mood-driven systems (§8). In Table 1, I organise the twenty-one varieties ${ }^{6}$ investigated from SL on the basis of the auxiliary system type displayed ${ }^{7}$. I consider the combination of different parameters of variation influencing the selection of the auxiliaries as creating 'systems' of auxiliation; i.e. where all the parameters involved in a specific system act together in a given language and determine the selection and, consequently, the combinations of the two auxiliaries HAVE and BE.

Table 1: Auxiliary system types in SL

| Auxiliary system type | Varieties |
| :---: | :---: |
| Pure argument-driven | Sant'Eliano |
| Partial argument-driven | Concano, Fauciano, Castelfortese, Carinolese |
| Hybrid argument-driven | Campomelese, Sant'Apollinarese, Lenolano, <br> Arcese, Sperlongano, Picano, Patricano, <br> Cassinate, Early Ferentinese |
| Person-driven | Campolese, Alvitano, Piciniscano, <br> Modern Ferentinese, Cepranese, San Donatese |
| Tense and mood-driven | Arpinate |

### 3.1 A short note on morphological forms of HAVE and BE in SL

Due to syncretism in some Italo-Romance varieties, different morphological forms can be ambiguous, bearing morphophonological shapes which neutralise the semantico-syntactic contrast between the two auxiliaries (cf. Manzini and Savoia 2005; Cennamo 2010; D'Alessandro and Ledgeway 2010b; Loporcaro 2017:813, i.a.). In some SL varieties as well, the imperfect indicative paradigm exhibits morphophonological identity between HAVE and BE in the $1^{\text {st }}$ and $2^{\text {nd }}$ singular persons ${ }^{8}$. For example, in the Arpinate (§8) imperfect indicative paradigm, the $1^{\text {st }}$ person singular is éva 'I.had', from èra <Lat. ERA(M) or (av)éva $<$ Lat. (H)ABEBA(M), and the $3^{\text {rd }}$ person singular is éva ‘s/he.had', from èra<Lat. ERA(T) or (av)éva<Lat. (н) $\operatorname{ABEBA}(\mathrm{T})$. Consequently, the morphological form éva is now ambiguous: HAVE cannot be distinguished

[^1]from BE.
I claim that these varieties had a true alternation between HAVE and BE in the $1^{\text {st }}$ and $3^{\text {rd }}$ person singular at an earlier stage, since they show opposition between HAVE and BE in different paradigms (e.g. present indicative, conditional, and subjunctive). However, at some point éra and éva in the imperfect indicative in both the $1^{\text {st }}$ and the $2^{\text {nd }}$ person singular were confused by speakers, and hence merged. Hence, éva could today be considered 'I.had was', 'I.was had', 's/he.had ${ }_{\text {was }}$ ', 's/he.washad'. In short, I treat them as the imperfect indicative of the verb HAVE and BE at the same time, a phenomenon I shall now refer to as HAVE/BE syncretism. HAVE/BE syncretism has been widely discussed in the literature. Rohlfs (1969:49,93-fn.1,§674) links the form érə to a development of the pluperfect indicative from the Latin (HABU)ERA(M), which came to function as the imperfect HABEBAM. Hence, he considers the form érə originally from HAVE. Along the same lines, for Neapolitan Ledgeway (2009:394-395) proposes that éva 'was' comes from HAVE (cf. also Cennamo 2010). Manzini and Savoia (2005) propose that $\grave{e} v a$ is BE inasmuch as it surfaces in copular constructions. Concerning Manzini and Savoia's (2005) hypothesis, I tested the behaviour of the imperfect indicative of HAVE and BE in reflexives and copular structures in SL varieties. Speakers cannot distinguish BE from HAVE anymore. Along the same lines, Andriani (2017:162-165) proposes that érə 'be.IMP.1/2SG' and évə 'have.IMP. $1 / 2 \mathrm{SG}$ ' have converged into the syncretic form évə 'HAVE/BE. $1 / 2 \mathrm{SG}$ ' to express both auxiliaries HAVE and BE in Barese.

Since in SL varieties the pluperfect indicative is formed with the imperfect indicative paradigm of HAVE and BE plus the past participle, HAVE/BE syncretism is relevant to this discussion. In fact, for all SL varieties which exhibit HAVE/BE syncretism, auxiliary HAVE in pluperfect contexts always seems to be generalised because the auxiliary BE is absent in the rest of the pluperfect paradigm.

HAVE/BE syncretism gives rise to opacity. In the relevant SL varieties investigated, the generalisation of the auxiliary HAVE is found, i.e. HAVE cannot be distinguished from BE in the $1^{\text {st }}$ and $3^{\text {rd }}$ persons singular of the pluperfect. I argue that speakers consider such forms to be superficially HAVE, analogous to the generalisation of HAVE in all persons of the pluperfect paradigm. In fact, all these varieties are (partial and hybrid) argument-driven systems or tense-and-mood-driven systems, so their grammars have an alternation between the two auxiliaries HAVE and BE in the present perfect only.

## 4 Pure argument-driven systems

The SL variety Sant'Eliano displays what I call a pure argument-driven auxiliary system. This variety shows HAVE with transitive/unergatives (e.g. acconcià 'fix'; (11a)) and BE with unaccusatives (e.g. $i$ 'go'; (11b)) in the present perfect ${ }^{9}$, in the pluperfect ((12a) vs (12b)), and in the counterfactual ((13a) vs (13b)). Specifically, Sant'Eliano transitive/unergative predicates (e.g. acconcià 'fix') in the present perfect paradigm select HAVE for all persons (11a), and unaccusative predicates (e.g. i'go') select BE for all persons (11b). Similarly, in pluperfect paradigms, transitive/unergative predicates (e.g. guidà 'drive') select HAVE (12a) and unaccusative predicates (e.g. $i$ 'go') select BE (12b) ${ }^{10}$.

## (11) Sant'Eliano (present perfect)

a. Transitive/unergatives
i àggiə / tu ài / issə/essa a / nujə àmə / vujə étə / issi/essə àu acconciàtə I have you have he/she has we have you have they.m/F have fixed.PTP (la màchina).
the.F.SG car.F.SG
'I have, you have, s/he has, we have, you have, they have fixed (the car).'

[^2]b. Unaccusatives
i só / tu si / issə/essa è / nujə sémə / vujə sétə / issi/essə só itə. I am you are he/she is we are you are they.M/F are gone.PTP
'I am, you are, s/he is, we are, you are, they are gone.'
(12) Sant'Eliano (pluperfect)
a. Transitive/unergatives
i avévə / tu avìvə / issə/essa avàmə / nujə avàtə / vujə àvanə / issi/essə àu
I had you had he/she had we had you had they.m/F had acconciàtə (la màchina).
fixed.PTP the.F.SG car.F.SG
'I had, you had, s/he had, we had, you had, they had fixed (the car).'
b. Unaccusatives
i èro / tu èri / issə/essa èra / nujə eravàmə / vujə eravàtə / issi/essə èranə I was you were he/she was we were you were they.M/F were itə.
gone.PTP
'I was, you were, s/he was, we were, you were, they were gone.'

In counterfactual contexts (13), as expected, BE and HAVE are selected on basis of the argument structure of the predicate (i.e. transitive/unergatives $=$ HAVE vs unaccusatives $=$ BE). As shown in (13), transitive/unergative predicates (e.g. magnà 'eat') in counterfactual contexts select HAVE (13a) and unaccusative predicates (i.e. $i$ ' go') select BE (13b).
(13) Sant'Eliano (counterfactual)
a. Transitives/unergatives

| 1SG | i avésse <br> I have.SBJV.1SG | magnàtə eaten.PTP | nə mə fòssə sentùtə malə not to.me be.COND. 1sG felt.PTP bad | H |
| :---: | :---: | :---: | :---: | :---: |
| 2SG | tu avéssə you have.SBJV.2SG | magnàtə eaten.PTP | nə tə fòssə sentùtə malə not to.you be.COND. 2 SG felt.PTP bad | H |
| 3SG | sə issə/essa avéssə <br> if he/she have.SbJV.3SG | magnàtə eaten.PTP | nə sə fòssə $\quad$ sentùtə malə not to.him/her be.COND. 3 SG felt.PTP bad | H |
| 1PL | nujə avéssəmə we have.SBJV.1PL | magnàtə eaten.PTP | nə cə fòssə not to.us be.COND.1PL felt.PTP bad | H |
| 2PL | vujə avéssəəə you have.SBJV.2PL | magnàtə eaten.PTP | nə və fòssə sentùtə malə <br> not to.you be.COND. 2 PL felt.PTP bad  | H |
| 3PL | issi/essə avéssərə they.m/F have.SBJV.3PL | magnàtə <br> eaten.PTP | nə sə fòssə $\quad$ sentùtə malə not to.them be.COND. 3 PL felt.PTP bad | H |

b. Unaccusatives

| $\frac{1 \mathrm{SG}}{2 \mathrm{SG}}$ | $\begin{aligned} & \text { sə } \\ & \text { if } \end{aligned}$ | i fòssa <br> I be.SBJV. 1 SG | itə <br> gone.PTP | 'Ntonio non sə fòssə 'ncazzatə Anthony not REFL be.COND.3SG got.mad.PTP | BB |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { tu fòssə } \\ & \text { you be.SBJV.2SG } \end{aligned}$ | it $\quad$ gone.PTP | 'Ntonio non sə fòssə 'ncazzatə Anthony not REFL be.COND. 3 SG got.mad.PTP |  |
| 3SG |  | issə/essa fòssə <br> he/she be.SBJV.3SG | itə gone.PTP | 'Ntonio non sə fòssə 'ncazzatə Anthony not REFL be.COND.3SG got.mad.PTP | B |
| 1PL |  | nujə fòssəəmə we be.SBJV.1PL | itə <br> gone.PTP | 'Ntonio non sə fòssə 'ncazzatə Anthony not REFL be.COND. 3 SG got.mad.PTP | B |
| 2PL |  | vujə fòssəvə you be.SBJV. 2 PL | itə <br> gone.PTP | 'Ntonio non sə fòssə 'ncazzatə Anthony not REFL be.COND. 3 SG got.mad.PTP | B |
| 3PL |  | issi/essə fòssarə <br> they.m/F be.SBJV.3PL | itə <br> gone.PTP | 'Ntonio non sə fòssə 'ncazzatə Anthony not REFL be.COND. 3 SG got.mad.PTP | B |

Henceforth, I consider the present perfect and pluperfect paradigms as 'realis contexts' and counterfactuals as 'irrealis contexts'. Hence, I observe that there are no tense (viz. present perfect vs pluperfect), mood (viz. indicative vs counterfactual), or modality restrictions (viz. [realis] vs [irrealis]) in the selection of the auxiliary in pure argument-driven auxiliary systems ${ }^{11}$.

