

Abstract

The paper shows how competing syntactic analyses may be refereed by phonological evidence. We argue that an interesting potential that is currently left fallow can be activated when coupling syntactic Phase Theory with specific assumptions on the workings of Spell-Out (Phase Space). In a number of Romance languages, 3ACC clitic pronouns occur in full [LV] shape in enclisis (a lateral [l] plus a vowel *la, li, le, lu, lo*), but as [V] (absence of L) before a consonant, or [L] before a vowel, in proclisis. Focusing on Italo-Romance, we derive all forms from a single underlier /LV/, where the L is a (virtual) geminate. Specifically, the proclitic/enclitic alternation can be derived without recourse to allomorphy by adopting Phase Space: the left margin of Spell-Out domains is marked with extra syllabic space. This in turn requires a syntactic account of enclisis/proclisis alternations under which 3ACC are phase-initial in enclisis (and thus receive the extra syllabic space), but phase-internal in proclisis. Therefore enclisis/proclisis alternations do not result from the verb moving around a fixed clitic position. Rather, the verb is stable in I and 3ACC is vP-initial (vP being a phase) in enclisis, but IP-initial (IP not being a phase) in proclisis.

Italo-Romance proclitic/enclitic alternations: an alternative to allomorphy

1. Introduction

In several Romance languages, 3rd person accusative clitics (3ACC) show phonological effects in specific syntactic contexts. Across Romance, 3ACC are made of the lateral [l] plus a vowel (*la, li, le, lu, lo*): we refer to these items as LV (where L stands for the lateral, while V refers to any vowel). Below we are concerned with the defective realization of LV as [V] (absence of L) in proclisis, while it appears as full [LV] in enclisis. We discuss this pattern in Italo-Romance dialects, illustrated under (1). Data are taken from Manzini & Savoia (2005) (M&S below).¹ Out of the 484 dialects referenced in M&S, on our count the proclisis-enclisis pattern at hand occurs in 44 Southern dialects (9 in Basilicata, 15 in Calabria, 5 in Campania, 10 in Puglia, 5 in Sicilia, the exhaustive list appears in section 1 of the Appendix to this article). We explain in section 1 of the Appendix why other dialects that instantiate (1) do not fall into the purview of our analysis.²

¹ The dataset of Manzini & Savoia (2005) is available as a csv file (Savoia *et al.* 2025 at <https://zenodo.org/records/14803999>); it is geolocalized at <https://manzinisavoia.changes.unimi.it/>.

² Note that the V of enclitic LV is reduced to schwa in some dialects, like Accettura and Martina Franca below. These dialects implement a general vowel reduction to schwa in unstressed word-final position. That is, in this position, only one vowel occurs: schwa. The 44 dialects that are compatible with the pattern under (1) are in truly complementary distribution: those where enclitic LV has schwa practice vowel reduction, while in those where the V of enclitic LV remains full, vowel reduction does not occur. Thus cases where the V of LV in pro- and enclisis are distinct are an artefact of vowel reduction that operates independently of the proclisis-enclisis pattern.

(1) 3ACC LV: proclisis - enclisis alternations
in Southern Italo-Romance

a. Accettura (Basilicata, M&S III: 494)

1. LV in enclisis

ca:mó: lə
call= him
"call him!"

2. V in proclisis

u cǎ:mə
him=call
"I call him"

b. Martina Franca (Puglia, M&S III: 460, II: 793)

1. LV in enclisis

cámə lə
call= him
"call him!"

2. V in proclisis

u téəŋgə
it=hold-1sg
"I hold it"

c. Conflenti (Calabria, M&S III: 416, 417)

1. LV in enclisis

camá lu
call= him
"call him!"

2. V in proclisis

u víðu
him=see-1sg
"I see him"

d. Camerota (Campania, M&S III: 409, II: 304)

1. LV in enclisis

camá lu
call= him
"call him!"

2. V in proclisis

u víyu
it=see-1sg
"I see it"

e. Scicli (Sicilia, M&S III: 94, 313)

1. LV in enclisis

affénna lu
offend-2sg=him
"offend him!"

2. V in proclisis

u: cáma
him=call-3sg
"he calls him"

These alternations suggest the generalization in (2), which is in itself not obvious.³

³ A reviewer suggests that the presence or absence of the L of 3ACC /LV/ may be predicted by the phonological (rather than syntactic) context: L is present if it is in intervocalic position, i.e. preceded by a V-final word (and within the same prosodic domain as this word). On this analysis, under (1) the L is present in enclisis because the preceding verb is V-final, but absent in proclisis because there is no V-final preceding word. If this is correct, the prediction is that L will never be present after C-final words. But in fact it is, as may be seen when enclitic 3ACC occurs after a C-final verb:

sə vənǎ:tə kə vǎdér lə Accettura (Basilicata, M&S II: 531)
am come that see=him
"I have come to see him"

t i dǎttə də camár lə Martina Franca (Puglia, M&S III: 365)
to.you have-1sg said to call=him
"I told you to call him"

These data show that there is no phonological solution for the presence / absence of 3ACC L.

(2) Generalization

If a clitic has two alternants of varying phonological complexity, then the poorer alternant may appear in proclisis and the richer alternant in enclisis, but not the reverse.

Since syntactic position is thought to be unable to bear on phonological shape, this alternation is quite generally held to represent allomorphy: 3ACC falls into two distinct lexical forms, /V/ and /LV/, which are selected according to syntactic context (Rohlf 1969: §§418, 455, Manzini & Savoia 2016, Ordoñez & Repetti 2014, Pescarini 2018).⁴ We aim at showing that this conclusion is the result of a hasty surrender when facing the surface pattern. On our analysis, a single lexical item /LV/ produces the surface alternations shown based on regular syntax, regular Spell-Out and regular phonology. This, however, requires specific assumptions regarding the workings of syntax, Spell-Out and phonology. Namely Phase Space is instrumental here, i.e. the idea that languages may mark Transfer (the shipping of a portion of the syntactic tree to phonology) by extra syllabic space heading the linearized string that is inserted into phonology (Scheer 2012, D'Alessandro & Scheer 2013, 2015, Newell & Scheer 2021).

The development of the argument below is atypical: insight gained into the phonological identity and workings of 3ACC LV (when present on the surface, the L is a geminate) makes a prediction: in enclisis where L is present, the extra syllabic space that allows the L to geminate is provided by the *syntactic* position of the clitic. Given Phase Space, this means that the clitic is phase-initial in enclisis: the extra syllabic space allowing the L to be pronounced is phase-initial syllabic material. In turn, the clitic is not phase-initial when occurring in proclisis: the L is absent because it cannot geminate due to the absence of the extra Phase Space.

What this shows regarding methodology is two things: phonological evidence i) may be used to detect phase boundaries and ii) thereby make predictions regarding syntactic structure, which may then be correlated with syntactic evidence for phases, or referee competing syntactic analyses. In current practice, phase boundaries are determined only by syntactic evidence and thus the opportunity of independent evidence from the other side of Transfer is left fallow. We believe that phonology can do more for syntax than just execute its structure: Phase Space as a linking theory digs into this potential.

⁴ Note that while Manzini & Savoia (2016) and Pescarini (2018) explicitly mention allomorphy, Ordoñez & Repetti (2014) do not. However, they state: "[w]e will present data from dialects that have two sets of pronouns: clitic and weak. We differentiate the two on the basis of lexical differences (for example, Neapolitan clitic /o/ vs. weak /vllə/)" (p.180).

An attempt at deriving alternations between vocalic proclitics and syllabic enclitics directly in the phonology is made by Cardinaletti & Repetti (2008) for Emilian subject clitics. Though we endorse a phonological approach to such alternations, we share the doubts expressed by Manzini & Savoia (2016) on Cardinaletti & Repetti's OT implementation. They argue that in proclisis V clitics are preferred over LV ones because of high ranking *STRUCTURE (imposing economy of structure) over ONSET (imposing the preservation of onset). However in enclisis, LV is triggered after V-final verb forms, because *STRUCTURE is ranked lower than *HIATUS (disallowing hiatus) and *VG (Vowel-Glide, disallowing falling diphthongs). See Manzini & Savoia (2016) for counterexamples to the latter constraints. More generally, an economy restriction such as *STRUCTURE if construed as strictly phonological could lead us to have pre-tonic syllables consisting quite generally of the nucleus alone, contrary to fact.

