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This is a contribution from *Romance Languages and Linguistic Theory 12. Selected papers* from the 45th Linguistic Symposium on Romance Languages (LSRL), Campinas, Brazil. Edited by Ruth E.V. Lopes, Juanito Ornelas de Avelar and Sonia M. L. Cyrino. © 2017. John Benjamins Publishing Company

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CHAPTER 15

When a piece of phonology becomes a piece of syntax

The case of subject clitics

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This work argues against the view that phonological factors play a role in the distribution of *vocalic auxiliary subject clitics* (vocalic auxiliary scl.s), namely, those scls which occur with auxiliary verbs beginning in a vowel. Evidence is given to support the view that such scls are purely syntactic entities, whose distribution is governed only by syntactic factors. The analysis leads to a re-casting of vocalic auxiliary scl.s as "be-scl.s," where the phonological structure of the auxiliary becomes irrelevant. Removing the phonological component from the explanation of the behavior of these syntactic elements further allows us to make fruitful connections with many other syntactic phenomena which would not otherwise have been seen.

Keywords: auxiliary verbs, consonant onset, functional structure, Northern Italian dialects, subject clitics, syllable structure

1. Overview of the phenomenon

1.1 The nature of auxiliary subject clitics across Northern Italian varieties

Researchers on subject clitics have observed, at least since Burzio (1981; 1986) and Brandi & Cordin (1981), that many Northern Italian dialects (NIDs) exhibit a particular kind of morphological form – identified as a subject clitic (scl.) – which seems to have two functions. On the one hand, this form (which is always a consonant) seems to function as a morpho-syntactic entity, which is consistent with its identification as an scl. On the other hand, it seems to serve a phonological purpose. Regarding its syntactic function, the form only occurs with the verbs 'have' and 'be'. Regarding its phonological function, the form occurs only with *have/be* verbs which begin in a vowel, typically referred to as *vocalic auxiliaries*. For this

reason, this type of SCL has been referred to in the literature as a vocalic auxiliary subject clitic (i.e., an SCL for "vocalic auxiliaries"). To illustrate, let us consider a classic example from Burzio (1986), seen in (1) and (2), who discusses the phenomenon as exhibited in the dialect of Torino; I gloss the "vocalic auxiliary SCL" as SCL auxiliary SCL" as SCL auxiliary SCL" as SCL auxiliary SCL auxiliary SCL as SCL auxiliary SCL as SCL auxiliary SCL auxiliary

TORINESE (Burzio 1986: 123-124)

Vocalic-auxiliary occurs with /l/:

- é chersüye tüt i presi. vocalic auxiliary é SCL SCL_{aux} is increased.LOC all the prices
 - an chersü tüt i vocalic auxiliary an SCL SCL any have increased all the prices

As can be seen in (1), Torinese has the SCL /l/, which occurs only with auxiliary verbs beginning in a vowel (e.g., \acute{e} 'is' and an 'have.PL'). That this l form can only appear with vocalic auxiliaries is evidenced by (2), where it is not exhibited with an auxiliary verb that begins in a consonant (e.g., sun 'are'); let us call such verb forms "consonantal auxiliaries," on analogy with "vocalic auxiliaries":2

1. The restriction regards, more precisely, those forms of 'have' and 'be' beginning in a vowel, regardless of their auxiliary vs. main verb status. I nevertheless continue to use the label "vocalic auxiliary," to remain consistent with what has now become terminological tradition. For more extensive discussion on vocalic auxiliary SCLs, see e.g. Burzio (1986), Poletto (2000), Goria (2004), Manzini & Savoia (2005), Benincà (2007a, b), Cardinaletti & Repetti (2008) Poletto & Garzonio (2011), Tortora (2014), Poletto & Tortora (2016), a.o.

I thank an anonymous reviewer for asking "[w]hat happens with other persons of the paradigm in these dialects? Does the *l* surface here too? Or are other consonants or vowels found? Goria (2004:24) reports l to occur in an example containing a second person subject clitic and claims that the *l* is found in all persons with 'have' and in the third person singular with 'be' (both auxiliary and lexical). In the other persons of 'be', j is found. This is another argument that the phenomenon is not phonological. How is this distribution accounted for?" Indeed, how to account for the distribution of these (and other) SCLs across the different persons and numbers – and the variation across the many SCL languages - has been the subject of many studies. Space considerations make it impossible to address these questions here. Future research will extend the proposal offered in this work.

2. The reader will have noticed that the example in (2) exhibits the SCL a, which is another type of SCL. See e.g. Poletto (2000) and Goria (2004) and references therein for further discussion of this kind of clitic, which can be ignored for the purposes of this chapter.

I thank an anonymous reviewer for noting that (1) and (2) do not form a minimal pair (as (2) contains the overt subject i client, while (1) contains no DP subject). This difference is not relevant to the point at hand; the presence or absence of a DP subject does not determine the absence or presence of the vocalic auxiliary SCL in Torinese.

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Consonantal auxiliary occurs without /l/:

client a sun rivà. the clients SCL are arrived consonantal auxiliary sun

The obligatory appearance of l just in the presence of auxiliary verbs which begin in a vowel makes the distribution of the form appear to be governed by phonological considerations, something which Burzio proposed, followed by many other authors for identical phenomena found in other dialects (with other auxiliary SCLS), such as Manzini & Savoia (2005), Benincà (2007a, b), and Garzonio & Poletto (2011). All of these authors (inter alia) note that the clitic in question provides the necessary material to create a well-formed CV syllable for the auxiliary('s first syllable), providing the material for the (first) syllable's onset. It is claimed that this is why the vocalic auxiliary SCL is not needed (and in fact, prohibited) precisely with those auxiliary verb forms beginning in a consonant (such as sun 'are' in (2)).