I will conclude by observing that in Sant'Eliano the selection of the auxiliary is always and only related to the argument structure of the predicate, as in many other conservative Romance varieties such as standard Italian and French (Table 2). For the sake of the forthcoming microtypology for SL auxiliary systems in §9, I refer to pure argument-driven auxiliary systems such as Sant'Eliano as TYPE 1, as illustrated in Table 2:

Table 2: Pure argument-driven systems (TYPE 1)

| Pure argument-driven systems |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SL variety | realis |  |  |  | irrealiscounterfactual |  |
|  | present perfect |  | pluperfect |  |  |  |
|  | transitives unergatives | unaccusatives | transitives unergatives | unaccusatives | transitives unergatives | unaccusatives |
| Sant'Eliano | H | B | H | B | H | B |

## 5 Partial argument-driven systems

The SL varieties of Carinolese, Concano, Fauciano, and Castelfortese have partial argument-driven auxiliary systems. Specifically, the argument structure of the predicate in these varieties determines the choice between the two auxiliaries HAVE and BE only in the present perfect (i.e. realis contexts; cf. Table 3). However, these varieties exhibit mood, modality, and tense restrictions (i.e. past vs present, realis vs irrealis, indicative vs counterfactual), which make them part of a distinct auxiliary system type with respect to the pure argumentdriven systems described in $\S 4$. As exemplified by Carinolese (14), transitive/unergative predicates (e.g. vénnə 'sell') select HAVE in all persons in the present perfect paradigm (14a). However, unaccusatives (e.g. $j i$ ' go ') select BE in all persons in the present perfect paradigm (14b):

[^3]a. Transitive/unergatives
i àggiu / tu ài / issə/essa a / nujə àmmu / vujə àtə / issi/essə ànnu vennùtu I have you have he/she has we have you have they.M/F have sold.PTP (la màchina).
the.F.SG car.F.SG
'I have, you have, s/he has, we have, you have, they have sold (the car).'
b. Unaccusatives
i su / tu si / issə/essa è / nujə sémmu / vujə sétə / issi/essə su/sóngu jutə.
I am you are he/she is we are you are they.m/F are gone.PTP
'I am, you are, s/he is, we are, you are, they are gone.'

Table 3: Present perfect paradigm in partial argument-driven systems (TYPE 2)

| Partial argument-driven systems |  |  |
| :---: | :---: | :---: |
| SL <br> variety | present perfect |  |
|  | transitives <br> unergatives | unaccusatives |
| Concano | H | B |
| Fauciano | H | B |
| Carinolese | H | B |
| Castelfortese | H | B |

### 5.1 Tense, mood, and modality restrictions

Auxiliary selection in Romance may also be sensitive to tense and mood in argument-driven systems (see Ledgeway 2019 for a detailed account). In SL partial argument-driven auxiliary systems, tense, mood, and modality all influence the selection of the auxiliary (see Table 4).

Starting from tense restrictions, Carinolese, Concano, and Fauciano exhibit partial argument-driven auxiliary systems, as we can see from the split in the present perfect (i.e. HAVE with transitives/unergatives vs BE with unaccusatives; cf. Table 4). However, in the pluperfect, partial argument-driven varieties generalise one auxiliary to the detriment of the other. Specifically, Carinolese, Concano, and Fauciano generalise HAVE and Castelfortese generalises BE with both transitive/unergative and unaccusative verbs ${ }^{12}$. The argument split observed in the present perfect is not present in the pluperfect. Hence, in these varieties, auxiliary selection is subject to temporal restrictions if we compare present perfect vs pluperfect contexts. As exemplified by Carinolese (15), both transitive/unergatives (e.g. purtà 'drive') and unaccusatives (e.g. ji 'go') select HAVE in the pluperfect.

Carinolese (pluperfect; transitives/unergatives/unaccusatives)
i évu / tu ìvi / issə/essa éva / nujə ému / vujə étə / issi/essə évanə purtàtu I had was you had he/she had $_{\text {was }}$ we had you had they.M/F had driven.PTP
(la màchina) / jutz.
the.F.SG car.F.SG gone.PTP
'I had, you had, s/he had, we had, you had, they had driven (the car) / gone.'

[^4]On the other hand, Castelfortese (Table 4) generalises BE in the pluperfect with both transitive/unergatives (e.g. purtà 'drive') and unaccusatives (e.g. $i$ 'go'), as we can see in (16):
(16) Castelfortese (pluperfect; transitives/unergatives/unaccusatives)
i èra / tu èrə / issə/essa èra / nujə èramə / vujə èratə / issi/essə èrənə purtàtə
I was you were he/she was we were you were they.M/F were driven.PTP (la màchina) / jutə.
the.F.SG car.F.SG gone.PTP
'I was, you were, s/he were, we were, you were, they were driven (the car) / gone.'

Table 4: Pluperfect paradigm in partial argument-driven systems (TYPE 2)

| Partial argument-driven systems |  |  |
| :---: | :---: | :---: |
| SL <br> variety | pluperfect |  |
|  | transitives <br> unergatives | unaccusatives |
| Concano | $\mathrm{H}(\mathrm{B})^{13}$ | $\mathrm{H}(\mathrm{B})$ |
| Fauciano | $\mathrm{H}(\mathrm{B})$ | $\mathrm{H}(\mathrm{B})$ |
| Carinolese | $\mathrm{H}(\mathrm{B})$ | $\mathrm{H}(\mathrm{B})$ |
| Castelfortese | B | B |

Concerning mood restrictions, Carinolese and Castelfortese generalise the auxiliary HAVE (17) and BE (18) respectively in counterfactual contexts with both transitive/unergative (e.g. magnà/pranzà 'eat') and unaccusatives (e.g. ji/i 'go'). On the other hand, Concano and Fauciano maintain argument-driven auxiliary selection (viz. HAVE with transitives/unergatives vs BE with unaccusatives) in counterfactual contexts as well. As exemplified by Concano in (19), transitive/unergative predicates (e.g. magnà 'eat') select HAVE (19a) and unaccusatives (e.g. ji 'go') select BE (19b).
(17) Carinolese (counterfactual; transitives/unergatives/unaccusatives)

| 1SG |  | i avésso <br> I have.SBJV.1SG | magnàtə/jutə eaten/gone.PTP | nə mə fòssə fàtu ramàggiu not to.me be.COND.1SG felt.PTP bad | H |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2SG |  | tu avésso you have.SBJV.2SG | magnàtə/jutə eaten/gone.PTP | nə tə fòssə fàttu ramàggiu not to.you be.COND. 2 SG felt.PTP bad | H |
| 3SG | $\begin{aligned} & \text { sə } \\ & \text { if } \end{aligned}$ | issə/essa avéssə he/she have.SBJV.3SG | magnàtə/jutə eaten/gone.PTP | nə sə fòssə fàttu ramàggiu not to.him/her be.COND. 3 SG felt.PTP bad | H |
| 1PL |  | nujə avéssəmə we have.SBJV.1PL | magnàtə/jutə eaten/gone.PTP | nə cə fòssəmə fàttu ramàggiu not to.us be.COND.1PL felt.PTP bad | H |
| 2PL |  | vujə avéssəvə you have.SBJV.2PL | magnàtə/jutə eaten/gone.PTP | nə və fòssəvə fàtu ramàggiu not to.you be.COND.2PL felt.PTP bad | H |
| 3PL |  | issi/essə avéssərə they have.SBJV.3PL | magnàtə/jutə eaten/gone.PTP | nə sə fòssərə fàttu ramàggiu not to.them be.COND. 3 PL felt.PTP bad | H |

[^5](18) Castelfortese (counterfactual; transitives/unergatives/unaccusatives)

| 1SG | $\begin{aligned} & \text { sə } \\ & \text { if } \end{aligned}$ | i fùssə <br> I be.SBJV.1SG | pranzàtə/itə eaten/gone.PTP | nə mə fùssə/sarìa sentitə malaméntə not to.me be.COND. 1 SG felt.PTP bad | B |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2SG |  | tu fùsso you be.SBJV.2SG | pranzàtə/itə eaten/gone.PTP | nə tə fùssə/sarìa sentìtə malaméntə not to.you be.COND. 2 SG felt.PTP bad | B |
| 3SG |  | issa/essa fùsso <br> he/she be.SBJV.3SG | pranzàtə/itə eaten/gone.PTP | nə sə fùssə/sarìa sentìtə malaméntə not to.him/her be.COND. 3 SG felt.PTP bad | B |
| 1 PL |  | nujə fùssəmə we be.SBJV.1PL | pranzàtə/itə eaten/gone.PTP | nə cə fùssəmə sentìtə malaméntə not to.us be.COND. 1 PL felt.PTP bad | B |
| 2PL |  | vuja fùssava you be.SBJV.2PL | pranzàtə/itə eaten/gone.PTP | nə və fùssəvə sentìtə malaméntə not to.you be.COND. 2 PL felt.PTP bad | B |
| 3PL |  | issi/essə fùssərə they be.SBJV.3PL | pranzàtə/itə eaten/gone.PTP | nə sə fùssərə $\quad$ sentìtə malaméntə not to.them be.COND. 3 PL felt.PTP bad | B |

(19) Concano (counterfactual)
a. Transitives/unergatives

| $\frac{1 \mathrm{SG}}{2 \mathrm{SG}}$ | $\begin{aligned} & \text { sə } \\ & \text { if } \end{aligned}$ | i avésso <br> I have.SBJV.1SG | magnàtə <br> eaten.PTP | nə mə avéssə sentùtə malə not to.me be.COND. 1 SG felt.PTP bad | HH |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | tu avéssə you have.SBJV.2SG | magnàtə eaten.PTP | nə tə avéssə $\quad$ sentùtə malə not to.you be.COND. 2 SG felt.PTP bad |  |
| 3SG |  | issə/essa avéssə <br> he/she have.SBJV.3SG | magnàtə eaten.PTP | nə sə avéssə sentùtə malə not to.him/her be.COND. 3 SG felt.PTP bad | H |
| 1PL |  | nujə avéssəmə we have.SBJV.1PL | magnàtə eaten.PTP | nə cə avéssəmə sentùtə malə not to.us be.COND. 1 PL felt.PTP bad | H |
| 2PL |  | vujə avéssəvə you have.SBJV.2PL | magnàtə eaten.PTP | nə və avéssəvə sentùtə malə not to.you be.COND.2PL felt.PTP bad | H |
| 3PL |  | issi/essə avéssərə they have.SBJV.3PL | magnàtə eaten.PTP | nə sə avéssərə sentùtə malə not to.them be.COND.3PL felt.PTP bad | H |

b. Unaccusatives

| $\frac{1 \mathrm{SG}}{2 \mathrm{SG}}$ | $\begin{aligned} & \text { sə } \\ & \text { if } \end{aligned}$ | i fùssə <br> I be.SBJV.1SG | it gone.PTP | 'Ntonio non zə fùssə 'ncazzatə Anthony not REFL be.COND.3SG got.mad.PTP | B |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | tu fùssə you be.SBJV.2SG | itə gone.PTP | 'Ntonio non zə fùssə 'ncazzatə <br> Anthony not REFL be.COND. 3 SG got.mad.PTP | B |
| 3SG |  | issa/essa fùssə <br> he/she be.SBJV.3SG | itə gone.PTP | 'Ntonio non zə fùssə 'ncazzatə Anthony not REFL be.COND. 3 SG got.mad.PTP | B |
| 1 PL |  | nujə fùssəəmə we be.SBJV.1PL | itə gone.PTP | 'Ntonio non zə fùssə 'ncazzatə Anthony not REFL be.COND.3SG got.mad.PTP | B |
| 2PL |  | vuja fùssəvə <br> you be.SBJV.2PL | itə gone.PTP | 'Ntonio non zə fùssə 'ncazzatə Anthony not REFL be.COND. 3 SG got.mad.PTP | B |
| 3PL |  | issi/essə fùssərə they be.SBJV.3PL | itə <br> gone.PTP | 'Ntonio non zə fùssə 'ncazzatə Anthony not REFL be.COND.3SG got.mad.PTP | B |

To summarise, partial argument-driven systems in SL generally seem to be sensitive to argument structure, tense, mood, and modality. In fact, all these varieties behave the same in realis present perfect contexts, where we see a traditional split between HAVE selected by transitive/unergatives and BE selected by unaccusatives. In all these varieties tense is marked with a different auxiliary, since all varieties feature an
argument-driven auxiliary system in the present perfect and the generalisation of HAVE or BE in realis pluperfect contexts. Hence, they all show temporal restrictions (Table 5).