Our analysis also contributes to a growing body of literature which aims at reinterpreting alternations that are typically held to be allomorphic as pure phonology: where all surface forms are derived from a single, rather than from several underliers. Relevant work includes Larsen (1998), Bendjaballah & Haiden (2005), Lampitelli (2010, 2013), Passino (2014), Scheer (2016), Faust *et al.* (2018), Newell (2023), as well as the articles published in Newell & Ulfsgjorninn (2021). These analyses build on enriched phonological representations, which allow them to reduce cases of alleged allomorphy to regular Spell-Out and regular phonology based on a single underlier. Of course they do not hold that there is no allomorphy at all: *go* and *went* will still be two distinct lexical entries of the same verb, which cannot be reduced.

Syntactically, we adopt the minimalist framework as defined mainly by Chomsky (1995, 2000, 2001 and following) including recent revisions by Chomsky (2021, 2024). Of special relevance in connection with clitics are assumptions about the interface between narrow Syntax and the phonological component (PHON). We assume that Transfer is regulated by phases, yielding Phase Impenetrability Condition (PIC) effects. The procedure mapping phasal chunks to PHON, i.e. Externalization (EXT, or Spell-Out), contains Vocabulary Insertion (Halle & Marantz 1993).⁵ It also encompasses Linearization, yielding precedence order based on the dominance order of syntax.

As for the syntax of clitics, two main framework theories have been contending the field for several decades. On the one hand, we have the movement approach of Kayne (1975, 1991), revised in view of minimalist ideas especially by Roberts (2010). The alternative is a model where clitics undergo External Merge (EM) at the edge of a phase head, where they license a null object: see especially Sportiche (1996) and Manzini & Savoia (2005) for clitics as functional heads, Roberts (2010) for the relevance of the *v* phase head (though within a movement framework), Sportiche (1996) for clitics as licensors of object *pros*. As we argue, under a Copy theory of movement and a deletion theory of *pro* (Holmberg 2005, Saab 2008), the two analyses are non-distinct at Transfer. What is directly relevant for our purpose is that we reject Kayne's (1991) conclusion that enclisis and proclisis are determined by the verb moving around the clitic in I. Rather, we argue that it is the clitic that undergoes EM either with *v** (enclisis) or with I (proclisis), while both the finite and the non-finite verb are in I. Thus, Transfer of the enclitic, but not of the proclitic, crucially occurs at the left edge of a Spell-Out domain.

The phonological evidence for phases we provide plays both roles mentioned above. On the one hand, it converges with the two syntactic analyses at hand (based on movement or EM), which both produce the same phase structure upon Transfer: enclitics are *vP*-initial, thus phase-initial, while proclitics are *IP*-initial, thus internal to the CP phase. This is precisely what the entirely independent phonological analysis arrives at; the phase structure at hand thus appears to stand on solid grounds, more solid than if it were just due to syntactic considerations, as is usually the case. On the other hand, the phonological evidence contributes to the syntactic debate in that it provides a non-syntactic argument in favour of the analysis under which enclisis/proclisis alternations involve two different positions of the clitic, rather than two different positions of the verb, against Kayne's (1991) analysis.

⁵ Note that the adoption of Late Insertion does not mean that we also endorse other features developed in Distributed Morphology. The present article is agnostic about them, using only the tools of minimalist syntax.

In section 2, we first introduce a purely phonological pattern where 3ACC shows L-V alternations in proclisis, which we believe is instrumental in understanding its phonological workings. Based on the phonological analysis developed, the proclisis/enclisis alternation under (1) is then addressed in terms of a model of the syntax/phonology interface including Phase Space in section 3. In section 4, we provide a syntactic model of enclisis/proclisis alternations under which the position of the verb remains fixed, but the position of the clitic shifts. We conclude that phonologically motivated Phase Space aligns with the left boundary of syntactically defined Spell-Out domains (section 5). This means that no allomorphy is involved in V / LV alternations, but simply the interfacing of syntax and phonology, each working on the basis of its own internal principles. We believe that the crucial sections of the paper are those where phonology and syntax meet, namely sections 3 and 5. Section 6 concludes. The article is related to an Appendix where issues (mostly raised by the reviewers) are discussed which we believe are less directly relevant to the argument: we have outsourced them in order to assure a more direct reading flow of the main strand. They include phonological processes occurring in enclitic clusters (Appendix section 2), virtual geminates (Appendix section 3) and variation in syntactic clitic placement (Appendix section 4).

2. Phonologically motivated V - L alternations

2.1. 3ACC in proclisis

In order to get a handle on the pro- vs. enclisis pattern under (1), we first look at the phonology-internal puzzle under (3). This pattern is found in Italo-Romance varieties including those that instantiate the pro- vs. enclisis pattern. Its analysis will tell us about the lexical identity of LV and its workings in the phonology.

(3) 3ACC /LV/ in proclisis: V-L alternations

V before a consonant	L before a vowel
a. Accettura (Basilicata, M&S II: 160)	
other LV items following this pattern: <i>la</i> (fem. sg.)	
u véʃkwə	l addʒə véstə
him=see-1sg	him=have-1sg seen
"I see him"	"I have seen him"
b. Senise (Basilicata, M&S II: 161)	
other LV items following this pattern: <i>la</i> (fem. sg.), <i>li</i> (masc/fem pl.)	
u kanóʃʃətə	l æddʒə
him=know-2pl	him=have-1sg
"You (pl) know him"	"I have him"
c. Martina Franca (Puglia, M&S II: 793, 275)	
other LV items following this pattern: <i>la</i> (fem. sg.)	
u téŋgə	mə l a ddé:tə
it=hold-1sg	me=it=have-3g given
"I hold it"	"he has given it to me"
d. Minervino Murge (Puglia, M&S II: 60, 289)	

u	cámə-nə	sə	l	akkátə
him=	call-3pl	self=it=	buy-3sg	
"they	call him"	"he	buys it for himself"	

- e. Conflenti (Calabria, M&S III: 417, 647)
 other LV items following this pattern: *la* (fem. sg.), *le* (fem. pl.), *li* (masc. pl.)
- | | | | | | |
|------|----------|----------|--------------------|--------|---------|
| u | víðu | si | l | a | llaváte |
| him= | see-1sg | self=it= | have-3sg | washed | |
| "I | see him" | "he | washed it for him" | | |

In the varieties displaying the proclisis pattern under (3), LV appears as V if the following word is consonant-initial (left column), but as L alone in case the following word is vowel-initial (right column). We will see in section 2.2 that the same pattern also occurs in the definite article, which is an /LV/ item, too.

The pattern at hand is recapitulated under (4).⁶

- (4) LV pattern in proclisis
 V-L alternation of /LV/ items
 /LV/ → V / C
 L / V

2.2. Definite article

The table under (5) shows that the definite article, which also identifies as /LV/ across dialects, displays the same pattern (4) as 3ACC in proclisis (Bafle 2012). We show relevant dialects from the five Southern Regions where the the proclisis - enclisis pattern (1) occurs, but the configuration is also found elsewhere in Italo-Romance.