There are, however, important factors which make it undeniable that the form in question has a syntactic function. The most obvious factor is precisely that the verb it occurs with must be an auxiliary verb (or the verb 'be/have', more generally; see footnote 13). This is illustrated by Garzonio & Poletto (2011) for the dialect of Roccavione, where it can be seen in (3) that the SCL *l* appears with the vocalic auxiliary è 'is' but is absent with the verb *ariva* 'arrive', which also begins in a vowel:³

DIALECT OF ROCCAVIONE (Garzonio & Poletto 2011)

(3) a. L $\underline{\dot{e}}$ arivà 1 pustin. auxiliary verb SCL aux is arrived the postman

b. Ariva n gangu. lexical verb arrives a child

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^{3.} A reviewer asks why, in comparison to (1a), the SCL a is missing in (3a). These are two different varieties (Burzio's Torinese vs. the dialect of Roccavione); as such, there is no reason to expect that they exhibit the same SCL systems.

I thank the same reviewer for rightly noting that there is an important syntactic difference between (3a) and (3b): while (3a) contains a definite post-verbal DP, the post-verbal DP in (3b) is indefinite, raising the question of whether the missing l in (3b) is a function of the post-verbal DP's indefinite status.

Another concern worth raising is the question of the status of the [a] in [ariva] in (3b), which could possibly be an SCL. The ideal minimal pair would involve a non-auxiliary verb which begins in a vowel, where that vowel is incontrovertibly a non-scl. As it turns out, it is unexpectedly difficult to find examples of non-auxiliary (i.e., non-have, non-be) verbs in NIDs which begin in a vowel, making a true minimal pair an elusive goal for scholars of SCL syntax. I leave this issue open.

If the sole function of the form *l* were to provide the necessary material to create a well-formed syllable, then the question arises as to why it is not present with the lexical verb ariva 'arrives'.

This "dual nature" of the form /1/-[1] (syntactic and phonological) is what has led to the nomenclature [[vocalic-auxiliary] subject clitic], a term which captures both the form's phonological nature (restricted to vocalic auxiliary), as well as its syntactic nature (auxiliary subject clitic). To capture the dual nature of the restriction on the distribution of this clitic form, Garzonio & Poletto (2011:120; G&P) offer the following description: "For those forms which begin in a consonant, the initial /s/ of the auxiliary occupies the same position as that occupied by the clitic in the syllable structure, inhibiting [the clitic's] phonetic realization." They further note that "[c]litics of this type are only visible when there is an empty onset position in front of the vowel of the auxiliary which allows [such clitics] to be properly syllabified."4

We can summarize this condition as follows:

(4) The presence of a pre-existing onset in the auxiliary's (first) syllable inhibits the appearance of the syntactic entity /l/

An important question which arises is, why would an onset position (a purely phonological concept) regulate whether a syntactic entity is visible?

1.2 This goal of this chapter

My purpose in this chapter is to work towards an approach to the syntax of the socalled "vocalic auxiliary SCLS" which takes the phonological factor affecting their distribution to be only apparent. Given that such scls are undeniably syntactic entities, my goal is to account for the distribution of such forms purely in syntactic terms. I further argue that the novel empirical considerations which I bring to bear on the question make a purely syntactic account actually better-motivated than a mixed phonological/syntactic account.

To this end: in Section 2, I review two of the many ways in which the distribution of scls in Romance otherwise find a purely syntactic explanation, setting the stage for my approach to the distribution of the "vocalic auxiliary SCL," which I argue likewise has nothing to do with phonology. In Section 3, I follow with a

^{4. &}quot;[L]'ipotesi che avanziamo è che nel caso delle forme che cominciano per consonante, la /s/ iniziale dell'ausiliare occupi la stessa posizione occupata dal clitico nella struttura sillabica e ne impedisca così la realizzazione fonetica." And "...[p]ossiamo ipotizzare che i clitici di questo tipo siano visibili solo quando cè una posizione di onset vuota davanti alla vocale dell'ausiliare che permette loro di essere sillabificati correttamente" (Garzonio & Poletto 2011:110-111).

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presentation of a series of facts from Borgomanerese (a Piedmontese variety), which I believe are aptly characterizable as "mirror image" to the facts described in (1)–(2)above – that is, where it seems that the consonantal auxiliary requires the "auxiliary SCL," while the vocalic auxiliary prohibits it. This leads to Section 4, where I offer an alternative proposal to the problem, and argue that an account which eliminates any reference to phonology is desirable on a number of counts. In Section 5 I make some closing observations.

2. Problems with dual phonology-syntax restriction on the distribution of the vocalic auxiliary SCL

There are several problems with characterizing the distribution of the vocalic auxiliary SCL as partly driven by phonological considerations. The most notable is the fact that phonology does not play this kind of role in the distribution of syntactic entities elsewhere in the grammar. If we limit our explanation to the restriction in (4) (based on G&P), which captures the essence of all previous explanations for the distribution of the vocalic auxiliary SCL, what makes the combination of this SCL and the verbs 'have' and 'be' so phonologically special? And why is it that, in all other cases of clitic placement across varieties, the clitic distribution finds a purely syntactic explanation?

I address these issues in Sections 2.1 and 2.2. Then, in Section 3, I continue with a discussion of data from Borgomanerese, which further calls into question the wisdom of appealing to phonology as an explanation for the distribution of vocalic auxiliary scls.