As for mood restrictions, Concano and Fauciano generalise the auxiliary HAVE in the pluperfect but display an argument-driven auxiliary system in the counterfactual (viz. transitives/unergatives $=$ HAVE vs unaccusatives $=\mathrm{BE}$ ). At the same time, Carinolese and Castelfortese generalise HAVE or BE in both the pluperfect and the counterfactual paradigms (Table 5). Specifically, Concano and Fauciano exhibit a [realis ${ }_{\text {past }}$ ] vs [irrealis] mood restriction and hence have the same present perfect and counterfactual paradigms, but a different one in the pluperfect. On the other hand, Carinolese and Castelfortese exhibit a [realis ${ }_{\text {present }}$ ] vs [irrealis] mood restriction, and hence the same pluperfect and counterfactual paradigms, with a different paradigm in the present perfect.

In order to build a microtypology for SL auxiliary systems based on modality marking in §9, I refer to partial argument-driven SL varieties as TYPE 2, and I divide them into TYPE 2A (i.e. Concano and Fauciano) and TYPE 2B (i.e. Carinolese and Castelfortese).

Table 5: Partial argument-driven systems (TYPE 2)

| Partial argument-driven systems |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SL variety | realis |  |  |  | irrealis |  | Aux <br> System Type |
|  | present perfect |  | pluperfect |  | counterfactual |  |  |
|  | transitives unergatives | unaccusatives | transitives unergatives | unaccusatives | transitives unergatives | unaccusatives |  |
| Concano | H | B | H(B) | H(B) | H | B | TYPE 2A |
| Fauciano | H | B | H(B) | H(B) | H | B |  |
| Carinolese | H | B | H(B) | H(B) | H | H | TYPE 2B |
| Castelfortese ${ }^{14}$ | H | B | B | B | B | B |  |

## 6 Hybrid argument-driven systems

A slightly more complex situation can be found in Campomelese, Sant'Apollinarese, Lenolano, Arcese, Sperlongano, Picano, Patricano, Cassinate, and Early Ferentinese. With respect to partial argument-driven systems, these varieties do not present the classical generalisation of HAVE with transitive/unergative verbs and BE with unaccusative verbs in all the persons of the present perfect paradigm. Specifically, these varieties have a mixed selection of the auxiliaries HAVE and BE. These distinguish the transitive/unergative paradigm from the unaccusative one. However, the transitive/unergative paradigm and the unaccusative paradigm show a mixed selection of HAVE and BE sensitive to four components of variation, namely discourse vs nondiscourse participant sensitivity, number sensitivity, gender sensitivity, and generalisation of one auxiliary.

For the sake of clarity, I describe auxiliary selection in hybrid argument-driven auxiliary systems in present perfect contexts focusing on transitive/unergative paradigms first (§6.1) and on the unaccusative paradigm later (§6.2). Since these varieties are sensitive to tense, mood, and modality, I provide several paradigms in §6.3.

### 6.1 Transitive/Unergative present perfect paradigms

As shown in Table 6, auxiliary selection in transitive/unergative paradigms in hybrid argument-driven systems is sensitive to four patterns: generalisation of one auxiliary, discourse vs non-discourse participants, number sensitivity, and gender sensitivity.

[^6]Table 6: Unergative/transitive present perfect paradigms

| Patterns of variation in transitives/unergatives present perfect paradigms |  |  |  |
| :---: | :---: | :---: | :---: |
| Discourse/non-discourse <br> participants sensitivity | Number sensitivity | Gender sensitivity | Generalisation of one <br> auxiliary |
| Arcese | Cassinate <br> Sant'Apollinarese <br> Picano <br> Early Ferentinese | Campomelese <br> Sperlongano | Picano |

Patricano and Lenolano (20) generalise the auxiliary HAVE in all persons of the transitive/unergative paradigm (e.g. accuncià 'fix'). However, these varieties do not present the generalisation of BE with unaccusatives, as we will see below (§6.2).

Lenolano (transitives/unergatives)
je àggiu / tu ài / issə/essa a / nujə àmu / ujə átə / issi/essə àru accunciàtə I have you have he/she has we have you have they.m/F have fixed.PTP (la màchina).
the.F.SG car.F.SG
'I have, you have, s/he has, we have, you have, they have fixed (the car).'

Arcese, Sant'Apollinarese, Picano, and Early Ferentinese show a sensitivity to discourse vs non-discourse participants (see Benveniste 1971:221) in transitive/unergative paradigms (cf. Table 7). In short, auxiliary selection is sensitive to the grammatical person of the nominative subject, and this constitutes a nominativeaccusative system which distinguishes all types of subjects (i.e. $\mathrm{A} / \mathrm{S}_{\mathrm{A}}, \mathrm{S}_{\mathrm{O}}$ ) from O . As exemplified by Arcese (21), the transitive/unergative predicate aggiustà 'fix' selects BE in the $1^{\text {st }}$ and $2^{\text {nd }}$ person singular and plural and HAVE in the $3^{\text {rd }}$ person singular and plural. However, as we see in (22), the transitive/unergative paradigm (e.g. accuncià 'fix') in Picano is sensitive to discourse vs non-discourse participants only if the non-discourse participant subject is feminine (e.g. essa 'she') in the $3^{\text {rd }}$ person singular in (22) ${ }^{15}$ :
(21) Arcese (transitives/unergatives)
i só / tu si / issə/essa a / nu sémə / vu sètə / issi/essə àu aggiustàtə (la
I am you are he/she has we are you are they.m/F have fixed.PTP the.F.SG màchina).
car.F.SG
'I am, you are, s/he has, we is, you are, they have fixed (the car).'
(22) Picano (transitives/unergatives)
i só / tu si / issə/essa è/a / nu sémə / vu sètə / issi/essə àvə aggiustàtə (la I am you are he/she is/has we are you are they.m/F have fixed.PTP the.F.SG màchina).
car.F.SG
'I am, you are, he is / she has, we are, you are, they have fixed (the car).'

[^7]Table 7: Discourse/non-discourse participant restrictions

| SL Variety | Persons |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1SG | 2SG | 3SG | 1PL | 2PL | 3PL |
| Arcese | B | B | H | B | B | H |
| Sant'Apollinarese | B | B | H | B | B | H |
| Picano | B | B | H/B | B | B | H |
| Early Ferentinese | B | B | H | B | B | H |

In Picano, the transitive/unergative present perfect paradigm shows that auxiliary selection is sensitive to the gender of the $3^{\text {rd }}$ person singular. As shown in example (22) and Table 8 , in the transitive/unergative present perfect paradigm (e.g. accuncià 'fix') Picano uses BE with masculine animate subjects (e.g. issə 'he') and with feminine animate subjects (e.g. essa 'she') in the $3^{\text {rd }}$ person singular. However, in the third person plural, auxiliary HAVE is always selected, regardless of the gender of the animate subject. From the data collected, it further seems that non-animate subjects do not present gender sensitivity in Picano.

Table 8: Gender restrictions

| SL <br> Variety | MASCULINE |  |  |  |  |  | FEMININE |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1SG | 2SG | 3SG | 1PL | 2PL | 3PL | 1SG | 2SG | 3SG | 1PL | 2PL | 3PL |
| Picano | B | B | B | B | B | H | B | B | H | B | B | H |

Cassinate (23), Sperlongano (24), and Campomelese (25) display number sensitivity (i.e. singular vs plural) in present perfect transitive/unergative paradigms (e.g. vénnə 'sell', accuncià 'fix'). Specifically, all these varieties display the contrast between the selection of the auxiliary HAVE in the $1^{\text {st }}$ singular and BE in the $1^{\text {st }}$ person plural (Table 9). In addition to a contrast between HAVE in the $1^{\text {st }}$ singular and BE in the $1^{\text {st }}$ plural, Campomelese (25) also contrasts the selection of auxiliary HAVE in the $2^{\text {nd }}$ singular with BE in the $2^{\text {nd }}$ plural.
(23) Cassinate (transitives/unergatives)
i àggiə / tu si / issə/essa a / nujə sémə / vujə sètə / issi/essə àu vennùtə (la
I have you are he/she has we are you are they.M/F have sold.PTP the.F.SG màchina).
car.F.SG
'I have, you are, s/he has, we are, you are, they have sold (the car).'
(24) Sperlongano (transitives/unergatives)
i àggiə / tu àijə / issə/essa a / nujə sémə / vujə àvə / issi/essə àu vennùtə (la
I have you have he/she has we are you have they.M/F have sold.PTP the.F.SG màchina). car.F.SG
'I have, you have, s/he has, we are, you have, they have sold (the car).'
(25) Campomelese (transitives/unergatives)
i àggiə / tu ài / issə/essa a / nujə sémə / vujə sétə / issi/essə ànnə accunciàtə
I have you have he/she has we are you are they.m/F have fixed.PTP (la màchina).
the.F.SG car.F.SG
'I have, you have, s/he has, we are, you are, they have fixed (the car).'

Table 9: Number restrictions

| SL Variety | Persons |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1SG | 2SG | 3SG | 1PL | 2PL | 3PL |  |
| Cassinate | H | B | H | B | B | H |  |
| Campomelese | H | H | H | B | B | H |  |
| Sperlongano | H | H | H | B | H | H |  |

### 6.2 Unaccusative present perfect paradigms

In hybrid argument-driven systems, auxiliary selection in unaccusative paradigms is sensitive to different patterns of variation, namely discourse vs non-discourse participants, number sensitivity, and gender sensitivity (Table 10).

Table 10: Unaccusative present perfect paradigms

| Patterns of variation in unaccusative <br> present perfect paradigms |  |  |
| :---: | :---: | :---: |
| Discourse/ <br> non-discourse participant <br> sensitivity | Number <br> sensitivity | Gender <br> sensitivity |
| Campomelese | Cassinate <br> Patricano <br> Picano | Lenolano <br> Sant'Apollinanarese <br> Early Ferentinese | | Cassinate |
| :---: |
| Arcese |

Campomelese, Patricano and Picano present discourse vs non-discourse participant sensitivity (i.e. $1^{\text {st }} / 2^{\text {nd }}$ singular and plural vs $3^{\text {rd }}$ singular and plural) in the unaccusative present perfect paradigm (e.g. $i$ 'go'; cf. Table 11). As exemplified by Campomelese (26), auxiliary selection is sensitive to the grammatical person of the nominative subject, hence displaying a nominative-accusative system which distinguishes all types of subjects (i.e. $\mathrm{A} / \mathrm{S}_{\mathrm{A}}, \mathrm{S}_{\mathrm{O}}$ ) from O . Specifically, unaccusative paradigms present BE in the $1^{\text {st }}$ and $2^{\text {nd }}$ person singular and plural and HAVE in the $3^{\text {rd }}$ person singular and plural:
(26) Campomelese (unaccusatives)
i só / tu si / issə/essa a / nujə sémə / vujə sétə / issi/essə ànnə jutə.
I am you are he/she has we are you are they.m/F have gone.PTP
'I am, you are, s/he has, we are, you are, they have gone.'

Table 11: Discourse/non-discourse participant restrictions

| SL Variety | Persons |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1SG | 2SG | 3SG | 1PL | 2PL | 3PL |
|  | B | B | H | B | B | H |
| Patricano | B | B | H | B | B | H |
| Picano | B | B | H | B | B | H |

Cassinate, Sperlongano, Sant'Apollinarese, and Early Ferentinese display number sensitivity (i.e. singular vs plural) in unaccusative present perfect paradigms. All these varieties select HAVE in the $1^{\text {st }}$ person singular and BE in the $1^{\text {st }}$ person plural ((27), (28), (29); see Table 12). However, Sant'Apollinarese and Cassinate (only with animate feminine subjects; (27)) select auxiliary HAVE in the $3^{\text {rd }}$ person singular and BE in the $3^{\text {rd }}$ person plural ((27), (28)). Moreover, Early Ferentinese presents free alternation between both auxiliaries in the $1^{\text {st }}$ and $3^{\text {rd }}$ person singular (Table 12).
(27) Cassinate (unaccusatives)
i àggiə / tu si / issə/essa è/a / nujə sémə / vujə sétə / issi/essə só jutə.
I have you are he/she is/has we are you are they.m/F are gone.PTP
'I have, you are, he is / she has, we are, you are, they are gone.'
(28) Sant'Apollinarese (unaccusatives)
i àggiə / tu si / issə/essa a / nujə sémə / vujə sétə / issi/essə só itə.
I have you are he/she has we are you are they.m/F are gone.PTP
'I have, you are, s/he has, we are, you are, they are gone.'
(29) Sperlongano (unaccusatives)
i àggiə / tu si / issə/essa è / nujə sémə / vujə sétə / issi/essə só itə.
I have you are he/she is we are you are they.m/F are gone.PTP
'I have, you are, s/he is, we are, you are, they are gone.'