- (5) def. article /LV/: V-L alternations

- a. San Fili (Calabria) (M&S III: 578)

	sg fem	sg masc	pl fem	pl masc	gloss
<u> </u> C	a fímmína	u yáttu	ε fímmine	i yátti	the woman, the cat
<u> </u> V	l ála	l úeminu	l ále	l úemini	the wing, the man

- b. Conflenti (Calabria) (M&S III: 578f)

	sg fem	sg masc	pl fem	pl masc	
<u> </u> C	a hímmína	u yáttu	ε hímmine	i yátti	the woman, the cat
<u> </u> V	l ála	l úeminu	l ále	l úemini	the hip, the man

- c. Calascibetta (Sicilia) (M&S III: 587)

	sg fem	sg masc	pl fem	pl masc	
<u> </u> C	a fímmína	u yáttu	i fímmini	i yátti	the woman, the cat

⁶ Here and below, phonological computation relating input and output is either described in the guise of rules like under (4), or in simple prose statements (such as "a floating consonant attaches to a preceding or following empty onset" as under (8) below), which are customary in autosegmental environments. The computational component not being our focus, we do not wish to take sides regarding the debate between rule-based vs. constraint-based computation: all we say may be implemented in either.

__V l átti fñimmina – l áti fñimmini l aṭtí yátti the other woman / cat

d. Uggiano la Chiesa (Apulia) (M&S III: 580)

	sg fem	sg masc	pl fem	pl masc	
__C	a króʃʃe	u kristjánu	ε króʃʃi	i kristjáni	the cross, the person
__V	l áŋka	l óccu	l áŋce	l ócci	the hip, the eye

e. Celle di Bulgheria (Campania) (M&S III: 584f)

	sg fem	sg masc	pl fem	pl masc	
__C	a fñimmina	u káni	i fñimmini	i káni	the woman, the dog
__V	l aʃʃidda	l ómu	l aʃʃiddi	l úəmmini	the wing, the man

f. Gorgoglione (Basilicata) (M&S III: 640)

	sg fem	sg masc	pl fem	pl masc	
__C	a fēmmenə	u kwé:nə	ɔ fēmmenə	ɔ ké:nə	the woman, the dog
__V	l óŋŋə	l úəccə	l óŋŋə	l úəccə	the nail, the eye

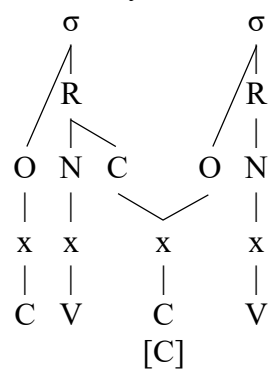
2.3. Analysis: L is a turbid ambisyllabic consonant

2.3.1. Ambisyllabic consonants

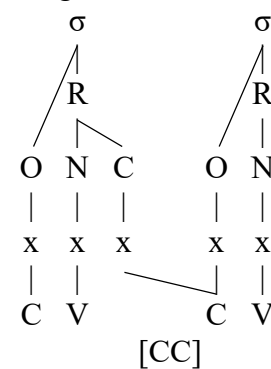
Introduced by Kahn (1976), ambisyllabicity is the idea that a consonant may belong to two syllables at the same time but, unlike a geminate, be pronounced only as a singleton (Borowski etc. XXX, Rubach 1996). This is shown under (6)a where the ambisyllabic consonant is pronounced singleton because it is associated to a single timing unit, which branches. By contrast, the geminate consonant under (6)b is itself branching: it is associated to two timing units and therefore pronounced as a geminate.

(6) classical view: ambisyllabic vs. geminate consonants

a. ambisyllabic C



b. geminate C



2.3.2. Turbidity Theory

Let us now look at what the equivalent of ambisyllabic consonants in Turbidity Theory (TT) (XXXlitt). The reason for doing that will appear as the discussion unfolds. TT was proposed in the version of OT that relies on Containment (rather than on Correspondence) (Oostendorp XXX). Since Containment holds that the input is always present (contained) in the output, there is no literal deletion of phonological objects due

to phonological computation. Rather, a "deleted" object in the output is not pronounced, but still present in the phonological representation: it is phonetically underparsed. This idea is operationalized by two distinct types of association lines relating segmental material and syllabic constituents. A vowel that is present in the input will have a belonging line, indicating that it belongs to its nucleus.⁷ This line noted ↓ under (7) below. Note that its presence makes no statement whether this vowel will actually be pronounced or not. The pronunciation of melodic items is decided by the other type of association line, the pronunciation line notes ↑ under (7). A "deleted" vowel is thus one that has a belonging, but no pronunciation line, as under (7)a: it will be absent from the surface. In case it acquires a pronunciation line through computation, as under (7)b, though, it will be pronounced (the presence of both belonging and pronunciation lines is noted by ↑↓). This also allows for a third object, shown under (7)c: a truly empty nucleus, i.e. one that like (7)a is not pronounced, but unlike (7)a does not possess any segmental content (∅ below notes phonetic absence).

(7) turbid vs. regular autosegmental representations

a. belonging line	b. both belonging and pronunciation lines	c. empty nucleus
N	N	N
↓	↑↓	
a	a	
∅	[a]	∅

Cavirani (2022: 618-620) argues that the turbid take has an advantage over the regular autosegmental perspective where (7)a is a floating segment, i.e. unattached to its nucleus in any way. He shows that in vowel-zero alternations the vocalic segment needs to be present and visible by the nucleus, that is attached to it, even when it remains unpronounced.

2.3.3. Turbid ambisyllabic consonants

Below we follow Cavirani's (2022) perspective on TT, arguing that the V-L alternation falls into place if L is identified as a turbid ambisyllabic segment. What that means is shown under (8) below. Note that, like Cavirani (2022), we use Strict CV representations where O is shorthand for onsets and N for nuclei (Lowenstamm 1996, Scheer 2004), but that nothing hinges on that: the classical onset-nucleus-coda model, or moraic structure, would do the same job.

⁷ This is called *projection* in the TT literature, but for the sake of exposition we will use *belonging* here.

(8) identity and workings of LV

a. LV, lexical form

O N
↓ ↓
l V

b. LV before a V-initial word

O N O N ...
↓ ↓ ↗ ↖ ↓
l V V ...

[l V]

c. LV before a C-initial word

O N O N ...
↓ ↓ ↕ ↕ ↓
l V C V ...

[V C V]

In TT, belonging relations are defined in the lexicon and cannot be altered in a derivation: this follows from Containment and Consistency of Exponence (van Oostendorp 2008). Only pronunciation lines may be manipulated by phonological computation.

The lexical identity of LV items is shown under (8)a: both the L and the V have a belonging, but no pronunciation line (that is, the turbid equivalent of floating segments). A following V-initial word (8)b offers an empty onset preceding the initial vowel, on which the L spreads. That is, the phonological process at hand which is active in the language concerns consonants that are "floating", i.e. only possess a belonging line: they spread (a pronunciation line) onto a neighbouring onset in case this onset is empty and the intervening nucleus has no pronunciation line relating it to a segment.

The resulting structure (8)b is the turbid equivalence of an ambisyllabic consonant (6)a: one that is attached to two syllabic constituents, but pronounced singleton. Its singleton pronunciation follows from the fact that the L possesses only one pronunciation line, the one acquired through spreading. It is associated to its home onset, but only with a belonging line. Being related to syllabic constituency only by one pronunciation line, L appears as a singleton on the surface.

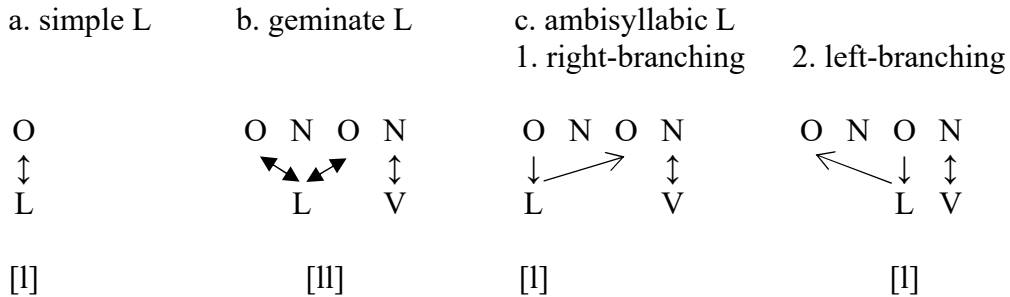
A consequence of the L spreading on the empty onset of the following word is that the V on the following V cannot associate to its nucleus: this would imply line crossing. Note that in TT, belonging and pronunciation lines are on different planes, i.e. never cross each other (Cavirani 2022: 633f). Only two belonging or two pronunciation lines can cross each other, a situation that produces ungrammaticality like in regular autosegmental representations. Under (8)b the pronunciation line created by the spreading of the L graphically crosses the belonging line of the following V, and this is well-formed. By contrast, did the V acquire a pronunciation line relating it to its nucleus, two pronunciation lines would cross. Therefore the V following the L must remain "afloat", i.e. attached only with a belonging line. The result is the pronunciation of L, but the phonetic absence of V.