Lack of phonological restrictions elsewhere in the grammar 2.1

In the previous literature, the appearance (or lack thereof) of the vocalic auxiliary SCL has been couched in terms of the lack of onset (or presence thereof) in the auxiliary's first syllable. There are different ways of framing this relationship between the vocalic auxiliary SCL (which itself is always a consonant, across varieties), depending on whether we see the phenomenon from the point of view of the SCL itself, or from the point of view of the auxiliary verb. Thus, we can either think of this SCL as providing the function of onset for a syllable that does not otherwise have one (as in Burzio 1986 or Benincà 2007a, b), or, we can think of the consonantal onset of the consonantal auxiliary as inhibiting the presence of the scl (as in G&P).

If viewed in this latter way ("if the aux starts in a consonant, don't use the SCL"), then something else must be stated about the special nature of the auxiliary's consonantal onset in relation to that of lexical verbs, because as we can see from the examples in (5) from across Northern varieties, an initial consonant of a following verb does not otherwise inhibit the presence of a SCL:

THE FORM /l/ WITH LEXICAL VERBS

S.M. Tagliamento: Al mangia. 'He eats' h Paduan: El vien. 'He comes' c. Trentino: E**l p**arla. 'He speaks' d. Borgomanerese: 'L druma. 'He sleeps' 'He reads' Borgomanerese: Al lesgia. 'He arrives' etc. Al riva. Borgomanerese:

For example, the [m] of the verb mangia 'eats' in (5a) does not inhibit the presence of the [l] of the third singular SCL in the dialect of San Michele in Tagliamento (and so forth). So either there is something special about the consonantal auxiliary's first consonant in (2) above which inhibits the presence of the auxiliary SCL (in contrast with other consonants), or there is something special about the auxiliary SCL in (1) above which prevents it from appearing with auxiliaries that begin in consonants (in contrast with other apparently identical scls) – or both. Whichever it may be, this would need to be addressed more in depth.⁵

If instead we view the problem in the former way ("if the first syllable of the aux has no onset, then use the SCL"), then we have to ask why is it that vocalic auxiliary verbs are in such need of consonantal onsets. In Torinese, for example, other left-periphery vocalic functional elements exhibit no such requirement for a consonant onset. Consider for example the SCL *a* in (6):

NO CONSONANT ONSET FOR THE TORINESE SCL a

(6) a sun rivà. sci are arrived

The fact that the Torinese SCL a can appear without any consonant onset illustrates that the "onset requirement" is not a general phonological requirement. As such, the auxiliary verb's requirement in this regard would have to be addressed more in depth.

^{5.} In Section 4, I will in fact propose that there is indeed something special about the consonant in the "consonantal auxiliary."

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The distribution of clitics is otherwise determined by the presence 2.2 of other syntactic entities

In addition to the mysterious question of the need for a consonant onset just in the case of vocalic auxiliaries (or, the mysterious question of the suppression of a syntactic entity just in the presence of an auxiliary verb's consonant onset, depending on how we approach the issue), we must also take into consideration the fact that, in all other cases of clitic placement, the presence of a clitic (or lack thereof) is governed purely by syntactic considerations. Although many, many examples can be used for illustration, space considerations allow me to review only two cases, though it is my hope that this is enough to give a flavor of the idea.⁶

OCL for SCL phenomena 2.2.1

For many Northern Italian varieties, it is not uncommon to find SCLs in complementary distribution with object clitics (OCLS), just in those cases where OCLS appear to the left of the inflected verb. This phenomenon, discussed in great detail by Roberts (1991) for Valdôtain, is often referred to as the "OCL for SCL" phenomenon.

Benincà & Vanelli (1994) illustrate the OCL for SCL phenomenon in the dialect of Felettis di Palmanova, which I exemplify here. First, note in (7) that this dialect requires the SCL *al* in the third person masculine singular:

FELETTIS DI PALMANOVA (Benincà & Vanelli 1994):

```
(7) a. Al vjot.
        scl he-sees
        'He sees.'
    b. *Vjot
        he-sees
```

Despite the obligatoriness of this SCL, there is one context where the SCL *al* is not obligatory (and in fact, is obligatorily absent): namely, in the presence of a pre-verbal OCL, such as ti 'you', seen in (8):

^{6.} See e.g. the discussion in Benincà & Tortora (2010) on Paduan voler-ghe.

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Whichever way one wishes to account for this complementarity between the SCL and pre-verbal OCL in varieties like this one, 7 it is clear that syntax is regulating the presence (or lack thereof) of the SCL, and not phonology.

Romagnol SCL vs. complementizer

For the sake of completeness, I review one other example which does not involve two clitics, but rather a SCL and a complementizer. This phenomenon, discussed by Benincà (1994:115), could be termed "complementizer for SCL," on analogy with the phenomenon reviewed in 2.2.1.

Consider the example in (13) from Romagnol (see Benincà 1994 for further discussion):

(13) Chi ve-l cun te? who comes-scl with you 'Who is coming with you?'

As can be seen in (13), Romagnol exhibits a third person singular SCL *l*, which appears post-verbally in interrogatives. Importantly, though, along with (13), a wh-question with the interrogative pronoun chi 'who' also allows for a complementizer (giving rise to a doubly-filled comp structure), as in (14):

(14) Chi ch ven cun te? who that comes with you 'Who is coming with you?'