Table 12: Number restrictions

| SL Variety | Persons |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1SG | 2SG | 3SG | 1PL | 2PL | 3PL |
|  | H | B | H/B | B | B | B |
| Sant'Apollinarese | H | B | H | B | B | B |
| Sperlongano | H | B | B | B | B | B |
| Early Ferentinese | H/B | B | H/B | B | B | B |

The unaccusative present perfect paradigm in Lenolano, Cassinate, and Arcese shows a sensitivity to gender (Table 13). In particular, in all these varieties the auxiliaries HAVE and BE are selected on the basis of gender (i.e. masculine vs feminine) in the $3^{\text {rd }}$ person singular. In Cassinate (27), Arcese (30), and Lenolano the auxiliary selected in unaccusative present perfect paradigms (e.g. $i$ 'go') is BE in the $3^{\text {rd }}$ person singular with animate masculine subjects (e.g. issə 'he'). However, the auxiliary selected is HAVE in the $3^{\text {rd }}$ person singular with animate feminine subjects (e.g. essa 'she')
(30) Arcese (unaccusatives)
i só / tu si / issə/essa è/a / nu sémə / vu sétə / issi/essə só itə. I am you are he/she is/has we are you are they.m/F are gone.PTP
'I am, you are, he is / she has, we are, you are, they are gone.'

Table 13: Gender restrictions

| SL | MASCULINE |  |  |  |  |  | FEMININE |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1SG | 2SG | 3SG | 1PL | 2PL | 3PL | 1SG | 2SG | 3SG | 1PL | 2PL | 3PL |
| Lenolano | H | H | B | H | H | H | H | H | H | H | H | H |
| Cassinate | H | B | B | B | B | B | H | B | H | B | B | H |
| Arcese | B | B | B | B | B | B | B | B | H | B | B | B |

To summarise, in Table $14^{16}$ I show that hybrid argument-driven auxiliary systems in SL exhibit several different present perfect paradigms. In all varieties which belong to this auxiliary system type (i.e. TYPE 3),

[^8]the transitive/unergative present perfect paradigm is different from the unaccusative one. Hence, I consider these varieties hybrid argument-driven auxiliary systems in which argument-structure influences the selection of the auxiliary in the present perfect. Moreover, there are embedded patterns of variation, i.e. discourse vs non-discourse participants, gender, and number, which play a secondary role in the selection of the auxiliary in transitive/unergative and unaccusative present perfect paradigms respectively.

Table 14: Present perfect in hybrid argument-driven systems (TYPE 3)

| Hybrid argument-driven systems |  |  |
| :---: | :---: | :---: |
| SL |  |  |
| variety | present perfect |  |
|  | transitives |  |
| unergatives | unaccusatives |  |
| Campolese | HHH BBH | BBH BBH |
| Sant'Apollinarese | BBH BBH | HBH BBB |
| Lenolano | HHH HHH | HHB $\sim$ H HHH |
| Arcese | BBH BBH | BBB $\sim$ H BBB |
| Early Ferentinese | BBH BBH | H~BBH~B BBB |
| Cassinate | HBH BBH | HBB $\sim$ H BBB $\sim$ H |
| Picano | BBH~B BBH | BBH BBH |
| Patricano | HHH HHH | BBH BBH |
| Sperlongano | HHH BHH | HBB BBB |

### 6.3 Tense, mood, and modality restrictions

Hybrid argument-driven systems also prove to be sensitive to tense, mood, and modality. Beginning with tense restrictions, Campomelese, Sant'Apollinarese, Arcese, and Cassinate all show generalisation of the auxiliary BE in the pluperfect with both transitives/unergatives and unaccusatives. As shown in the Cassinate example in (31), both the transitive/unergative paradigm (e.g. guidà 'drive') and the unaccusative paradigm (e.g. $i$ ' go') feature the auxiliary BE in all grammatical persons:
(31) Cassinate (pluperfect; transitives/unergatives/unaccusatives)
i èrə / tu èri / issə/essa èra / nujə erauàmə / vujə erauàtə / issi/essə èranə guidàtə
I was you were he/she was we were you were they.M/F were driven.PTP (la màchina) / juto.
the.F.SG car.F.SG gone.PTP
'I was, you were, s/he was, we were, you were, they were driven the car / gone.'

On the other hand, Patricano, Lenolano, Early Ferentinese, and Picano generalise the auxiliary HAVE in the pluperfect paradigm in all grammatical persons. As shown in (32), Patricano generalises the auxiliary HAVE in both the transitive/unergative (e.g. purtà 'drive') and unaccusative (e.g. $i$ 'go') paradigms in all grammatical persons:
(32) Patricano (pluperfect; transitives/unergatives/unaccusatives)
je jèvə / tu jìvə / issə/essa jèvə / nui jìmə / ujə jétə / issi/essə jévanə purtàtə
I had was you had he/she $\operatorname{had}_{\text {was }}$ we had you had they.M/F had driven.PTP
(la màchina) / ito.
the.F.SG car.F.SG gone.PTP
'I had, you had, s/he was, we had, you had, they had driven the car / gone.'

In the pluperfect, the general tendency in hybrid argument-system auxiliary systems is to generalise either HAVE or BE at the expense of the other auxiliary in both transitive/unergative and unaccusative paradigms (Table 15).

Table 15: Pluperfect in hybrid argument-driven systems (TYPE 3)

| Hybrid argument-driven systems |  |  |
| :---: | :---: | :---: |
| SL | pluperfect |  |
| variety | transitives |  |
|  | unergatives | unaccusatives |
|  | B | B |
| Campolese | B | B |
| Sant'Apollinarese | H(B) | H(B) |
| Lenolano | B | B |
| Arcese | H(B) | H(B) |
| Early Ferentinese | B | B |
| Cassinate | H(B) | H(B) |
| Picano | H(B) | H(B) |
| Patricano | H(B) | H(B) |
| Sperlongano |  |  |

Turning now to mood restrictions, the SL variety Lenolano (33) generalises the auxiliary HAVE in the transitive/unergative and the unaccusative paradigms in counterfactual contexts. On the other hand, Campomelese, Sant'Apollinarese, Early Ferentinese, and Picano generalise the auxiliary BE in both the counterfactual unergative/transitive and unaccusative paradigms, as exemplified by Picano in (34):
(33) Lenolano (counterfactual; transitives/unergatives/unaccusatives)

| 1SG |  | je avésso <br> I have.SBJv.1sG | magnàtə/itə eaten/gone.PTP | nə mə fùssə/sarìa sentùtə malə not to.me be.COND. 1 SG felt.PTP bad | H |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2SG |  | tu avésso <br> you have.SBJV.2SG | magnàtə/itə eaten/gone.PTP | nə tə fùssə/sarìa sentùtə malə not to.you be.COND. 2 SG felt.PTP bad | H |
| 3SG | $\begin{aligned} & \text { sə } \\ & \text { if } \end{aligned}$ | issə/essa avéssə he/she have.SBJV.3SG | magnàtə/itə eaten/gone.PTP | nə sə fùssə/sarìa sentùtə malə not to.him/her be.COND. 3 SG felt.PTP bad | H |
| 1PL |  | nujə avéssəmə we have.SBJV.1PL | magnàtə/itə eaten/gone.PTP | nə cə fùssəmə/sarìssəmə sentùtə malə not to.us be.COND.1PL felt.PTP bad | H |
| 2PL |  | vujə avéssəvə <br> you have.SBJV.2PL | magnàtə/itə eaten/gone.PTP | nə və fùssəva/sarìssəvə sentùtə malə not to.you be.COND.2PL felt.PTP bad | H |
| 3 PL |  | issi/essə avéssərə they have.SBJV.3PL | magnàtə/itə eaten/gone.PTP | nə sə fùssərə/sarìssərə sentùtə malə not to.them be.COND.3PL felt.PTP bad | H |

Picano (counterfactual; transitives/unergatives/unaccusatives)

| 1SG | $\begin{aligned} & \text { sə } \\ & \text { if } \end{aligned}$ | i sarìa <br> I be.SBJV.1SG | magnàtə/itə eaten/gone.PTP | nə mə fùssə sentùtə malə not to.me be.COND.1SG felt.PTP bad | B |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2SG |  | tu sarìa you be.SBJV.2SG | magnàtə/itə eaten/gone.PTP | nə tə fùssə $\quad$ sentùtə malə not to.you be.COND. 2 SG felt.PTP bad | B |
| 3SG |  | issə/essa sarìa <br> he/she be.SBJV.3SG | magnàtə/itə eaten/gone.PTP | nə sə fùssə sentùtə malə not to.him/her be.COND. 3 SG felt.PTP bad | B |
| 1PL |  | nujə sarìssəmə we be.SBJV.1PL | magnàtə/itə eaten/gone.PTP | nə cə fùssəmə sentùtə malə not to.us be.COND.1PL felt.PTP bad | B |
| 2PL |  | vujə sarìssəvə you be.SBJV.2PL | magnàtə/itə eaten/gone.PTP | nə və fùssəvə sentùtə malə not to.you be.COND. 2 PL felt.PTP bad | B |
| 3PL |  | issi/essə sarìssərə they be.SBJV.3PL | magnàtə/itə eaten/gone.PTP | nə sə füssərə sentùtə malə not to.them be.COND.3PL felt.PTP bad | B |

Cassinate, Patricano, Sperlongano, and Arcese feature argument-driven auxiliary selection in counterfactuals. As exemplified by Cassinate in (35), in the transitive/unergative paradigm (e.g. məgnà 'eat') the auxiliary selected is HAVE in all grammatical persons (35a), and in the unaccusative paradigm (e.g. $i$ 'go') the auxiliary selected is BE in all grammatical persons (35b):
(35) Cassinate (counterfactual)
a. Transitives/unergatives

| $\frac{1 \mathrm{SG}}{2 \mathrm{SG}}$ | $\begin{aligned} & \text { sə } \\ & \text { if } \end{aligned}$ | i avéssə <br> I have.SBJV.1SG | magnàtə <br> eaten.PTP | nə mə fùssə sentùtə malə not to.me be.COND.1SG felt.PTP bad | H |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | tu avéssə you have.SBJV. 2 SG | magnàtə eaten.PTP | nə tə fùssə $\quad$ sentùtə malə not to.you be.COND. 2 SG felt.PTP bad | H |
| 3SG |  | issə/essa avéssə <br> he/she have.SBJV.3SG | magnàtə eaten.PTP | nə sə fùssə sentùtə malə not to.him/her be.COND. 3 SG felt.PTP bad | H |
| 1 PL |  | nujə avéssəmə <br> we have.SBJV.1PL | magnàtə eaten.PTP | nə cə fùssəmə sentùtə malə not to.us be.COND.1PL felt.PTP bad | H |
| 2PL |  | vujə avéssəvə you have.SBJV.2PL | magnàtə eaten.PTP | nə və fùssəvə sentùtə malə not to.you be.COND. 2 PL felt.PTP bad | H |
| 3PL |  | issi/essə avéssərə <br> they have.SBJV.3PL | magnàtə <br> eaten.PTP | nə sə fùssərə sentùtə malə not to.them be.COND.3PL felt.PTP bad | H |

b. Unaccusatives


To summarise, hybrid argument-driven auxiliary systems in SL show sensitivity to the argumental structure of the predicate in the present perfect paradigm. Specifically, these auxiliary systems exhibit mixed HAVE/BE paradigms which are different for transitives/unergatives and unaccusatives. This is how these varieties show argument-driven sensitivity in the present perfect. Additionally, the selection of HAVE and BE in these mixed HAVE/BE paradigms appears to obey different patterns of variation, namely gender, number, discourse vs non-discourse participants, and generalisation of one auxiliary.