Unlike a following V-initial word, a following C-initial word (8)c has its initial onset filled. Therefore the L cannot spread and remains "afloat", i.e. without pronunciation line and therefore unpronounced. Since the L has not spread, the floating V can associate to its nucleus with a pronunciation line: no (pronunciation) lines will be crossing. The phonological process here is that all vowels which lack a pronunciation line will acquire such a line if they can, i.e. if this line does not cross another pronunciation line. The result is the reverse of what is produced by (8)b: the L is absent from the surface, while the V is pronounced.⁸

⁸ In some dialects, only a subset of LV items follows the pattern under (5): the remaining LV items

Note that (8)b is distinct from both regular simple L and geminate L. This is shown under (9) below. Note that simple L and geminate LL exist independently of the LV pattern in the dialects at hand and must thus be distinct.

(9) simple L vs. geminate L vs. turbid ambisyllabic L



Simple L (9)a has both belonging and pronunciation lines just like all other regular consonants, while geminate LL (9)b is associated to two onsets with both belonging and pronunciation lines. Finally, the turbid ambisyllabic L (9)c is also associated to two onsets, albeit with only a belonging line to one, and with only a pronunciation line to the other. (9)c1 shows the right-branching version that we have seen in the proclitic LV pattern (4), while its version under (9)c2 is left-branching: we will see in section 2.4 that it occurs in enclisis. Recall that L lexically associated with only a belonging line spreads on any available empty onset in its vicinity, either preceding or following. The phonetic interpretation of both the simple and the turbid ambisyllabic L is as a singleton [l] since both have only one pronunciation line. The geminate comes out as a long consonant [ll] because it has two pronunciation lines.

Note that in most of the 44 dialects where we have identified the proclisis-enclisis pattern, the threefold distinction under (9) is necessary. That is, simple [l] contrasts with geminate [ll], while ambisyllabic [l] is distinct from the latter by being phonetically singleton, from the former since it is only endowed with a belonging line in the lexicon (and therefore subject to the spreading process).

2.3.4. Diachronic evolution: geminate > ambisyllabic

appear either with a stable [V] alone, or with a stable [LV], no matter whether the following word is C- or V-initial. Thus items with a stable [V] representing the def. art. are found in Borghetto Vara (Liguria) (M&S III: 576f), where masc sg /lu/ behaves as expected ([u gátu] "the cat", but [l ómu] "the man"). However, the pl determiner only ever appears as [i], before consonants ([i gáti] "the cats") as much as before vowels ([i ómi] "the men"). In these cases, the pl item has a different lexical structure: on top of its belonging line, the V also has a pronunciation line in the lexicon (and the L is probably absent altogether since it never surfaces).

Accettura (Basilicata) is a dialect where some 3ACC items follow the proclisis / enclisis pattern (case of masc. sg. /lu/ illustrated under (3)a, and also of fem. sg. /la/), while others always appear as [LV] no matter what (in proclisis before a consonant or in enclisis). This is the case of masc./fem. pl *lə cá:mə* "I call them_{masc./fem.pl.}" (M&S II: 494). Note that these items still show elision: /LV/ appears as [LV] before consonants (as in the example shown), but as [V] before vowels, as in *l addʒə véstə* "I saw them_{masc./fem.pl.}" (M&S II: 160). The lexical representation of these 3ACC items has L that possesses both belonging and pronunciation lines (depending on the analysis of elision, the V may either also have a pronunciation line which is severed in presence of a following V, or lack a pronunciation line, whose acquisition is inhibited when followed by a V).

In the case of 3ACC and the definite article, it springs to the eye that their diachronic origin Lat. ILL-V is the reason why their L shows peculiar behaviour in Italo-Romance: it was a geminate in Latin. Initial L in other words, lexical or grammatical, is never observed to show alternations with zero or the def. art. allomorphy *il//lo*. It is therefore reasonable to think of a causal relationship between the (overt) geminate in the etymon and the behaviour of the L in 3ACC and the def. art. in the dialects at hand.

The question then is how exactly the diachronic geminate identity of L could be carried over to the synchronic workings of 3ACC and the def. art. The evolution from (9)b to (9)c is an answer: what happened diachronically is i) the loss of syllabic space and ii) the loss of pronunciation lines. If you compare the state of affairs in Latin (I)LLU (9)b with the modern lexical item under (8)a, i) the leftmost CV unit has disappeared and ii) both L and L have lost their pronunciation lines. Note that the typical situation of function words is to be defective when compared to lexical words (§Selkirk, 1996 #2614£ 1996 and much subsequent literature).⁹

2.3.5. No modularity violation

Also note that the lexical specification for gemination allows us to avoid making reference to morpho-syntactic categories, which would be a violation of modularity. All analyses will need to distinguish 3ACC and the def. art. on the one hand and other L-initial items on the other hand. Rules or constraints could be indexed for applying only to 3ACC and the def. art., but that would involve modularity-violating reference to extra-phonological information. We explain why modularity is an essential property of our analysis in sections 2.4 and 3 (for reasons unrelated to the present issue).

Given (8), all that is needed to derive the LV pattern under (4) is thus regular (turbid) autosegmental structure where melodic items may be "floating", as well as the insight that L is a turbid ambisyllabic consonant.

2.3.6. Intrinsic vs. contrastive geminates

⁹ Based on the surface data, the learner can arrive at the representations and computation under **Errore. L'origine riferimento non è stata trovata.** in the following way. Segment-zero alternations as in 3ACC [L] - [V] are indicative for the alternating segments not to be regular segments which are always pronounced. Also, their quality cannot be predicted, and thus they cannot be epenthetic ([l] is not the epenthetic consonant in the dialects at hand, and V varies according to gender and number, thus must be recorded in the respective lexical entries). The regular way of encoding segments i) that alternate with zero and ii) whose quality cannot be predicted is to conceive them as floating (see e.g. French liaison, Clements & Keyser 1983 and much following literature). The learner equipped with knowledge about autosegmental workings will arrive at the same conclusion since they know that stable [l] / [V] must be different: they are lexically associated. Thus the learner is able to conclude that the lexical representation of 3ACC is as under **Errore. L'origine riferimento non è stata trovata.**a. That the lateral of 3ACC is a phonological geminate when it is pronounced singleton may then be abstracted from the conditioning environment: it is only pronounced if the following word is V-initial, i.e. offers an empty onset as a target for gemination **Errore. L'origine riferimento non è stata trovata.**b. The learner thus understands that L is only pronounced if it is able to geminate. Finally, its non-pronunciation before a C-initial word **Errore. L'origine riferimento non è stata trovata.**c allows the learner to conclude that a floating L remains afloat even if it could associate to a single position. That is, they understand that floating L associates only if it is able to associate to two positions.

A well-known case of consonants being phonetic singletons but behaving as phonological geminates are so-called intrinsic geminates in Standard Italian (SI) and Italo-Romance varieties: the palatals ɲ , ʎ , ʝ and the affricates tʃ , dʒ (e.g. Bertinetto & Loporcaro 2005: 134).¹⁰ These consonants behave like geminates e.g. word-initially where (just like s+C clusters) they select the *lo* allomorph of the definite article (SI *lo sciocco* "the dullard", *lo gnomo* "the gnome", against *il sale* "the salt", *il naso* "the nose").