Notably, the presence of the complementizer *ch* /k/ in (14) precludes the presence of the SCL /l/. In this case, we can see that this complementarity exists despite the fact that the two elements clearly appear in distinct syntactic positions, with the complementizer ch appearing to the left of the verb in (14), and the SCL appearing to the right of the verb (in an inversion structure) in (13). This incontrovertibly illustrates that the complementarity cannot be attributed to phonology, but rather is syntactic in nature. As in footnote 7, it is not necessary to assume that the SCL l and complementizer ch occupy the same syntactic position, to account for their complementarity. See Benincà & Tortora (2009; 2010) for a discussion of the licensing functions of (s)CLS, which can under certain conditions be taken over

^{7.} One possibile explanation is that the SCL and OCL compete for the same syntactic position (as per Roberts 1991). Another possible explanation is that the SCL acts as a licenser of some silent element; however, the OCL is capable of acting as licenser of said element as well. Thus, the presence of a pre-verbal OCL renders the SCL unnecessary; under this scenario, it is not necessary to assume that the SCL and OCL occupy the same syntactic position, to account for their complementarity. (See Benincà & Tortora 2009; 2010 for a discussion of this latter idea.)

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by other syntactic elements (such as OCLs and complementizers, as in the cases discussed above).

2.3 Summary: Syntax is responsible for the distribution of clitics in Romance

In this brief section, I hope to have given a sense of the fact that across varieties and constructions types, the appearance of scls is governed only by syntactic factors. The fact that the vocalic auxiliary SCL in e.g. (1) and (3a) is also governed by syntactic factors (as discussed in Section 1.1 and at the beginning of Section 2) should thus come as no surprise.

The real surprise for the vocalic auxiliary SCLs is that – in contrast with all other cases - they are the only ones whose distribution also appears to be governed by phonological factors. The idea that a purely phonological consideration (like the presence or lack thereof of a syllable onset) would dictate whether a syntactic entity can appear in a structure is both exceptional and conceptually difficult. And as we will now see in Section 3, there is another series of facts to consider, which further point in the direction of avoiding an appeal to phonology to account for the distribution of the so-called "vocalic auxiliary SCLS" across the Northern varieties.

3. Borgomanerese second person singular SCLs t and tal: Mirror image pattern

In this section I present some facts from Borgomanerese, a Gallo-Italic dialect spoken in the town of Borgomanero, which is in the Province of Novara, in the Piedmont region of Northern Italy. The facts I review here are presented in greater detail (and with much more context) in Tortora (2014). For the purposes of this chapter, I will stick only to the most relevant details.

The facts concern the second person singular SCLS, which I believe can provide some insight into the problem I am dealing with in this chapter. Specifically, the choice of Borgomanerese second singular SCLs present a "mirror image" phenomenon, in relation to other varieties' apparent phonological need for a consonantal onset for the vocalic auxiliary (which comes in the form of the so-called vocalic auxiliary scl).

3.1 The second person singular forms *tal* and *t* in Borgomanerese

To put the Borgomanerese second person singular SCLs in context, in (15) I provide the entire paradigm of personal SCLs in Borgomanerese:⁸

(15) SCLS IN BORGOMANERESE

	singular	plural
first person	i	i
second person	t / tal	i
third person	l (m.) / la (fem.)	i

Of particular noteworthiness here are two facts: (i) the second person singular has two different forms (*t* and *tal*), and (ii) as for *tal*, this form contains the segment /l/, which is typically associated with the third person across varieties (for both lexical and auxiliary verbs); indeed, in Borgomanerese, /l/ also occurs in the third singular. (Though see e.g. Goria 2004 and G&P for a discussion of /l/ in other persons/numbers.) Tortora (2014) takes *tal* to be a combination of the form /t/ and the form /l/ (with the epenthetic vowel [a], ubiquitous in Borgomanerese), as in (16):

BORGOMANERESE tal:

(16)
$$/t/ + /l/ \rightarrow [tal]$$

Not all Borgomanerese speakers use the form *tal*. However, those who do exhibit a limited distribution of this form, in two contexts, namely with lexical verbs and with consonantal auxiliaries, exemplified in (17) and (18) respectively:

(17) WITH LEXICAL VERBS

- a. Tal vegni.scl you-come'You're coming.'
- b. Té tal môngi.you scl you-eat 'You're eating.'
- c. Té tal crumpa-la? (crumpi, 2nd sg. present)
 You scl you-buy-cl
 'Are you buying it?'

^{8.} There are a few impersonal SCLs in Borgomanerese, which are missing in the paradigm in (15). Chapter 5 and parts of Chapter 2 of Tortora (2014) discuss in full detail the behavior of all of the SCLs in this dialect.

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- d. Tal porti vija la torta. scl you-bring away the cake 'You're taking the cake away.'
- tal rilesgi (ASIt)9 e. Tal lesgi e 'l stess libbru. scl you-read and scl you-reread the same book 'You read and re-read the same book.'

(18) WITH AUXILIARIES BEGINNING IN A CONSONANT

- 'be', conditional a. (Té) tal sarissi. (you) scl you-would-be 'You would be.'
- b. (Té) tal sij. 'be', present subjunctive (you) scl you-be '[that] You be.'
- c. (Té) tal füssi. 'be', past subjunctive (you) scl you-were '[if] you were.'

Importantly, tal cannot occur with vocalic auxiliaries (i.e., auxiliary verbs beginning in a vowel):

- (19) a. *(Té) tal è. (you) scl you-are/have 'You are,' or 'You have,'
 - b. *(Té) tal evi. (you) scl you-were/had 'You were,' or 'You had,'
 - c. *(Té) tal eri. (you) scl you-were 'You were.'

For vocalic auxiliaries, the monomorphemic form t is used, as in (20):

- (20) a. (Té) t è. (you) scl you-are/have 'You are,' or 'You have,'
 - b. (Té) t evi. (you) scl you-were/had 'You were,' or 'You had,'

^{9.} Atlante Sintattico Italia, http://asit.maldura.unipd.it/

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eri. 10 c. (Té) t (you) scl you-were 'You were'

Thus, in the second singular in Borgomanerese, /l/ is absent precisely with those auxiliary verb forms which require a vocalic auxiliary SCL, as discussed in Sections 1 and 2.