All hybrid argument-structure varieties are restricted on the basis of tense, mood, and modality. As for tense, these varieties generalise one auxiliary to the detriment of the other in all grammatical persons of the transitive/unergative and unaccusative pluperfect paradigms (§6.3). In the case of mood restrictions, again, all these varieties either generalise auxiliary HAVE/BE in all grammatical persons of the paradigm, or they show argument-driven auxiliary selection (viz. transitive/unergative $=$ HAVE vs unaccusatives $=\mathrm{BE}$ ) in both the transitive/unergative and unaccusative counterfactual paradigms.

For the sake of the microtypology in §9, I will divide hybrid argument-driven varieties (TYPE 3) on the basis of modality marking. Specifically, as we can see in Table 16, I label the SL varieties Campomelese, Sant'Apollinarese, and Lenolano TYPE 3A since these varieties present a [realis ${ }_{\text {present }}$ ] vs [irrealis] modality restriction, hence their auxiliary systems only mark modality with the contrast between a specific paradigm in the present perfect and a different one in the counterfactual. These varieties do not have a [realis ${ }_{\text {past }}$ ] vs [irrealis] modality restriction since they all generalise the same auxiliary in both the pluperfect and the counterfactual paradigms. On the other hand, I call the SL varieties Arcese, Early Ferentinese, Cassinate, Picano, Patricano, and Sperlongano TYPE 3B varieties since these exhibit [realis present ] vs [irrealis] and [realis past ] vs [irrealis] modality restrictions. Hence, these varieties have different present perfect, pluperfect, and counterfactual paradigms.

Table 16: Hybrid argument-driven systems (TYPE 3)

| Hybrid argument-driven systems |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SL variety | realis |  |  | irrealis |  |  |  |
|  | present perfect |  | pluperfect |  | counterfactual |  | System Type |
|  | transitives unergatives | unaccusatives | transitives unergatives | unaccusatives | transitives unergatives | unaccusatives |  |
| Campomelese ${ }^{17}$ | HHH BBH | BBH BBH | B | B | B | B | TYPE 3A |
| Sant'Apollinarese | BBH BBH | HBH BBB | B | B | B | B |  |
| Lenolano ${ }^{18}$ | HHH HHH | HHB $\sim$ H HHH | H(B) | H(B) | H | H |  |
| Arcese | BBH BBH | ВВB $\sim$ H В BB | B | B | H | B | TYPE 3B |
| Early Ferentinese | BBH BBH | $\mathrm{H} \sim \mathrm{BBH} \sim \mathrm{B}$ В ${ }^{\text {a }}$ | H(B) | H(B) | B | B |  |
| Cassinate | HBH BBH | HBB $\sim$ H B BB $\sim$ H | B | B | H | B |  |
| Picano | BBH~B BBH | BBH BBH | H(B) | H(B) | B | B |  |
| Patricano | ННН ННН | BBH BBH | H(B) | H(B) | H | B |  |
| Sperlongano | HHH BHH | HBB BBB | H(B) | H(B) | H | B |  |

## 7 Person-driven systems

The SL varieties Campolese, Alvitano, Piciniscano, Modern Ferentinese, Cepranese, and San Donatese show no sensitivity whatsoever to the argumental structure of the predicate (cf. pure and partial argument-driven varieties; $\S 4, \S 5)$. Hence, there is no difference between transitives/unergatives and unaccusatives in the present perfect. However, these varieties, as I show in §7.1, show tense, mood, and modality restrictions as

[^9]well, and hence different pluperfect and counterfactual paradigms. In present perfect paradigms, the choice between the two auxiliaries HAVE and BE depends on the grammatical person, which is sensitive to three factors: discourse vs non-discourse participants (i.e. $1^{\text {st }} / 2^{\text {nd }}$ persons vs $3^{\text {rd }}$ persons), number (i.e. singular vs plural), and gender (i.e. masculine vs plural), as we can see in Table 17.

Table 17: Patterns of variation in present perfect paradigms

| Patterns of variation <br> in present perfect paradigms |  |  |
| :---: | :---: | :---: |
| Discourse/ <br> non-discourse participants <br> sensitivity | Number <br> sensitivity | Gender <br> sensitivity |
| Campolese |  |  |
| Alvitano <br> Piciniscano <br> Modern Ferentinese | San Donatese | Cepranese |

Campolese, Alvitano, Piciniscano, and Modern Ferentinese have person-driven auxiliary systems which show discourse vs non-discourse participant sensitivity (i.e. $1^{\text {st }} / 2^{\text {nd }}$ singular and plural vs $3^{\text {rd }}$ singular and plural) with both transitive/unergative and unaccusative verbs (Table 18), hence displaying a nominativeaccusative system which distinguishes all types of subjects (i.e. A/S $\mathrm{S}_{\mathrm{A}}$ ) from O. For example, Campolese (36) shows in both present perfect transitive/unergative and unaccusative paradigms the auxiliary BE in the $1^{\text {st }}$ and $2^{\text {nd }}$ person singular and plural and the auxiliary HAVE in the $3^{\text {rd }}$ person singular and plural.
(36) Campolese (present perfect; transitives/unergatives/unaccusatives)
i sò / tu sə / issə/essa a / nu sémə / vu sétə / issi/essə éu vennùtə (la
I am you are he/she has we are you are they.M/F have sold.PTP the.F.SG màchina) / ito.
car.F.SG gone.PTP
'I am, you are, s/he has, we are, you are, they have sold the car / gone.'

Table 18: Discourse/non-discourse participant restrictions

| SL Variety | Persons |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1SG | 2SG | 3SG | 1PL | 2PL | 3PL |
|  | B | B | H | B | B | H |
| Alvitano | B | B | H | B | B | H |
| Piciniscano | B | B | H | B | B | H |
| Modern Ferentinese | B | B | H | B | B | H |

The SL variety San Donatese (37) displays a person-driven split system, which shows number sensitivity (i.e. singular vs plural) in both transitive/unergative (e.g. vènnə 'sell', $i$ 'go') and unaccusative paradigms (Table 19). Specifically, in San Donatese there is a contrast between the selection of BE in the $3^{\text {rd }}$ person singular and HAVE in the $3^{\text {rd }}$ person plural in both transitive/unergative and unaccusative paradigms.
(37) San Donatese (present perfect; transitives/unergatives/unaccusatives)
i sò / tu si / issə/essa è / nu sémə / vu sétə / issi/essə jàvə vennùtə (la
I am you are he/she is we are you are they.M/F have sold.PTP the.F.SG màchina) / ito.
car.F.SG gone.PTP
'I am, you are, s/he is, we are, you are, they have sold the car / gone.'

Table 19: Number restrictions

|  | Persons |  |  |  |  |  |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SL Variety |  |  |  |  |  |  |
|  | 1SG | 2SG | 3SG | 1PL | 2PL | 3PL |
| San Donatese | B | B | B | B | B |  |

In both transitive/unergative (e.g. vénna 'sell') and unaccusative (e.g. i 'go') present perfect paradigms, Cepranese shows sensitivity to gender (i.e. masculine vs feminine). In particular, the auxiliaries HAVE and BE are selected on the basis of the gender of the animate subject in the $3^{\text {rd }}$ person singular. As we can see in the Cepranese example in (38), masculine animate subjects (e.g. issa 'he') select the auxiliary HAVE in the $3^{\text {rd }}$ person singular and feminine animate subjects (e.g. essa 'she') select the auxiliary BE in the $3^{\text {rd }}$ person singular (Table 20) ${ }^{19}$ :
(38) Cepranese (present perfect; transitives/unergatives/unaccusatives)
i sò / tu si / issə/essa a/è / nu sémə / vu sétə / issi/essa au vennùta (la
I am you are he/she has/is we are you are they.M/F have sold.PTP the.F.SG
màchina) / ita.
car.F.SG gone.PTP
I am, you are, he has / she is, we are, you are, they have sold the car / gone.'

Table 20: Gender restrictions

| SL Variety | MASCULINE |  |  |  |  |  | Feminine |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1SG | 2SG | 3sG | 1PL | 2PL | 3PL | 1SG | 2SG | 3SG | 1PL | 2PL | 3PL |
| Cepranese | B | B | H | B | B | H | B | B | B | B | B | H |

### 7.1 Tense, mood, and modality restrictions

As with all SL auxiliary systems presented above in §4-§6, person-driven split auxiliary systems in SL also exhibit tense, mood, and modality restrictions. In particular, beginning with temporal restrictions, all SL person-driven split auxiliary systems generalise the auxiliary BE in all grammatical persons of both transitive/unergative and unaccusative pluperfect paradigms. As shown in (39) for Piciniscano, the auxiliary BE is selected in all grammatical persons in both transitive/unergative (e.g. purtà 'drive') and unaccusative (e.g. $i$ 'go') pluperfect paradigms:
(39) Piciniscano (pluperfect; transitives/unergatives/unaccusatives)
i éra / tu érə / issə/essa érə / nu erauàmə / vu eràuata / issi/essa èrana pùrtata
I was you were he/she was we were you were they.M/F were driven.PTP
(la màchina) / ita.
the.F.SG car.F.SG gone.PTP
'I was, you were, he was / she was, we were, you were, they were driven the car / gone.'
As for mood restrictions, all SL person-driven split varieties generalise auxiliary be for all persons in both transitive/unergative and unaccusative counterfactual paradigms. Taking Campolese as an example, in (40) we see that the auxiliary BE is selected in all grammatical persons of the transitive/unergative (e.g. məgnà 'eat'; (40a)) and the unaccusative (e.g. $i$ 'go'; (40b)) counterfactual paradigms.

[^10](40) Campolese (counterfactual)
a. Transitives/unergatives

| 1SG | $\begin{aligned} & \text { sə } \\ & \text { if } \end{aligned}$ | i fùssə <br> I be.SBJV.1SG | məgnàtə eaten.PTP | nə mə sarìa sentùtə malə not to.me be.COND. 1 SG felt.PTP bad | B |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2SG |  | tu fùsso <br> you be.SBJV.2SG | məgnàtə eaten.PTP | nə tə sarìa sentùtə malə not to.you be.COND. 2 SG felt.PTP bad | B |
| 3SG |  | issə/essa fùssə <br> he/she be.SBJV.3SG | məgnàtə eaten.PTP | nə sə sarìa sentùtə malə not to.him/her be.COND. 3 SG felt.PTP bad | B |
| 1 PL |  | nu fùssəmə we be.SBJV. 1 PL | məgnàtə eaten.PTP | nə cə sarìssəmə sentùtə malə not to.us be.COND. 1PL felt.PTP bad | B |
| 2PL |  | vu fùssəvə you be.SBJV.2PL | məgnàtə eaten.PTP | nə və sarìssəvə sentùtə malə not to.you be.COND. 2PL felt.PTP bad | B |
| 3PL |  | issi/essə fùssarə they be.SBJV.3PL | məgnàtə eaten.PTP | nə sə sarìssərə sentùtə malə not to.them be.COND.3PL felt.PTP bad | B |

b. Unaccusatives


As schematised in Table 21, person-driven split auxiliary systems in SL do not show any sensitivity to the argumental structure of the predicate. This is shown by the fact that there is no difference between the present perfect paradigm of transitives/unergatives and unaccusatives. In fact, the selection of the auxiliaries HAVE and BE in the transitive/unergative and unaccusative paradigms is influenced by three factors: discourse vs non-discourse participant person ( $1^{\text {st }} / 2^{\text {nd }}$ vs $3^{\text {rd }}$ persons), number (singular vs plural), and gender (masculine vs feminine). All these systems have tense and mood restrictions, since all present the generalisation of the auxiliary BE in all grammatical persons in the pluperfect and the counterfactual transitive/unergative and unaccusative paradigms (Table 21). In terms of modality, then, all SL person-driven split auxiliary systems have a [realis present ] vs [irrealis] restriction, since these varieties present the same pluperfect and counterfactual paradigms which contrast with a different present perfect paradigm.