Unlike the other geminates of SI and Italo-Romance, though, intrinsic geminates are not contrastive (with a singleton version: they are themselves singletons) and occur word-initially where other geminates are not found. In the latter context, they are phonetic singletons in absence of a preceding vowel-final word, but geminates in presence of a preceding vowel (Bertinetto & Loporcaro 1995: 134). Instrumental studies have shown that intrinsic geminates do not display the phonetic properties of distinctive geminates, especially regarding duration (Endo 1999, Celata & Kaepelli 2003, Mairano *et al.* 2025). Also, in northern varieties where distinctive geminates do not occur (duration is not distinctive), the geminate behaviour of intrinsic geminates is the same as elsewhere, e.g. regarding allomorph selection of the definite article (Bertinetto & Loporcaro 2005: 134).

A rationale giving this situation is to consider that intrinsic geminates are (turbid) ambisyllabic consonants (9)c: associated to two syllabic constituents and thus phonologically geminate, but pronounced only on one of them and therefore phonetically singleton. This makes them distinct from regular geminates (9)b, which are geminates both phonologically and phonetically. The literature on SI and Italo-Romance dialects discusses various issues related to geminates without distinguishing both types: whether they are mono- or bisegmental (Loporcaro 1996), or whether they are regular or ambisyllabic (Vogel 1977, Bertinetto & Loporcaro 2005: 143, 142). Analyzing the dialect of Miogliola (Piemont), Ghini (2001: 15, 162ff) argues that singleton intervocalic consonants preceded by a tonic vowel are ambisyllabic for the same reasons that led Kahn (1976) to this conclusion regarding words like *cíty*: the tonic vowel does not lengthen. We are unaware of proposals calling on different phonological identities for contrastive and intrinsic geminates.

2.4. Consequences of the geminate L analysis for syntax

Based on the LV pattern (4), we have argued on purely phonological grounds that the L of LV items, when instantiating proclitic 3ACC or the definite article, is a (turbid) ambisyllabic consonant whenever it appears on the surface (10)a. This makes a prediction for the syntactic pro- vs. enclisis pattern (1), shown under (10)b.

(10) phonetic presence of L

a. phonology

L appears on the surface iff it can spread on extra syllabic space.

¹⁰ Intrinsic geminates also occur in Portuguese, where ɲ and ɲ are concerned (Wetzels 1997, 2000): unlike other singleton consonants, they occur only in intervocalic position (geminates cannot exist elsewhere), they are never preceded by diphthongs, and ɲ always nasalizes preceding vowels (while nasalization before the other nasals m, n is only optional, Abaurre & Pagotto 1996).

b. syntax

L appears on the surface in enclisis, but not in proclisis, *because* it is able to spread in the former, but not in the latter context.

Indeed, since the L is present in enclisis, this context must provide extra syllabic space, grey-shaded under (11)b, which allows the L to spread and thus be pronounced. By contrast in proclisis, this extra syllabic space is absent, entailing the non-pronunciation of the L (11)a.

(11) extra syllabic space in enclisis

a. proclisis

LV	word 2
O N	O N
↓ ↓	
L V	C V ...
[V]	

b. enclisis

word 1	LV
O N	O N
	← ↓ ↓
... C V	L V
	[LV]

Thus what looks like a syntactic conditioning turns out to be phonological in kind. This is all to the good if modularity (Chomsky 1955-56, Fodor 1983, Coltheart 1999, Carruthers 2006, Reiss 2007, Boeckx 2010, Robbins 2017) is taken seriously: syntax has no clue about the presence or absence of a consonant in a given Vocabulary Item, and could not mandate either. The pro- vs. enclisis pattern (1) is considered allomorphy in the literature because a specific syntactic context selects a given VI, while another syntactic configuration inserts another VI. Note that the only purpose of this analysis is to get the surface distribution right: there is no independent reason why proclisis selects V and enclisis LV, rather than the reverse.

The allomorphic option is refuted if the spreading analysis of L is correct: LV appears with or without the L not because of allomorph selection, but because of the opportunity for L to spread on extra syllabic space.

The question, then, is what the origin of this extra syllabic space could be, which is present in enclisis but absent in proclisis. In other words, an interface theory is needed that converts a specific syntactic context into syllabic space. This is precisely what is proposed under the heading of Phase Space, which is introduced in the following section.

3. Phase Space: the footprint of Transfer

3.1. Diacritic carriers of morpho-syntactic information do not qualify

Since morpho-syntactic information regularly impacts phonological computation, phonologists have always devised items that import this information into phonological representations: juncture phonemes (#) in structuralism, boundaries (#, +, =) in SPE, autosegmental structure in Prosodic Phonology (ω, φ) (for historical overviews, see Elordieta 2008, Scheer 2011, 2021). They face the issue of being diacritics, arbitrarily chosen and interchangeable (a typewriting symbol like # was chosen in the 50s because it was available on typewriters), which do not have any intrinsic properties

(phonological or other): they are alien to the proprietary phonological vocabulary, which is made of labial, occlusion, etc. (Scheer 2011: §399).

As their only purpose is to make morpho-syntactic information available to phonological computation, these items are phonologically meaningless: unlike [labial] etc., their mere presence has no effect on the phonology. It is only when a phonological rule or constraint makes reference to them that they bear on phonology ("consonants preceded by # / initial in ω are strong", meaning that word-initial consonants are strong). Because they are phonologically meaningless, they do not produce any predictable effect: in principle they could trigger or inhibit any phonological process and its reverse. That is, they could cause initial consonants to be strong or weak, or mandate that a language only allow for word-initial #RT clusters (e.g. "consonants preceded by # / initial in ω are weak"). This is not how language works, though (Scheer 2004: §§87, 402; 2014, Ségéral & Scheer 2008): the effects of the beginning of the word are cross-linguistically stable. Initial consonants are strong in some languages and behave as intervocalic consonants in others; but there is no language on record where they would be especially weak. Languages may restrict initial clusters to #TR (French, German, etc.), or they may not impose any restriction (#TR, #RT, #TT, #RR occur, as in Moroccan Arabic, Polish etc.); but there is no language on record that restricts initial clusters to #RT.

Therefore, phonologically meaningless diacritics do not qualify for carrying morpho-syntactic information into phonology: the empirical situation requires items representing morpho-syntactic information to be phonologically meaningful, i.e. to exist in the proprietary phonological vocabulary and by their mere presence to produce the cross-linguistically stable effects mentioned. Respecting modularity (see the references quoted in section 2.5) leads to the same conclusion: phonological computation can only be done over the domain-specific vocabulary used in phonology. Thus typewriting symbols or other diacritics do not qualify.

3.2. Phonologically meaningful carriers of morpho-syntactic information

Phase Space (Lowenstamm 1999, Scheer 2009: 72-74, 2012: §307, D'Alessandro & Scheer 2013, 2015, Newell & Scheer 2021) introduces an alternative to diacritic carriers of morpho-syntactic information, which satisfies modularity and may be able to derive the cross-linguistically stable effects mentioned: the (only) carrier of morpho-syntactic information in phonology is syllabic space (depending on theoretical inclination, x-slots, moras, empty Onset-Nucleus pairs). The locus of this extra syllabic space is phase-initial: Spell-Out domains, i.e. those portions of the syntactic tree that are sent to Spell-Out and then to phonology in one go, may be marked in the phonology by extra syllabic space at their left edge. Phase Space may thus be seen as the phonological footprint of Transfer.

Regarding the cross-linguistically non-arbitrary effects of the beginning of the word that are discussed in the previous section, the left edge of the word is parametrically represented as an empty Onset-Nucleus pair, to which we will refer as an empty CV or the initial CV (since these labels are used in the relevant literature): in languages where initial clusters are restricted to #TR and where initial consonants are strong, the initial CV is present. By contrast, in languages where initial clusters are unrestricted and initial consonants non-strong, it is absent. Showing how the presence

/ absence of the initial CV enforces the effects mentioned would lead too far afield here (see e.g. Ségéral & Scheer 2008, Scheer 2009, 2012: §252, 2014 for discussion).