Summary 3.2

On analogy with (4) in Section 1.1, let us summarize the Borgomanerese second singular facts as in (4'), and compare it with (4) directly:

Borgomanerese:

(4') The absence of a pre-existing onset in the auxiliary's (first) syllable inhibits the appearance of /l/

Torinese:

(4) The presence of a pre-existing onset in the auxiliary's (first) syllable inhibits the appearance of /l/

Given the exact opposite requirements in (4) and (4'), I take it as given that a phonological account of the distribution of the SCL /l/ is not feasible for the Borgomanerese second singular.

Because there is no reasonable way to phonologically frame the ban on second person /l/ in (19), I argue that a phonological account of the distribution of the so-called "vocalic auxiliary SCLS" in Northern varieties more generally is also

10. The fom /t/ is also used as a variant of *tal*, in the contexts in (17) and (18):

(i) a. At vegni. (cf. (17a)) b. At môngi.

c. At crumpu-lu opura at crumpi mi-llu?

(ASIt) scl you.buy-ocl or SCL you.buy NEG-OCL

d. At lesji e t rilesji sempri l memmu libbru. (cf. (17e))

sarissi. (ii) (Té) at (you) scl you-would-be

> b. (Té) sij. 'be', present subjunctive at (you) scl you-be

> at (Té) füssi. 'be', past subjunctive (you) scl you-were

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unviable. Instead, I want to focus on what the Borgomanerese facts allow us to see more clearly and more abstractly: across languages, a distinction is made between two types of auxiliary verb. However, the way in which we characterize these two "types" must be re-thought. In what follows, I pursue a re-thinking of the two types which appeals only to syntactic structure, for all varieties concerned.

4. Alternative hypothesis: Speakers take the onset of the consonantal auxiliary's syllable to be a syntactic object

Let us pursue the idea that, even for the other Piedmontese varieties which are characterized by G&P as in (4), a phonological account of the distribution of /l/ with "vocalic vs. consonantal auxiliaries" is not the right way to go, despite appearances.

Instead, I propose that speakers across varieties take the apparent syllable onset of the so-called consonantal auxiliary to occupy the syntactic position which is otherwise occupied by the "auxiliary SCL," as I will now call it. 11 In other words, the initial consonant /s/ of a consonantal auxiliary like Torinese sun 'are' is actually an auxiliary scl (leaving the remaining material, un, to be the heart of the auxiliary verb). This would mean that all auxiliary verbs are "vocalic," even those forms we traditionally take to begin in a consonant. To illustrate, I repeat Torinese example (2) here, also in a modified fashion in (21), with the consonant /s/ analyzed as an auxiliary scl:

Previous analyses:

(2) I client a sun rivà. the clients SCL are arrived

Present analysis:

<u>un</u> rivà. (21) I client a the clients SCL SCL aux are arrived

In Section 4.1 I provide a more detailed analysis of the proposal sketched out in (21), and in Section 4.2 I provide independent evidence supporting the claim that

^{11.} I henceforth call these elements auxiliary SCLS, eliminating the adjective "vocalic" to modify "auxilary." Under the present analysis, all auxiliaries are now vocalic. However, see concluding remarks for the term "BE-scls".

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speakers analyze the apparent initial consonant in so-called consonantal auxiliaries as an independent syntactic entity. 12

4.1 Analysis for Torinese auxiliary SCLs and similar phenomena

As already noted, like any other SCL, an "auxiliary SCL" is a syntactic entity. Following previous literature, we can take this syntactic entity to serve the function either (i) of licensing some silent element (a phrase, or a head, à la Kayne 2013, or a feature), or (ii) of instantiating some functional feature associated with the auxiliaries 'have' / 'be'. 13

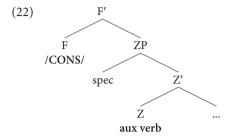
Taking as our first approach the cases of auxiliary forms that have been traditionally termed "vocalic auxiliaries," recall that the auxiliary SCL accompanying such forms is always a consonant; in Torinese and in many other varieties the form appears as /l/, but it is also known to manifest itself as /g/, /j/, or /z/, depending on the variety. (See Benincà 2007a, b and Tortora 2014 for examples, which space considerations prevent me from exploring here.)

Consistent with this view is the fact that the "auxiliary SCL" is always identical in form to a complement clitic in the relevant varieties (/l/ or /g/ or /j/), suggesting its original merge association with a complement position. One caveat remains, which is that – as noted above – the so-called "auxiliary SCL" also appears with main verb have/be (making the nomenclature misleading; a more apt terminology would be "have/be SCL"). This might render the analysis in (i) (which depends on the bi-clausal nature of a compound tense) unviable. On the other hand, if we take have/be even in its main verb form to take a clausal complement (as in Kayne 1984), then the analysis sketched in (i) could apply to have/be in all its uses.

^{12.} Note that this proposal crucially differs from the G&P proposal. As noted earlier, G&P propose that "For those forms which begin in a consonant, the initial /s/ of the auxiliary occupies the same position as that occupied by the clitic in the syllable structure, inhibiting [the clitic's] phonetic realization" [bolding mine]. In other words, G&P propose that the locus of the complementarity of the auxiliary's [s] and the SCL [l] is in the phonological structure: the presence of the [s] in the syllable onset inhibits the appearance of the [l] in this same phonological position. Thus, under the G&P proposal, speakers do not parse the [s] as an independent syntactic entity. See D'Alessandro (2016) for a proposal compatible with the present one, namely, that the s- of s-forms of 'be' in Abruzzese represents independent featural content.