For the sake of our microtypology of SL auxiliary systems, I therefore group Campolese, Alvitano, Piniciscano, Modern Ferentinese, Cepranese, and San Donatese under the same auxiliary system type, namely TYPE 4.

Table 21: Person-driven systems (TYPE 4)

| Person-driven systems |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SL variety | realis |  |  |  | irrealis counterfactual |  |
|  | present perfect |  | pluperfect |  |  |  |
|  | transitives unergatives | unaccusatives | transitives unergatives | unaccusatives | transitives unergatives | unaccusatives |
| Campolese | BBH BBH | BBH BBH | B | B | B | B |
| Alvitano | ВВН ВВН | ВВН ВВН | B | B | B | B |
| Piciniscano | BBH BBH | BBH BBH | B | B | B | B |
| Modern Ferentinese | BBH BBH | BBH BBH | B | B | H | B |
| Cepranese | BBH~B BBH | BBH~B BBH | B | B | B | B |
| San Donatese | ВВВ ВBH | ВВВ BBH | B | B | B | B |

## 8 Tense-and-mood-driven auxiliary systems

Only the SL variety Arpinate (41) uses a tense-and-mood-based auxiliary system. This variety generalises the auxiliary BE in both the present perfect transitive/unergative (e.g. vénnə 'sell') and unaccusative (e.g. $i$ 'go'; (41)) paradigms in all grammatical persons (Table 22). As for tense and mood, Arpinate exhibits selection of the auxiliary HAVE in all persons of both transitive/unergative (e.g. purtà 'drive') and unaccusative (e.g. $i$ 'go') pluperfect (42), and the auxiliary BE in the counterfactual (e.g. attreppà 'eat', $i$ 'go'; (43)) paradigms.
(41) Arpinate (present perfect; transitives/unergatives/unaccusatives)
ie só / tu si / issə/essa è / nuə sémə / vuə sétə / issi/essə sévə vennùtə (la
I am you are he/she is we are you are they.M/F are sold.PTP the.F.SG màchəna) / ito.
car.F.SG gone.PTP
'I am, you are, s/he is, we are, you are, they are sold the car / gone.'
(42) Arpinate (pluperfect; transitives/unergatives/unaccusatives)
ie èva / tu ivə / issə/essa èva / nuə èvamə / vuə èvatə / issi/essə èvanə purtàtə
I had was you had he/she had was we had you had they.M/F had driven.PTP (la màchəna) / ito.
the.F.SG car.F.SG gone.PTP
'I had, you had, s/he had, we had, you had, they had sold the car / gone.'
(43) Arpinate (counterfactual)
a. Transitives/unergatives

| 1SG | $\begin{aligned} & \text { sə } \\ & \text { if } \end{aligned}$ | ie fùsso <br> I be.SBJV.1SG | attreppàtə eaten.PTP | nə mə sarrìa sentùtə malə not to.me be.COND. 1 SG felt.PTP sick | B |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2SG |  | tu fùssə you be.SBJV.2SG | attreppàtə eaten.PTP | nə tə sarrìa sentùtə malə not to.you be.COND. 2 SG felt.PTP sick | B |
| 3SG |  | issə/essa fùssə <br> he/she be.SBJV.3SG | attreppàtə eaten.PTP | nə sə sarrìa sentùtə malə not to.him/her be.COND. 3 SG felt.PTP sick | B |
| 1PL |  | nu fùssəmə we be.SBJV.1PL | attreppàtə <br> eaten.PTP | nə cə sarrìssəmə sentùtə malə not to.us be.COND. 1PL felt.PTP sick | B |
| 2PL |  | vu fùssəvə you be.SBJV.2PL | attreppàtə eaten.PTP | nə və sarrìssəvə sentùtə malə not to.you be.COND. 2 PL felt.PTP sick | B |
| 3PL |  | issi/essə fùssərə they be.SBJV.3PL | attreppàtə eaten.PTP | nə sə sarrìssərə sentùtə malə not to.them be.COND.3PL felt.PTP sick | B |

b. Unaccusatives

| $\frac{1 \mathrm{SG}}{2 \mathrm{SG}}$ | $\begin{aligned} & \text { sə } \\ & \text { if } \end{aligned}$ | ie fùssə <br> I be.SBJV.1SG | itə gone.PTP | 'Ntoniə nə sə sarrìa 'ncazzatə Anthony not REFL be.COND. 3 SG got.mad.PTP | B |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | tu fùsso you be.SBJV.2SG | itə gone.PTP | 'Ntoniə nə sə sarrìa 'ncazzatə Anthony not REFL be.COND.3SG got.mad.PTP |  |
| 3SG |  | $\begin{aligned} & \text { issə/essa fùssə } \\ & \text { he/she be.SBJV. } 3 \mathrm{SG} \end{aligned}$ | itə gone.PTP | 'Ntoniə nə sə sarrìa 'ncazzatə Anthony not REFL be.COND.3SG got.mad.PTP | B |
| 1PL |  | nu fùssəmə we be.SBJV.1PL | itə gone.PTP | 'Ntoniə nə sə sarìa 'ncazzatə Anthony not REFL be.COND.3SG got.mad.PTP | B |
| 2PL |  | vu fùssəvə you be.SBJV. 2PL | itə gone.PTP | 'Ntoniə nə sə sarrìa 'ncazzatə Anthony not REFL be.COND. 3SG got.mad.PTP | B |
| 3PL |  | issi/essə fùssərə they be.SBJV.3PL | it gone.PTP | 'Ntoniə nə sə sarrìa 'ncazzatə Anthony not REFL be.COND.3SG got.mad.PTP | B |

Tense-and-mood-driven auxiliary systems do not have any sensitivity to the argument structure of the verb, since there is no difference between the transitive/unergative and unaccusative paradigms in the present perfect, pluperfect, and counterfactual. Arpinate has tense restrictions since it generalises BE in all grammatical persons of the transitive/unergative and unaccusative past perfect paradigms, in contrast with the generalisation of HAVE in all persons of the transitive/unergative and unaccusatives pluperfect paradigms. Moreover, it also presents mood restrictions, since Arpinate shows the generalisation of HAVE in all persons of the transitive/unergative and unaccusative pluperfect paradigms, which contrasts with the generalisation of BE in all persons of the transitive/unergative and unaccusative counterfactual paradigms.

In terms of modality restrictions, then, I maintain that tense-and-mood-driven auxiliary systems in SL mark modality only in [realis past ] vs [irrealis] contexts, since the generalisation of HAVE in the pluperfect contrasts with the generalisation of BE in the counterfactual. This is also supported by the fact that in Arpinate there is the generalisation of BE in both the present perfect and the counterfactual paradigms. I call tense-and-mood-driven systems TYPE 5 systems in the microtypology of modality systems in SL, as illustrated in $\S 9$.

Table 22: Tense-and-mood-driven systems

| Tense-and-mood-driven systems (TYPE 5) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SL variety | realis |  |  |  | irrealis counterfactual |  |
|  | present perfect |  | pluperfect |  |  |  |
|  | transitives unergatives | unaccusatives | transitives unergatives | unaccusatives | transitives unergatives | unaccusatives |
| Arpinate | B | B | $\mathrm{H}(\mathrm{B})^{20}$ | H(B) | B | B |

## 9 A microtypology of Southern Lazio auxiliary systems

Having described the individual auxiliary systems of SL, we can now sketch a microtypology of these systems. With the term 'microtypology' I intend a typological classification among closely-related and minimally-differing languages, which applies to the linguistic situation of SL. Specifically, I propose the microtypology for SL in Table 23 where I consider mood/modality restrictions, which seem to be, together with tense restrictions, the source of substantial differences and similarities among auxiliary systems in SL.

[^11]As shown in $\S 3$, it is possible to find five types of auxiliary systems in SL, namely pure argument-driven systems (TYPE 1), partial argument-driven systems (TYPE 2), hybrid argument-driven systems (TYPE 3), person-driven split auxiliary systems (TYPE 4), and tense and mood-driven auxiliary systems (TYPE 5).

Table 23: A microtypology of SL auxiliary systems

| Auxiliary system type | Tense restrictions | Mood and Modality restrictions | Varieties |
| :---: | :---: | :---: | :---: |
| Pure argument-driven auxiliary systems |  |  |  |
| TYPE 1 | $(\mathrm{NO})^{21}$ | (NO) ${ }^{22}$ | Sant'Eliano |
| Partial argument-driven auxiliary systems |  |  |  |
| TYPE 2A | YES | YES [realis ${ }_{\text {past }}$ ] vs [irrealis] | Concano Fauciano |
| TYPE 2B | YES | $\begin{gathered} \text { YES } \\ \text { [realispresent] } \\ \text { vs } \\ \text { [irrealis] } \end{gathered}$ | Castelfortese Carinolese |
| Hybrid argument-driven auxiliary systems |  |  |  |
| type 3A | YES | $\begin{gathered} \text { YES } \\ \text { [realispresent] } \\ \text { vs } \\ \text { [irrealis] } \end{gathered}$ | Campomelese Sant'Apollinare Lenolano |
| TYPE 3B | YES | $\begin{gathered} \text { YES } \\ \text { [realis } \\ \text { present/past] } \\ \text { vs } \\ {[\text { [irrealis] }} \end{gathered}$ | Arcese Sperlongano Picano Patricano Cassinate <br> Early Ferentinese |


| Person-driven auxiliary systems |  |  |  |
| :---: | :---: | :---: | :---: |
| TYPE 4 | YES | $\begin{gathered} \text { YES } \\ \text { [realispresent] }^{\text {vs }} \\ \text { [irrealis] } \end{gathered}$ | Campolese <br> Alvitano <br> Piciniscano Modern Ferentinese Cepranese San Donatese |
| Tense and mood-driven auxiliary systems |  |  |  |
| TYPE 5 | YES | YES $\left[\right.$ realis ${ }_{\text {past }}$ ] vs [irrealis] | Arpinate |

[^12]Pure argument-driven systems (TYPE 1) present no tense, mood, and modality restrictions involved in the selection of the auxiliary. This type is exemplified by the SL variety Sant'Eliano. Typologically speaking, this is the auxiliary system that we find in modern Romance, e.g. standard Italian and French.

Partial argument-driven systems (TYPE 2) present tense, mood, and modality restrictions. Specifically, I divide TYPE 2 auxiliary systems into two subsystems, namely TYPE 2A and TYPE 2B. TYPE 2A shows tense restrictions but mood and modality restrictions only between [realis past ] vs [irrealis]. Concano and Fauciano are part of this auxiliary type. TYPE 2B shows tense restrictions, but mood and modality restrictions only between [realis ${ }_{\text {present }}$ ] vs [irrealis]. The SL varieties Castelfortese and Carinolese belong to this auxiliary type.

Hybrid argument-driven auxiliary systems (TYPE 3) exhibit tense, mood, and modality restrictions. In SL we find two different kinds of TYPE 3 auxiliary systems, namely TYPE 3A and TYPE 3B. TYPE 3A has tense restrictions, but mood and modality restrictions only between [realis present ] vs [irrealis]. Campomelese, Sant'Apollinarese, and Lenolano belong to this auxiliary type. On the other hand, TYPE 3B shows tense restrictions, but mood and modality restrictions only between [realis ${ }_{p r e s e n t / p a s t}$ ] vs [irrealis]. Arcese, Sperlongano, Picano, Patricano, Cassinate, and Early Ferentinese exemplify this group in SL.