The two defining properties of this approach are recapitulated under (12) below.

(12) Phase Space

- a. nature
morpho-syntactic information in phonology is represented by extra syllabic space (x-slots, moras, empty CV units). When using empty CV units, this is called the initial CV.
- b. locus
this extra syllabic space occurs at the left edge of Spell-Out domains.

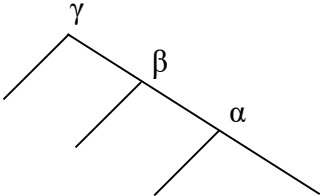
3.3. Spell-Out

In this perspective, Spell-Out does two things. It matches portions of the syntactic tree (Spell-Out domains) with lexically recorded Vocabulary Items (VI) and inserts the phonological material of the latter into the phonological Work Space. Thus under (13), there are three phases (α , β and γ) which for the sake of the argument (following Chomsky 2021: 36) are identical with Spell-Out domains. They are converted into phonological material (ab, c, de) upon a lexical access, and after linearization appear as a linear string in the phonology.

In addition to that, Spell-Out inserts Phase Space: the phonological material produced by the Spell-Out of a phase may be preceded by a CV unit. That is, whether or not a given phase also produces the insertion of the initial CV is an idiosyncratic property of each phase that needs to be acquired by the infant just as all other Spell-Out instructions (the fact that a VI matches some syntactic with some phonological and semantic properties). Like other Spell-Out instructions, the insertion of the initial CV is learnable by its effect: the learner knows from the regular phonology of the language (see section 2.3 note 9) that the presence of [L] identifies it as a geminate, which thus must have received extra syllabic space. Since there is no local source in the phonological environment, this extra space must be provided by Spell-Out.

In the example under (13), α and γ add the initial CV to the VI they spell out, while β does not. The phonological string thus pieced together contains the extra CV to the left of what α and γ have spelt out, but no CV unit precedes the VI spelt out by β .

(13) Spell-Out operation

syntax	Spell-Out	phonology
	$\alpha \leftrightarrow \text{CV} + \text{ab}$ $\beta \leftrightarrow \text{c}$ $\gamma \leftrightarrow \text{CV} + \text{de}$	$\text{CV} + \text{ab} + \text{c} + \text{CV} + \text{de}$

3.4. There is no "CV in the tree"

Note that Phase Space, i.e. the extra initial CV, comes into being just like diacritic carriers such as # or ω do: upon Spell-Out. Since SPE and in all subsequent approaches to the interface, a mapping algorithm transforms syntactic constituent structure into items that are inserted into phonological representations. This mapping algorithm (which today is called Spell-Out or the EXT procedure) operates post-syntactically. In SPE (Chomsky & Halle 1968: 12f, 366ff), the mapping algorithm inserts a # to the left and right of major categories N, V, A, as well as of all constituents they project. Thus [[Peter]_{NP} [sees [Mary]_{NP}]_{VP}]_S reaches phonology as ####Peter## ##sees# #Mary####: the hash mark clusters import the hierarchical distance expressed by syntactic constituency into the phonology. In later work, prosodic constituency (ω , ϕ , etc.) also comes into being through a mapping algorithm: mapping rules in the rule-based environment of the 80s (Nespor & Vogel 1986), constraint-based mapping in OT since the 90s (Selkirk 1996 and following).

This historical excursus is to show that whatever carriers of morpho-syntactic objects are used in the phonology (#, ω), they do not exist in the syntactic tree. Rather, they come into being through a post-syntactic Spell-Out (or mapping) operation. These items, which were called boundaries in SPE, carry non-morphemic information: they do not belong to any morpheme and are not stored in their lexical recording. Rather, they describe the hierarchical position of morphemes in the syntactic structure. They are thus different in kind when compared to regular VIs, which represent morphemic information and spell out syntactic items (terminals or nodes). Phonological representations are therefore made of two distinct items: morphemes and boundaries.

All this is consensual in approaches to the interface since SPE. Phase Space, i.e. the phase-initial CV, has the exact same workings as #'s and ω 's in this respect: there is no "CV in the tree", and the CV does not spell out any syntactic item. It differs only with respect to the two properties mentioned under (12): Phase Space is a truly phonological object (rather than a diacritic), and it occurs at the left edge of certain Spell-Out domains.

3.5. Privativity: Phase Space is only inserted when it produces a phonological effect

Phase Space is a privative approach to the interface: only syntactic information that will indeed produce an effect in phonology is actually transferred to phonology. All previous approaches to the interface since SPE are non-privative. That is, the full syntactic structure is transmitted to phonology: items which will be used by the phonology as much as items that just sit in phonological structure without ever producing any effect (Scheer 2011: §756).

That Phase Space is only inserted when it produces a phonological effect (12)b is a consequence of its non-diacritic character (12)a: since it is a phonologically meaningful object, its mere presence in phonological structure will produce an effect. Thus it can only be present when phonology reacts to it. By contrast, diacritic items such as #, ω can be inserted into the phonology without counting, as their mere presence does not influence phonology in any way.

3.6. No post-Spell-Out tampering

Another property of Phase Space that contrasts with other representational interface theories is that it is directly driven by (morpho-)syntax without any possibility to tamper with what syntax has sent off after spell-out has occurred. That is, domains which are relevant for phonological computation are never defined or modified post-syntactically. By contrast, the core of Prosodic Phonology is a mapping mechanism that creates phonological domains expressed in terms of prosodic constituency. This mapping is based on the output of Spell-Out: mapping rules in the 80s (Nespor & Vogel 1986), constraint-based mapping since Selkirk (1996), more recently implemented in Match Theory (Selkirk 2011, Elfner 2018). Mapping is language-specific and expresses cross-linguistic variation.

Thus Selkirk (1996: 188) argues that the relationship of a clitic and its host may identify as three distinct prosodic trees according to phonological behaviour: i) the host may make a Prosodic Word (PWd) by itself, and the clitic depends on another PWd dominating the host-PWd, which in turn is dominated by a Prosodic Phrase (PPh) (affixal clitic: [[[clitic] [host]_{PWd}]_{PWd}]_{PPh}); ii) the host and the clitic may be sisters of a PWd, which is dominated by a PPh (internal clitic: [[host clitic]_{PWd}]_{PPh}); iii) the host may make a PWd by itself, and the clitic depends on the PPh dominating this PWd (free clitic: [[host]_{PWd} clitic]_{PPh}). Studying variation in Italo-Romance, Peperkamp (1997: 177) has identified enclitics to be affixal clitics in Neapolitan, internal clitics in Lucanian and free clitics in Standard Italian.

Given this situation, the property of mapping that is crucial for the argument is shown under (14)a.

(14) consequences of mapping

- a. the same syntax affords different mappings to prosodic constituency.
- b. phonological variation may thus be invisible to the syntax: it is created post-Spell-Out by the mapping mechanism which produces variable prosodic constituency for an identical syntactic configuration.
- c. in such cases, syntax is blind for phonology and phonological evidence is unable to inform syntactic analysis.

Because of (14)a, phonological variation involving items that are relevant in syntax (such as clitics in the above example) may be made a purely phonology-internal matter (14)b, invisible to the syntax (14)c. This means that phonological evidence cannot be used for arguing about syntactic analyses – but doing exactly that is the central purpose of the present article.