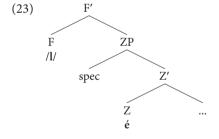
^{13.} Following Freeze (1991) and Kayne (1993), we can take the verbs 'have' and 'be' to be one and the same verb, so that the "auxiliary SCL" becomes associated with only one morphological form, underlyingly BE in Kayne's analysis. It is tempting to associate the function of the "auxiliary SCL" with some aspect of have/be in its auxiliary form. For example, following Kayne (1993), Rizzi (2010), and more recently, Tortora (2014) (inter-alia), we could take compound tenses with have/be to be bi-clausal. We could then further relate the "auxiliary SCL" to this aspect of such structures, taking "auxiliary SCL" to be a kind of clitic double of the embedded clause, as in (i):

Let us take this syntactic entity to be represented as a functional head F whose phonological content is a consonant (/cons/), as in (22):



The structure in (22) represents a portion of the IP domain; cf. Poletto's (2000) portion of the IP field which is below the preverbal strong NegP. In this structure, the auxiliary SCL /CONS/ occupies the functional head immediately above the functional head occupied by the auxiliary verb (Z).

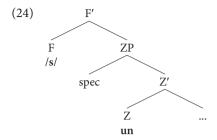
I further propose that the phonological content of the /cons/ in the F head has to be filled in with material that can be pronounced. If the auxiliary verb begins in a vowel (as in Torinese (1a)), then the content of the /CONS/ occupying the F head is instantiated by a default consonant; in the case of Torinese (and many other varieties), this default consonant is /l/, as in (23):14



Now the question arises as to what happens in those cases where the auxiliary does not begin in a vowel (from the traditional / etymological perspective), as in the case of Torinese sun 'are'. For such cases, I propose that the consonant /s/ is parsed by the speaker as the relevant phonological content that fills in the /cons/ head in (22), as follows:

^{14.} This proposal is reminiscent of the concept of "morpho-syntactic epenthesis" proposed by Cardinaletti & Repetti (2008).

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In other words, the consonant etymologically belonging to the auxiliary verb is parsed by the speaker as the auxiliary SCL. 15

The idea is that we have a syntactic head (F, in (22)–(24) above) which is reserved for the auxiliary SCL, and whose minimum content is a consonant. This consonant has to be realized with phonological material, and that phonological material can either be (i) epenthetic (as in (23)), or (ii) filled in with the phonological material of a morpho-syntactic entity found elsewhere in the syntactic environment (as in (24)). This claim of course raises a number of questions, including the nature of the epenthetic consonant, and in what sense is this consonant a "default." I thank a reviewer for noting this question also in relation to the other varieties I mention above, where g, j, and z are also used, and for further noting the fact that in some

15. I thank a reviewer for raising a number of questions here, all of which involve the predictions made by this hypothesis. First, the reviewer states that "...since object clitics follow subject clitics (SCL - OBL - Aux/Verb), we would expect to find object clitics inbetween s and un, something which is never encountered in Romance languages." It is important to note, in this regard, that the observation made by the reviewer only applies to non-auxiliary scls; vocalic auxiliary scls are never immediately followed by ocls. Thus, contrary to the reviewer's statement, *SCL_{aux} - OCL - Vocalic-Aux. As such, we would not expect to find any OCLs intervening between *s* and *un* (since *s* is analyzed as a vocalic auxiliary scl.).

The reviewer further states that "...we would expect speakers to write s'un (see (32a) in Section 4.2), which is presumably undocumented" [underlining and bolding mine]. I must assume that the reviewer means that we would expect vernacular speakers of Torinese to write s'un (as this orthographic habit has been documented for vernacular speakers of Borgomanerese). I am not sure what the reviewer means by "presumably undocumented." Note that the vernacular orthographic habit of Borgomanerese speakers (as in (32) below) was not documented in the theoretical linguistics literature until Tortora (2014). The phenomenon was thus not any less of an empirical fact, documented before the year 2014 in unpublished vernacular writing (and in published writing outside of theoretical linguistics). Whether any vernacular Torinese speakers ever write (or have written) the string s'un in unpublished informal writing is an empirical question.

The reviewer further makes the very interesteing observation that "...we would expect children to pronounce un instead of sun in the very first stages of language acquisition when subject clitics are not yet available, which is presumably undocumented." I thank the reviewer for noting this prediction, which should be tested empirically.

varieties (e.g., those discussed by Goria 2004 and also Tortora 2014), more than one form is used (e.g., l and j). This is an important issue which I leave as a matter for future work

In the next sub-section (4.1.1 and 4.1.2), I review two completely independent phenomena. Section 4.1.1 illustrates that this phenomenon of "filling-in with phonological material from an independent morpho-syntactic entity" is not particular just to the above proposal about the s of sun. The phenomenon in Section 4.1.2 likewise illustrates the phenomenon of "filling in the content of a syntactic head with epenthetic (default) phonological material" is also not particular just to the situation of a default segment inserted in a functional head (as in the case of *l* above).

Spanish non-standard imperatives (Kayne 2010)

Kayne (2010) discusses an apparently unrelated phenomenon from imperatives in non-Standard Spanish, a small part of which I summarize very briefly here, for the purposes of illustrating that the analysis in 4.1 above does not represent an isolated incident, devised just to account for the phenomenon in question. On the contrary, I would argue that pursuit of the purely syntactic account above allows us to unify the auxiliary SCL phenomenon (which was previously characterized as entirely exceptional, having to reference syllable onsets) with many other cases found across languages and construction types.