Person-driven auxiliary systems (TYPE 4) show tense restrictions, but mood and modality restrictions only between [realis ${ }_{\text {present }}$ ] vs [irrealis]. This auxiliary type is exemplified in SL by Campolese, Alvitano, Piciniscano, Modern Ferentinese, Cepranese, and San Donatese.

Finally, tense and mood-driven auxiliary systems present tense restrictions, but mood and modality restrictions only between [realis past ] and [irrealis]. Arpinate is the only SL variety that belongs to this auxiliary type.

## 10 SL auxiliation is not unprincipled language variation

Even if the variation found in SL auxiliary selection appears to be complex, it is far from being unprincipled. From both a functional (Greenberg 2005 [1966]; Haspelmath et al. 2004) and a formal (Chomsky 1981) perspective, there is agreement on the fact that syntactic variation cannot be unpredictable or limitless. This is also the case for SL auxiliary selection, which is indeed principled and restricted by the parametric space.

In order to explain the variation found in SL varieties, I will assume a so-called 'emergentist' approach to language variation developed by Biberauer and Roberts (2015, 2017, 2016), Biberauer (2019), and Roberts (2019). This approach, briefly outlined in $\S 10.1$, conceives parametric variation as an implicationally structured set of parameters, which can be organised into a taxonomy illustrated by means of so-called 'parameter hierarchies'. Such an approach demonstrates that the variation found in SL varieties is indeed predictable, limited, and thus, part of possibly acquired grammars.

### 10.1 Background: parameter hierarchies and language variation

Within a Principles and Parameter approach Chomsky (1981), Biberauer and Roberts (2015, 2016, 2017), Biberauer (2019), and Roberts (2019) argue for the existence of a different granularity of language variation proposing the following taxonomy of parameters:
(44) Different sizes of parametric variation (Biberauer 2019:22)

For a given value $v_{i}$ of a parametrically variant feature $F$ :
a. Macroparameters: all functional heads of the relevant type share $\mathrm{v}_{\mathrm{i}}$;
b. Mesoparameters: all functional heads of a given naturally definable class, e.g. [+V], share $\mathrm{v}_{\mathrm{i}}$;
c. Microparameters: a small subclass of functional heads (e.g. modal auxiliaries) shows $\mathrm{v}_{\mathrm{i}}$;
d. Nanoparameters: one or more individual lexical items is/are specified for $\mathrm{v}_{\mathrm{i}}$.

Without going too much into detail, the central idea is that macroparameters are to be considered 'bigger' parameters with respect to meso-, micro-, and nano-parameters (which are 'smaller' parameters). In particular, macroparameters are the result of clusters of microparameters which behave in concert. In formal terms, macroparameters are set for a particular formal feature (e.g. tense feature), whereas microparameters arise
when different subclasses of functional heads present, for a given feature, different featural specifications (e.g. different kinds of tense features).

Conceived in this way, the parametric space can be illustrated by parametric hierarchies along the lines of (45):

## Does p charaterize L?



All functional heads?


Extended to naturally definable class?


Restricted to lexically definable subclass?


Limited to idiosyncratic collection of individual lexical items?


Needless to say, hierarchies are able to restrict the space of possible grammars by illustrating the intrinsic dependencies across parameters. Consequently, these hierarchies are remarkably useful for the Romance linguist, who usually deals with the granularity of parametric variation. Thus, via parameter hierarchies, we can make predictions about how specific parameters involved in parametric granularity are interrelated. This is why parametric hierarchies have proved to be quite valuable in previous studies aimed at modelling Romance variation in different domains: adverb and participle agreement (Silvestri 2016), nominal and clausal domains (Ledgeway 2015), auxiliary selection (Ledgeway 2019), and complementation (Colasanti 2018c,a).

### 10.2 A parameter hierarchy for auxiliation in $S L$

Starting from the parameter hierarchy for auxiliary selection already proposed for Romance by Ledgeway (2019:348) in (46), we observe that, within the mesoparameteric space, there are five dimensions of variation in Romance perfective auxiliary alternation. Question 1 splits up the Romance languages which present alternation between HAVE and BE from languages which do not present any alternation (e.g. generalisation of one auxiliary; e.g. many Ibero-Romance and extreme/upper southern Italo-Romance varieties). If the given Romance variety presents auxiliary alternation, it can be determined by mood, tense, person, and argument structure. At the levels of both person and argument structure, auxiliary selection can blend modal and temporal restrictions to produce increasingly complex auxiliation 'systems', which can be also seen in SL. However, in Romance, both these levels, more fine-grained variation is present, which is to be considered in fact as microparametric. For instance, at a microparametric level, we are not considering 'person' but different featural specifications of person; e.g. discourse participant sensitivity, number, etc. This is why, postulating the existence of two microparameter hierarchies which model the variation within person and argument structure, Ledgeway (2019:354-375) is able to interpret the granularity of variation present within Romance perfective auxiliary selection.


With respect to SL auxiliary selection, the same mesoparameter hierarchy put forward by Ledgeway (2019) can also model some of the mesovariation presented in SL varieties, as expected. However, at a microparametric level, the parameter hierarchy for SL auxiliation presents different parametric dependencies and implications because the microparameters found in SL are different. Starting with modelling the mesoparametric variation in $\S 10.3$, we then proceed to the modelling of microparametric variation in $\S 10.4$ in SL.

### 10.3 Mesoparametric variation

Every language type found in SL and classified in the microtypology for SL auxiliary selection in $\S 9$ can be captured by the mesoparameter hierarchy in (47) below. However, this parameter hierarchy presents a number of very small changes with respect to the one in (46) previously proposed for Romance by Ledgeway (2019).

First, the variation exhibited at a mesoparametric level in SL varieties is modelled by the 'yes' answers (as opposed to the 'no' answers) to all the questions in the hierarchy proposed by Ledgeway (2019) in (46). The general assumption is that the auxiliary category in Romance (and beyond) is related to the lexicalisation of mood/modality ${ }^{23}$, tense, and person/phi-features. Specifically, the very nature of an auxiliary in Romance is to grammaticalise these features. Additionally, the alternation between the two auxiliaries can also be sensitive to the interaction of tense, mood, and person/phi-features in Romance. In short, concerning Question 2,3 , and 4 , I take the 'sensitivity' to be related both to the features that the auxiliary category grammaticalises (i.e. tense, mood, person/phi-features) and the features which influence the alternation between the two auxiliaries HAVE and BE in Romance. This is a first difference from the hierarchy proposed by Ledgeway (2019:348) in (46), where only the sensitivity with respect to the auxiliary alternation is considered (but not the sensitivity related to the features grammaticalised by the auxiliary category). In this way, we are able to model varieties which show sensitivity to mood/modality, tense, and also phi-features (and, eventually, to argument structure) at the same time and which are found in SL (e.g. hybrid argument-driven systems and person-driven systems).

[^13]
2. Sensitive to mood/modality?

3. Sensitive to tense?

4. Sensitive to phi-features?

5. Sensitive to argument structure?


TYPE 4
TYPE 1
TYPE 5 TYPE 2A/2B
TYPE 3A/3B

The parameter hierarchy in (47) for SL mesoparametric variation is also different from the one proposed by Ledgeway (2019:348) in terms of Question 4. While the latter in Ledgeway (2019) asks whether the variety is sensitive to 'person' (46), Question 4 in (47) is more generally concerned with 'phi' features (Kerstens 2012). This is because the microvariation found in SL varieties goes well beyond the phi-feature person but includes several different phi-features (of which person features are part), such as person, number, and gender. In order to capture SL variation, we therefore need to enlarge the scope of Question 4.

The variation present in TYPE 1, 2A, 2B, and 5 is already modelled at mesoparameter level by the hierarchy in (47): TYPE 1 (pure argument-driven) varieties exhibit auxiliary selection (hence, mood, tense, and person/phi features the auxiliary category) sensitive to the argumental structure of the predicate they accompany. Thus, these varieties occupy the 'yes' choice at the bottom of the hierarchy in (47). In the same position we also find TYPE 2A and 2B (partial argument-driven) varieties as these are partially sensitive to the argumental structure of the lexical verb, but the combination of HAVE and BE in these varieties is also sensitive to mood/modality and tense (in addition to mood, tense, and person/phi features on the auxiliary category), creating different complex systems of auxiliation. This place is also occupied by TYPE 3A and 3B (hybrid argument-driven) varieties; however, these varieties present microparametric variation at the level of the person (Question 4). Hence, the microparametric variation found at the level of the single varieties will need to be additionally modelled by a specific microparameter hierarchy for phi-features (see §10.4). The 'no' choice to Question 5 of the hierarchy is occupied by TYPE 4 (person-driven auxiliary) and TYPE 5 (tense-and mood-driven auxiliary) varieties. In particular, while the parametric variation exhibited by TYPE 5 varieties is already modelled by the mesoparameter hierarchy in (47) because the auxiliary alternation is only sensitive to tense and mood/modality but not to the argumental structure of the lexical verb, TYPE 4 exhibits additional microparametric variation at the level of phi-features, as we will see in §10.4.

### 10.4 Microparametric variation

The microparametric variation present in SL varieties such as TYPES 3A, 3B (hybrid argument-driven auxiliary systems) and 4 (person-driven auxiliary systems), is not exhaustively modelled by the mesoparametric hierarchy in (47) above. In fact, in order to model the variation found in TYPES 3A, 3B, and 4 systems, we will also need to consider also new microparameters, which have been found in SL varieties but they have not been found before in Romance before now (e.g. gender sensitivity). The parameter hierarchy in (48) is
a sub-hierarchy for microparametric variation found with respect to phi-features and it should be considered as dependent on Question 4 of the mesoparameter hierarchy in (47).

[TYPES $3 \mathrm{~A} / 3 \mathrm{~B} / 4$ ]

## 2. Number?



San Donatese
Sperlongano
3. Also discourse?


Early Ferentinese
Sant'Apollinarese
Campomelese
4. Gender?


Cassinate

## 5. Only gender?



Cepranese
6. Only discourse?


Campolese
Alvitano

Piciniscano Modern Ferentinese

8. Generalisation of aux?

Arcese
Picano
9. Also generalisation of aux?


Patricano

Starting from Question 1 in (48), the hierarchy divides languages which show the selection of the auxiliary influenced by phi-features from those which do not show such a sensitivity. Further down the hierarchy, Question 2 divides languages belonging to TYPES 3A, 3B, and 4 (which auxiliary selection is sensitive to phi-features) in which show number sensitivity (i.e. San Donatese, Sperlongano, Sant'Apollinarese, Campomelese, Early Ferentinese, Cassinate) from varieties which do not (i.e. Campolese, Alvitano, Piciniscano, Modern Ferentinese, Cepranese, Arcese, Patricano, Lenolano, Picano). Varieties such as San Donatese and Sperlongano exhibit sensitivity only to number (i.e. 'Yes' answer to Question 2). However, this is not the case for varieties such as Early Ferentinese, Sant'Apollinarese, and Campomelese, which, on top of number sensitivity, also show also sensitivity to discourse (i.e. $1 / 2$ persons vs 3 persons; 'Yes' answer to Question 3). The answer 'Yes' to Question 4 models varieties such as Cassinate, which shows sensitivity to gender, discourse participants, and number.

Among the varieties in which auxiliary selection is not sensitive to number (i.e. 'No' answer to Question 2), we need to model varieties which present exclusive sensitivity to gender, such as Cepranese (i.e. 'Yes' answer to Question 5) and varieties which do not present sensitivity to number and gender, but exclusively to discourse participants, such as Campolese, Alvitano, Piciniscano, and Modern Ferentinese (i.e. 'Yes' answer to Question 6). The answer 'No' to Question 6, would predict the existence of varieties which do not present both sensitivity to number, and exclusive gender and/or discourse sensitivity. For instance, Arcese and Picano both present additional sensitivity to gender and discourse ('Yes' answer to Question 7). However, on the one hand, varieties such as Lenolano present additional sensitivity to gender ('No' answer to Question 5) and
the generalisation of the auxiliary for each person. On the other hand, Patricano also exhibits sensitivity to discourse ('Yes' answer to Question 7) and the generalisation of the auxiliary for each person ('Yes' answer to Question 9).