Phase Space does not allow for the creation or modification of phonological domains in the privacy of phonology, i.e. after Spell-Out has occurred. That is, phonologically relevant domains and spell-out domains are the same thing: they are isomorphic. There is no other means of creating phonological domains than what syntax has devised through phase structure and Spell-Out. In other words, there is no mapping and no prosodic constituency (independent arguments may be found in D'Alessandro & Scheer 2015, Newell 2021, Newell & Sailor in press) (more on that in section 3.7).¹¹

¹¹ This is why the title of Scheer (2012) mentions *Direct Interface*: nothing stands between syntax and phonology (or phonological domains). The word *direct* here does *not* refer to so-called Direct Syntax approaches: these allow phonological computation to make reference to morpho-syntactic categories (such as "dative"), in violation of modularity (Kaisse 1985, Pak 2008). The dual use of the word *direct*

In this perspective, variation in phonologically relevant domains is always visible in the syntax: the phonological domains at hand are spell-out domains and thus defined in the syntax. Therefore the absence of mapping and intermediate prosodic constituency is a condition on our major goal in the present article: to enable phonological evidence to bear on syntactic analysis.

Let us illustrate these workings. There is variation between Corsican and southern dialects regarding the behaviour of 3ACC when preceded by another proclitic (and followed by a C-initial word). In some Corsican dialects, 3ACC /LV/ appears as [LV] in this context, while in southern dialects like Accettura (Basilicata) [V] is found (more on that in section 1.3.1 of the Appendix). When prosodic constituency is used to express this variation, two distinct prosodic structures are set up. The variation will thus be invisible to the syntax, which is identical in both cases: it does not have a syntactic cause and cannot bear on syntax in any way. By contrast on our analysis, the variation at hand cannot be due to anything else than phase structure, which means that the syntax of the contrasting dialects is different. Here the phonological pattern makes a prediction for syntactic phase structure, which is the locus of variation. It is only in this perspective that the variation in the behaviour of 3ACC may then be linked to the different syntactic properties of Corsican and southern dialects, which we hint at in note 3 of the Appendix.

3.7. Syntactic and phonological footprints of phases

A frequently encountered and well-known empirical situation involves syntax-phonology mismatches in the sense that a syntactic effect of a given domain is not mirrored by a phonological effect, or vice-versa. This is also a reason why the marking of Spell-Out domains by Phase Space is only optional: syntactically defined Spell-Out may send an item to the phonology, but its arrival in the phonology may not leave any footprint. This is when there is syntactic, but no phonological evidence for the existence of a phase. The reverse may also occur: there is phonological evidence for the existence of a computational domain, i.e. for a phase, but syntax does not echo any effect.

These mismatches, and the existence of so-called phonological phases (based only on phonological evidence), are discussed in Scheer (2012: §307), D'Alessandro & Scheer (2015), Bonet *et al.* (2019) and Ledgeway (2017). The general perspective is that if there is a theory of pieces that are shipped between syntax and phonology, the identification of these pieces should be based on evidence from both sides that are exchanging them. Currently, phasehood is only defined by syntactic evidence: phonological evidence is not consulted or taken into account. There is no reason why phonological evidence for phases should be ignored, though. A major concern of the present article is just about that: to show how a purely phonological analysis can make predictions about phase structure, which in turn will impact syntactic analysis. Here we are able to display the optimal situation in which phonological and syntactic predictions converge. Beyond this particular result, our point is that in order to discover exactly where the (mis)matches lie we need an appropriately restrictive setup.

4. Syntactic analyses of clitics

may have sparked some confusion: Direct Interface is perfectly modular.

Recall that according to the phonological analysis, 3ACC enclitics are preceded by extra syllabic space, while proclitics are not (section 2.5). A candidate for the origin of this extra syllabic space is Phase Space (section 3). This means that the geminate analysis of L and the view on the interface based on Phase Space predicts that enclitics are phase-initial, while proclitics are not. In this section, we discuss competing syntactic approaches to clitics and specifically to proclitics vs. enclitics. We show that movement and "base generation" analyses of cliticization converge at the interface, i.e. send the same Spell-Out domains to the phonology – while there are reasons to conclude that in enclisis/proclisis alternations it is the clitic which is differently positioned, not the verb. In section 5, we relate these results to the phonological predictions.

4.1. Movement and ‘base generation’ converge at the interface

There are essentially two types of approaches available within generative grammar concerning clitic structures. One takes the view that clitics are arguments moved from theta-position to clitic position, as proposed notably by Kayne (1975, 1991). In the alternative approach, clitics undergo External Merge (EM) as heads modifying some verbal projection. In Sportiche’s (1996) version of the ‘base-generation’ hypothesis, the role of clitics is that of licensing a null pronominal object (*pro*). We will briefly review both approaches and show that they yield equivalent representations at the interface. Both are also compatible with the analysis of enclisis/proclisis alternations we propose.

The core idea of movement models of cliticization is that clitics undergo External Merge (EM) in θ -position, as in (15b). Chomsky (1995) accounts for the fact that full phrasal constituents are generally merged in θ -position, while clitics appear to be bare heads, by proposing that head or phrasal status is not an inherent, but a relative notion. In the structure in (15b), D (the clitic) is both the minimal (min) and the maximal (max) projection of D. Next, the clitic obligatorily undergoes movement, landing in a position adjoined to some functional projection, normally identified with I, as in (15c).
zzz 13 > 15

- (15) a. Gianni lo vede
Gianni him/it=sees
“Gianni sees him/it”
- b. *Step 1*
... [VP V [D_{min/max} lo]]
- c. *Step 2*
[IP lo [IP I [VP v* [VP V lo]]] cf. Kayne (1991)
↑ _____]

While Step 1 is self-explanatory, in Step 2 it is not immediately evident why movement takes place. Uriagereka (1995) suggests that the anti-focused properties of the clitic are involved. Cardinaletti & Starke (1999) argue that the clitic needs to move because it lacks functional structure, and specifically needs to target a Case assigning Agr head. What is more directly relevant is why movement takes place to I. Inroads on this issue are made by Roberts (2010) who suggests the generalization that clitics target

phase heads. In fact, Roberts (2010) argues that the clitic initially moves to the edge of the immediately superordinate phase edge, i.e. to the edge of v^* in the case of an accusative clitic – from where the clitic must further move to its final landing site in the I-field.¹²

The main alternative to movement is to assume that clitics undergo EM as functional heads or adjuncts to some head. This ‘base generation’ hypothesis goes back to a number of works closely following Kayne’s (1975) original proposal (Rivas 1977, Jaeggli 1981, Borer 1984). Sportiche (1996) argues that clitics undergo EM in the v^*P phase as Voice heads (AccVoice etc.). Though clitics eventually move to a target position in the I-field, there is no movement from argument position. In Sportiche’s account, instead, θ -positions are filled by *pro*’s – so that cliticization effectively becomes a branch of the theory of pro-drop. We may construe the relation between the clitic and *pro* simply as Agree, as in (16). Note the convergence with Roberts (2010), quoted above, in individuating the v -phase as the domain of object clitics.

- (16)
$$\begin{array}{c} [\text{AccVoice } lo \quad [_{vP} \ v^* \ [_{VP} \ vede \ pro]] \\ \hline \end{array} \quad \text{Syntax: Agree}$$

Next, we show that the choice between one or the other analysis is irrelevant for present purposes. This is because, under widely accepted assumptions about the nature of movement and *pro* licensing, the two analyses in (15) and (16) yield equivalent representations at Transfer. As for movement, under the Copy theory of Chomsky (1995), cliticization creates two copies of the clitic, and the lower copy is deleted as part of the Externalization (EXT) procedure, deletion being an externalization (‘phonological’) operation, as already shown in (15c). Under the base generation hypothesis, assuming that cliticization is a form of pro-drop, we need to briefly review how the latter is construed. Holmberg (2005) points out that (subject) *pro* can be construed as a pronominal deletion site, licensed by Agree with rich I – or, we assume, by Agree with subject clitics. This deletion approach to *pro* is further developed by Saab (2008). He assumes Late Insertion of lexical items, proposing that ellipsis, here of *pro*, is No Transfer, i.e. lack of lexical insertion under a pronominal abstract terminal, under usual licensing conditions (Agree with rich I or a subject clitic).¹³

We may schematically represent the process of subject pro-drop as in (17). The subject pronoun is merged in θ -position, and provides a goal for the I probe, as in (17b). As part of EXT, it undergoes deletion under Agree with rich I, as in (17c) – or alternatively the abstract terminal does not undergo Lexical Insertion (Saab 2008). We keep to the deletion alternative for ease of exposition.