The phenomenon treated by Kayne (2010) is one that was previously analyzed from a morpho-phonological perspective by Harris & Halle (2005). Harris & Halle note that many Spanish varieties exhibit an apparent repetition of the formally third plural verb-ending -n (seen in (26) for Standard Spanish) onto an enclitic object, in pragmatically second plural imperative constructions:

Non-standard Spanish:

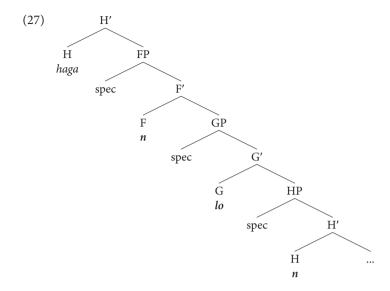
lo-<u>n</u> (25) Haganmejor. you.do.PL- OCL-PL better '(you.pl) Do it better.'

Standard Spanish:

(26) Hagan-lo mejor.

The -*n* suffix on the OCL *lo* 'it' in (25) seems to be copied from the (non-adjacent) verb-ending on the verb form hagan. I refer the reader to Kayne (2010) for detailed arguments motivating his own analysis of the phenomenon, which reconciles the data in (25) with a series of other facts. The analysis itself can be summarized as follows: Kayne proposes that the post-clitic /n/ in lo-n is the morphological instantiation of a syntactic head, as is the verb-ending /n/. I provide my own interpretation of Kayne in (27):

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Putting aside an explanation for why this morpheme appears twice: Kayne illustrates how his purely syntactic approach allows us to make predictions regarding a number of cross-dialectal facts and entailments.

Of course, there is a technical difference between the Spanish imperative phenomenon seen in (27) on the one hand, and the Northern Italian auxiliary SCL phenomenon seen in (24) on the other. In the former case, we are dealing with the copying of the form /n/ from one syntactic head onto another; in the latter case, we are dealing with the realization of a segment (i.e., /s/) in a syntactic head which is separate from the head housing the remaining string (i.e., /un/) which /s/ is lexically associated with; this happens without any copying (thus, there is no repetition of the material). However, I would argue that both represent similar strategies, in the abstract. For the auxiliary SCL case in (24), speakers are parsing the form /s/ as material that should fill in the /CONS/ head projecting the FP. For the Spanish imperative case in (27), speakers are likewise parsing the /n/ as an independent form, and likewise using it to fill in an abstract functional head (H in (27)). In both cases, a head is structurally represented, and speakers interpret it with phonological material that is perceived in the (nearby) acoustic signal.

4.1.2 "Change to [a]" under OCL-enclisis in Borgomanerese (Tortora 2014) In Section 4.1.1, we examined an independent case from Spanish, where speakers morpho-syntactically instantiate a functional head with phonological material that is perceived in the nearby acoustic signal. Use of the segment n in (25) to instantiate a functional head c-commanded by the OCL lo is analogous to the use of the segment s to instantiate the F head in (24). In this section, I discuss an independent

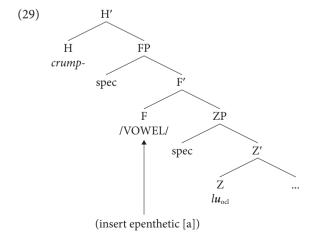
case of use of an epenthetic (default) segment in another area of the grammar. As with Section 4.1.1 in relation to segment reanalysis, I review this case of "default segment epenthesis" with an eye towards illustrating that the proposal in (23) namely, insertion of a default segment – is not an isolated syntactic phenomenon. For space reasons I stick to a brief exposition (and refer the reader to Tortora 2014, Chapter 3 for further detail).

Consider the data in (28) from Borgomanerese:

- (28) a. Quônta tal môngia-nu? (môngi, 'you-eat') how.much scl you-eat-NU 'How much of it are you eating?'
 - è mija gnö denta-ghi. (denti, 'inside') Mario scl is NEG come inside-GHI 'Mario didn't come inside here.'
 - è rutta-si al bicer. (ruttu, 'broken') SCL is broken-si the glass.masc 'The glass broke.'
 - d. Cum i capissa-ti! (capissi, 'I-understand') how sci. I-understand-ti 'How I understand you!'

As can be seen by the forms in the right column (*môngi*, *denti*, *ruttu*, and *capissi*), when these words appear in isolation, the final vowel appears as i, i, u, and i (respectively). However, when these forms are followed by an OCL (e.g., nu, ghi, si, and ti), the final vowel of these words appears as [a] (môngia, denta, rutta, and capissa).

Tortora (2014) proposes that this reflects a case of default segment insertion (in this case, [a]) in a functional head F, as follows:



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Here we see – in a completely different construction type – a functional head that speakers fill in with a default segment. In the case of the auxiliary SCL in (23), the default segment is the consonant [1], while in this case, the default segment is the vowel [a], but otherwise, the two cases are analogous. 16

Evidence for the "independent consonant" 4.2

In this section (Section 4) I have been arguing that speakers analyze the initial consonant of so-called "consonantal auxiliaries" as an independent syntactic entity (namely, an auxiliary SCL), in Northern Italian varieties. In this sub-section, I review a piece of independent evidence to support this, from the orthographical habits exhibited by Borgomanerese speakers.¹⁷

It is not uncommon for Borgomanerese speakers to spell consonant-initial auxiliaries (and other functional verbs) with an apostrophe after the consonant. Examples in poetry abound; here I provide two examples from Colombo (1967: 46), though there are many, many examples from contemporary poets and prose writers:

Borgomanerese

```
(32) a.
                  s'eri
                              cascia...
                                            (cf. seri, variant of eri, 'I was' (imperfect))
           if.scl I-was out hunt
           'If I was out hunting...'
```

```
n'avagu
                                          (cf. nava 'he went' (imperfect))
SCL went.GHI.NU two
'Two of them were necessary.'
                                           (Italian: Ce ne volevano due.)
```

Like many of his colleagues, Colombo orthographically separates the s of seri 'I was' (which is a variant of the form eri) with an apostrophe. In the case of the seri, perhaps it can be argued that it is the seri ~ eri variation which gives rise to the analysis of the /s/ (which itself is non-etymological) as something "separate." Be that as it may (and in fact, precisely if this is true), we still have to account for how speakers conceptualize this /s/, as an independent syntactic entity. I suggest that the only analysis available to speakers is as an auxiliary SCL.