The variation exhibited by SL perfective auxiliary selection can be modelled at the level of mesoparametric variation and microparametric variation, although, as expected, the mesoparametric variation hierarchy previously proposed by Ledgeway (2019) models Romance variation in auxiliary selection (SL varieties included), with small changes. At a microparametric level, the variation shown by SL varieties in terms of auxiliary selection needs to be modelled with the specific microparametric hierarchy in (48) for phi-features. This is due to the fact that there is a need to model patterns of microvariation for SL varieties which have not been previously found in other Romance varieties. Hence, a new parameter hierarchy with new implicational relationships for new parameters is entirely expected.

There are at least two advantages of modelling the parametric variation found in SL varieties by means of a parameter hierarchy. The first is related to the predictability that such an approach creates in terms of possible grammars. In fact, the hierarchy predicts the existence of specific patterns of variation among languages which present auxiliary selection, which means that we are able to go beyond the descriptive adequacy. In other words, we do not simply document the empirical evidence from Italo-Romance varieties - which variation in terms of auxiliary selection is far from being entirely documented - but we try to give an explanation for it.

The predictions made by the mesoparameter hierarchy proposed by Ledgeway (2019) appear to be empirically grounded also with respect to SL varieties; i.e., the hierarchy predicts the system of perfective auxiliation found in SL varieties. In terms of microvariation, since some of the empirical facts found in SL are novel and so far unattested in Romance, some new predictions can be made on the basis of the microparametric hierarchy in (48). In particular, the hierarchy in (48) predicts the non-existence of varieties which exhibit mesoparametric person-driven auxiliary selection, and microparametric sensitivity to number, discourse, and gender on top of the generalisation of the auxiliary across grammatical person ${ }^{24}$. The hierarchy also predicts the non-existence of person-driven systems which show sensitivity to gender, the generalisation of one auxiliary, and number sensitivity at the same time, or grammars which are not sensitive to gender but exhibit discourse sensitivity and the generalisation of one auxiliary at the same time.

As we can see, an approach in terms of parameter hierarchies makes some predictions in terms of possible and impossible grammars. However, it makes also implicationally relevant predictions in terms of microparameter clusters; i.e. a set of microparameters acting together, whose presence/absence is determined by each other's presence/absence. For instance, in terms of phi-features, we can say that if a given variety shows person sensitivity to number, then it can show additional sensitivity to discourse and gender only. However, if a given variety presents no sensitivity to number, then it can show sensitivity not only to gender and discourse, but also the generalisation of one auxiliary. To the best of my knowledge, these impossible patterns of auxiliary selection have not been discovered so far.

## 11 Contributions and conclusions

The varieties spoken in Southern Lazio exhibit empirically unattested and hybrid patterns of auxiliary selection. This confirms the hypothesis that SL is a transitional area between the varieties spoken in the centre and those spoken in the upper South of Italy, not only from a phonetic/phonological perspective but also from a morphosyntactic point of view; i.e. on the basis of morphosyntactic isoglosses. The microtypology of SL auxiliary systems includes five auxiliary system types: pure argument-driven auxiliary systems (TYPE 1), partial argument-driven auxiliary systems (TYPE 2), hybrid argument-driven auxiliary systems (TYPE 3), person-driven auxiliary systems (TYPE 4), and tense and mood-driven auxiliary systems (TYPE 5).

Although presenting a number of patterns previously documented within the Romance literature on auxiliary selection (e.g. sensitivity to person and number of the subject, tense/mood, discourse participants, etc.),

[^14]SL varieties also exhibit patterns of variation not previously noted in Romance (e.g. gender-sensitivity). What is more, this apparently unprincipled variation found in SL can be modelled in terms of parameter hierarchies. In particular, while empirically confirming the mesoparametric hierarchy proposed by Ledgeway (2019), a new microparametric hierarchy for sensitivity to phi-features (i.e. gender, number, discourse participants, person, and auxiliary generalisation) is put forward in this paper in order to include the new parameters of variation found in SL.

On top of the empirical contribution made by this paper, an approach in terms of parameter hierarchies is appealing as it also allows the linguist faced with complex clusters of parameters (i.e. micro- and macroparameters) and their combinations to explain such variation and reveal the implicational relations among these different parameters. These relations among several meso- and macro-parameters also allow the prediction of the existence of possible and impossible patterns of auxiliary selection in Romance. Granted the fact that the patterns of auxiliary selection in Romance are far from being fully documented, these empirical predictions are, at the time of writing, being met.

## References

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[^0]:    1 See Ceci (1886); Vignoli (1911, 1925); Maccarrone (1915); Devoto (1972), Pellegrini (1977:31); Vignuzzi (1981:63, 1988:614); Schanzer (1989); Maiden (1991); De Mauro and Lorenzetti (1991); Fanciullo (1994); Merolle (1995); Avolio (1995, 2000, 2001, 2013); Trifone (1997); Colasanti (2008, 2011); i.a..

    2 Cf. the central varieties spoken in the Lazio region investigated by Manzini and Savoia (2005:II).

[^1]:    6 The SL varieties investigated in this paper are: Sant'Eliano (spoken in Sant'Elia Fiumerapido, province of Frosinone), Concano (spoken in Conca della Campania, province of Caserta), Fauciano (spoken in Falciano del Massico, province of Caserta), Castelfortese (spoken in Castelforte, province of Latina), Carinolese (spoken in Carinola, province of of Caserta), Campomelese (spoken in Campodimele, province of Latina), Sant'Apollinarese (spoken in Sant'Apollinare, province of Latina), Lenolano (spoken in Lenola, province of Frosinone), Arcese (spoken in Arce, province of Frosinone), Sperlongano (spoken in Sperlonga, province of Latina), Picano (spoken in Pico, province of Frosinone), Patricano (spoken in Patrica, province of Frosinone), Cassinate (spoken in Cassino, province of Frosinone), Early/Modern Ferentinese (spoken in Ferentino, province of Frosinone), Campolese (spoken in Campoli Appennino, province of Frosinone), Alvitano (spoken in Alvito, province of Frosinone), Piciniscano (spoken in Picinisco, province of Frosinone), Cepranese (spoken in Ceprano, province of Frosinone), San Donatese (spoken in San Donato Val di Comino, province of Frosinone), and Arpinate (spoken in Arpino, province of Frosinone). I also included in the survey northern Campanian varieties such as Fauciano, Concano, and Carinolese, which are spoken in Northern Campania. This is because the varieties spoken in Southern Lazio and in northern Campania (province of Caserta) present similarities. In fact, these were all part of the same former administrative area called Terra di Lavoro until 1927.
    7 However, as we will see in this section (§3), the situation is much more complicated than this. Table 1 is only a tentative typology of auxiliary systems. Cf. the microtypology for SL auxiliation in $\S 9$.
    8 Specifically, in the partial argument-driven varieties (§5) Concano (évə 'have/be.IMP. 1SG', éva 'have/be.IMP. 3 SG '), Fauciano (évə 'have/be.IMP.1SG', éva 'have/be.IMP.3SG'), and Carinolese (évu 'have/be.IMP. 1 SG ', éva 'have/be.IMP. 3 SG '), the hybrid argument-driven varieties (§6) Sperlongano (évə 'have/be.IMP. 1 SG ', évə 'have/be.IMP. 3 SG '), Patricano (jévə 'have/be.IMP. 1 SG ', jévə ‘have/be.IMP.3SG’), Picano (éva ‘have/be.IMP.1SG’, éva have/be.IMP.3SG’), Early Ferentinese (éva ‘have/be.IMP.1SG’, éva 'have/be.IMP.3SG'), and Lenolano (évo 'have/be.IMP.1SG', éva 'have/be.IMP.3SG'), and the tense-and mood-driven variety (§8) Arpinate (éva 'have/be.IMP. 1 SG ', éva 'have/be.IMP. 3 SG ').

[^2]:    9 See also the variety of Rocca di Papa (Castelli Romani), which shows a similar distribution of the auxiliaries HAVE and BE; Lorenzetti 1995:ch.3).
    ${ }^{10}$ Concerning past participle agreement (which is not represented in the examples from SL varieties), see Colasanti (2018b:130) for details.

[^3]:    ${ }^{11}$ I take the very same category Aux to grammaticalise features such as tense, mood/modality, and person of the lexical verb which they accompany in perfective contexts. However, the selection between of HAVE and BE in pure argument-driven systems does not show tense/mood restrictions.

[^4]:    12 Varieties with ' $\mathrm{H}(\mathrm{B})$ ' have the HAVE/BE syncretism form in the $1^{\text {st }}$ and $3^{\text {rd }}$ person of the pluperfect paradigm. I consider these varieties to have a superficial morphological generalisation of the auxiliary HAVE in all persons. See $\S 3.1$ for details.

[^5]:    ${ }^{13}$ See in fn. 12.

[^6]:    14 The generalisation of BE in the transitive/unergative/unaccusative pluperfect and counterfactual paradigms is also found in the varieties of Lariano, Albano, Castelgandolfo, Ariccia, and Marino (Castelli Romani) investigated by Lorenzetti (1995:ch.3), and in the varieties of Ortezzano, Amandola, Campli, S. Vittore, Vastrogirardi, Roccasicura, Pontecorvo, Sonnino, Castelpetroso, Gallo, Monteroduni, Sassinoro, and Castelvecchio Subequo investigated by Manzini and Savoia (2005:II,729).

[^7]:    15 Note that the gender alternation is also present with proper nouns and full DPs. This excludes the possibility that the alternation might be the result of a phonetic co-articulation process between the final vowel of the pronoun and the initial vowel of the auxiliary forms.

[^8]:    16 The ' $\sim$ ' symbol in the table means 'or'.

[^9]:    17 See in fn. 12.
    18 The generalisation of HAVE in transitive/unergative/unaccusative pluperfect and counterfactual paradigms is also found in the variety of Frascati (Castelli Romani) investigated by Lorenzetti (1995:ch.3). See also the varieties of Secinaro, Tufillo, Montenerodomo, Giovinazzo, Molfetta, Ruvo di Puglia, Bitetto, Padula, and Castelvecchio Subequo investigated in Manzini and Savoia (2005:II,729).

[^10]:    19 Note that the gender alternation is also present with proper nouns and full DPs; e.g. Aldə a vennùta la màchina 'Aldo has sold the car' vs Iolə è vennùta la màchina 'Iole is sold the car'. This excludes the possibility that the alternation might be the result of a phonetic co-articulation process between the final vowel of the pronoun and the initial vowel of the auxiliary forms.

[^11]:    ${ }^{20}$ See in fn. 12.

[^12]:    ${ }^{21}$ This is only true for the alternation of the two auxiliaries as opposed to the features grammaticalised by the exponences of the two auxiliaries HAVE and BE.
    ${ }^{22}$ See in fn. 12.

[^13]:    23 Although Question 2 in the hierarchy proposed by Ledgeway (2019) for Romance considers only 'mood' but not 'modality' (cf. Question 1, SL hierarchy in (47)), I do not consider this to be a difference between the two hierarchies, as I consider mood to be strongly interrelated to (realis/irrealis) modality.

[^14]:    ${ }^{24}$ For instance, this could mean that a variety would hypothetically present the generalisation of one auxiliary for transitive/unergative predicates and sensitivity to number, discourse, and gender for unaccusative predicates. To the best of my knowledge, such a variety does not exist in Romance or this pattern has not been empirically discovered yet.