^{16.} See Tortora (2014) for details. For a completely alternative analysis of the post-verbal pronoun in Borgomanerese (and the vowel in F in (29)), see Cardinaletti (2015). I thank an anonymous reviewer for pointing out Cardinaletti's analysis.

^{17.} For a fuller discussion of the idea in this sub-section, see Tortora (2014, Chapter 5, Section 7.3.2).

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Perhaps more curious is the treatment of the /n/ in (32b), given that this segment is etymological (and by prescriptivist standards, considered an integral part of the root na- from the verb nè 'to go', related to Italian andare). In this particular construction, the verb 'go' together with the locative clitic ghi (nè-gghi 'go-Loc') has an impersonal deontic reading, not unlike that exhibited by Italian volerci. The verb nè 'go' is thus bleached of some of its meaning in this construction (lacking, for example, an agent), and therefore analyzed more as a functional verb than as a lexical verb. 18 Under this view, the /n/ may be analyzed as a kind of scl, not unlike the /n/ segment found in the existential construction, discussed in Tortora (1997; 2014):

```
(33) a. Ngh è na mata.
         SCL is a girl
         'There's a girl.'
     b. N'è piö
                         Burbané.
                                                          (Colombo 1967: 46)
         SCL is anymore Borgomanero
         'There aren't anymore [dogs like that] in Borgomanero'
```

As Tortora (2014) notes, the most common form of the SCL in existentials is *ngh*; however, the example in (33b) illustrates that the n can appear without the accompanying gh. It is possible that speakers likewise analyze the /n/ in na- as an auxiliary SCL, when it is in the impersonal deontic construction.

Closing thoughts

The analysis in this chapter leads to the claim that there is no divide between "vocalic auxiliaries" on the one hand (e.g., Torinese \acute{e} 'is'), and "consonantal auxiliaries" on the other (e.g. Torinese sun 'are'). If what I am saying is correct, then there are only vocalic auxiliaries, as forms traditionally orthographically represented as e.g. *sun* are actually segmented by speakers as the auxiliary SCL *s* plus the auxiliary verb un. Under this view, the terminology "vocalic auxiliary SCL" is no longer needed, and we can refer to these elements as "auxiliary SCLS" (i.e., SCLS that appear with auxiliary verbs). However, as in footnote 13, it may be even more accurate to call them have/be scls, since they also occur with have/be in their main verb forms. As

^{18.} This is not to suggest that the verb $n\acute{e}$ 'go' in its non-bleached use selects an external argument. As in Tortora (1997), I argue that né 'go' is an unaccusative verb, and so even in its full lexical sense does not project an external argument. Nevertheless, the "subject" of unaccusative 'go' (i.e., the internal argument) has an "agentive" interpretation (as in English John went to the store). It is in this sense that (32b) lacks an "agentive" argument. (I thank a reviewer for requesting clarification here.)

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a matter of fact, given Freeze (1991) and Kayne (1993), whereby have and be are analyzed as the same verb underlyingly (termed BE by Kayne), it would be more accurate still, to term them BE-scls.

Thus, one consequence of the discussion in this chapter is that we must dispense with the term "vocalic auxiliary SCLS" or "auxiliary SCLS," in favor of the term BE-scls. BE-scls are always consonants, be they epenthetic (as with Torinese /l/), or be they lexically supplied (as with Torinese /s/ from s-un). As a further consequence, there is no need to appeal to syllable structure requirements to account for the occurrence of BE-scls: like any other scl, the BE-scl is required in order to instantiate a syntactic entity (or to license another syntactic entity, depending on the SCL and/or the analysis).

Finally: while this chapter may read primarily like an effort to argue against a phonological account of the distribution of BE-scls, let us not lose sight of another possible way of framing the problem: pursuit of a purely syntactic account can, of its own merit - regardless of any conceptual difficulties with a phonological account lead us to pursue questions that have previously not been addressed fully (or at all), such as: (i) the nature of BE-scls (see footnote 13); (ii) the nature of the auxiliary BE itself (and the relation between have paradigms and be paradigms in Romance varieties); (iii) the question of the licensing of silent elements; (iv) the phenomenon of the co-opting of segmental material from nearby syntactic objects; and (v) the ways in which syntactic structure limits the hypothesis space that speakers have to play with, when parsing consonants in the IP field. This just names a few issues raised in this chapter, issues which would not have been raised and addressed had we not insisted on pursuit of a syntactic account. For this reason alone, it is worth attempting to eliminate phonological considerations from the matter; in other words, it is not just a question of whether a syntactic account can do "just as good a job" as a phonological account can. It is a question of whether a syntactic account can provide deeper insights into the nature of the present phenomenon, and apparently unrelated phenomena.

Acknowledgements

An earlier version of this paper was presented at CIDSM8 in Padua, and I would like to thank members of that audience (including Paola Benincà, Adam Ledgeway, and Mair Parry) for very helpful comments, which gave rise to the more developed version given at LSRL45. I also thank the audience at LSRL45 in Campinas (including Karlos Arregi and John Lipski), and an anonymous reviewer of a previous draft of this paper, for their thoroughly useful observations and comments, which have greatly improved this work. All errors of course remain my own. A special thank you also goes to Ruth Lopes and Charlotte Galves, for their kind support and collegiality.

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