- (17) a. (Loro) parlano
 they speak-3pl

¹² For Roberts, the initial movement to v^* is an incorporation and the subsequent movement to I is movement of the whole verbal complex. However, many Romance languages allow so-called interpolation, i.e. adverb placement between (pro)clitics and the verb (Pescarini 2021 for review), providing an empirical argument against incorporation.

¹³ Late Insertion of Vocabulary Items has originally been proposed as part of the Distributed Morphology (DM) framework. However, Late Insertion does not have to be tied to other assumptions of DM, and specifically to the morphological operations of Halle & Marantz (1993).

In languages like Italian (or Spanish), the alternation between enclisis and proclisis is governed by whether the verb (inflection) is finite or non-finite. In (19a), the clitic precedes the finite verb (proclisis), while in (19b) it follows the infinitival (enclisis).

- (19) a. Gianni lo vede
 Gianni him=sees
 “Gianni sees him”
 b. E’ facile vederlo
 is easy see=him
 “It is easy to see him”

Recall from (15) above that according to Kayne (1991) the landing site of clitic movement is IP, when proclisis to the finite verb is concerned. His proposal concerning enclisis is that no matter the surrounding context, clitics target I. In enclisis, it is the verb that moves around the clitic, targeting C. This yields (20) as the structure of enclisis.

- (20) [CP veder [IP lo [IP I

Roberts (2010: 84) notes that a different construal of enclisis is possible. Recall that for Roberts (2010), clitics target the edge of the immediately superordinate phase head, hence v^* . As Roberts points out, enclisis can be derived by leaving the clitic in the edge of the v^* position it targets by default. It is then immaterial whether infinitives move to I or to C, see the structure in (21).

- (21) veder [vP lo [vP ...

Adverb positions are standardly used as a test of the verb positioning in Romance languages. Already Belletti (1990: 70ff) observes that infinitives in Italian raise as high as finite verbs. Cinque (1999) reports her examples in (22), where it can be seen that a low temporal adverb like *spesso* ‘often’ cannot precede an infinitive (22a), while higher epistemic adverbs can precede it (22b). Since the same distribution of adverbs is observed with finite verbs, these examples suggest that the infinitive has the same position as the finite verb, namely I. As Cinque (1999: 145), puts it “the head to which the infinitive raises ... has thus to be in the complement of C^0 .”

- (22) a. *?Ho trovato qualcuno a cui spesso affidare questo tipo di incarico
 I have found someone to whom often to assign this kind of task
 b. Cerco un uomo al quale forse presentare Maria.
 I seek a man to whom perhaps to introduce Maria

Let us then conclude that the Italian verb has a fixed position in I, whether finite or non-finite. If so, the position of enclitics can simply be identified with the edge of vP, as shown in (22) or more explicitly in (23). As discussed in the previous section, in (23) the lower deleted pronoun could be the trace of movement of *lo* (movement analysis) – or equivalently, the clitic and the deleted pronoun could be both Externally Merged, and connected by Agree (licensing deletion).

(23) [_{IP} veder [_{VP} lo [_{VP} v* [_{VP} V ~~to~~]]]]

The important point in (23) is that the enclitic is at the edge of the v* phase. Under either possible derivation (IM or Agree), locality conditions must be respected, including the Phase Impenetrability Condition (PIC), under which merger of a phase head X_i makes structure embedded under the immediately lower phase head X_{i-1} inaccessible to the derivation. Movement out of the object position must then target no higher a position than the edge of vP, prior to Merge of the C-I phase head. Agree is similarly constrained to take place phase-internally. In other words, the PIC provides a principled reason why the edge of vP position is targeted by cliticization (*qua* IM or *qua* Agree). If so, however, proclisis appears to be problematic, since proclitics appear to be positioned outside the vP-phase, at the edge of IP. We turn to them next.

4.3. Phase extension/sliding: proclisis

Since the finite verb is generally assumed to be in I in Romance languages like Italian, French, Spanish (Pollock 1989 for French, Belletti 1990 for Italian, see also the previous section), proclitics must be adjoined to IP, as in Kayne's (1991) proposal in (15).¹⁵ But this is unexpected under the assumption that whatever syntactic operation is involved in cliticization (i.e. IM or licensing of an object *pro* under Agree), it is subject to the PIC. Under the PIC we expect cliticization to take place internally to the v* phase, as discussed above.

Various solutions to this problem are logically possible. The first one is movement of the clitic roughly from a position at the edge of the v* phase to the edge of IP. In particular, Roberts (2010) proposes movement of the whole v* complex (into which the clitic is incorporated) to I. In order to derive enclisis in infinitives, Roberts (2010: 84) then assumes that non-finite verbs do not incorporate into v*, but rather move directly to I. He suggests that this may be due to the fact that infinitives "represent a neutralized category, not true verbs". But without entering into the merit of the proposal itself, note that it does not seem to be extendable even to enclisis in imperatives.¹⁶ One may also consider the possibility of a relatively rich functional structure of the type entertained by Angelopoulos & Sportiche (2021) where the clitic moves from dedicated position to dedicated position. This kind of dedicated functional structures (broadly speaking 'cartographic' ones) are avoided here.¹⁷

The solution to proclisis in I, adopted here, dispenses with movement, in favour of some mechanism of phase extension (den Dikken 2007) or phase sliding (Gallego 2010). In other words, the positioning of clitics at the edge of IP points to an extension of the v* phase boundaries from the periphery of vP to the periphery of IP. Gallego's discussion specifically targets Romance phenomena (including clitics), connecting

¹⁵ Ledgeway & Lombardi (2005) argue that in some Italo-Romance languages the finite verb remains lower than I so that the interpolation of adverbs between the clitic and the verb is predicted on the assumption that clitics are in I (see Pescarini 2021 for review).

¹⁶ An incorporation approach is also difficult to extend to interpolation languages, cf. Roberts (2010: 87), and notes 12, 15 above.

¹⁷ This is suggested both by general theoretical considerations (see the mention of 'acquirability and evolvability' in Chomsky *et al.* 2019: 250) – and by the fact that as far as we can tell, proponents of rich functional structures are never quite explicit as to their relation to phases.

- b. Prendetelo
take-2pl=it
“Take it!”

Crucially, our account of enclisis/proclisis alternations does not refer to a notion of finiteness connected to a particular type of verb morphology, but rather to the formal notion of presence/absence of an Agree probe on I. Now, in imperatives it has been independently argued that inflectional properties do not pick up the subject of the sentence, but rather the addressee (Zanuttini *et al.* 2012). If so, it is natural to construe the Agree probe reflected in the verb morphology as being associated with C. Therefore, the finiteness divide puts imperatives in the same class as infinitives or gerunds, though for different reasons.

So far, we have based the discussion on standard Italian examples, for ease of reference. The implicit assumption is that Italo-Romance varieties reflect the conditions of Italian. One major difference concerns the position of clitics in infinitival sentences. Many South Italian varieties have proclisis, not enclisis in the infinitive. This is illustrated in (27) with different types of embedded infinitives (complement, adjunct, wh-).

(27) Pozzuoli, Campania (M&S III: 368)

- a. tə rikə r u cam'ma
you=tell-1sg to him=call
“I am telling you to call him”
b. addʒə vənutə p u vərə
have-1sg come for him=see
“I have come to see him”

Senise, Lucania (M&S III: 369)

- a'. tʃerkə r u fə
try-1sg to it=do
“I try to do it”
b'. æddʒə vənutə pə ttə vərə
have-1sg come for you=see
“I have come to see you”
c. nən tsattʃə kə tt addʒ a ritʃə
not know-1sg what you=have-1sg to say
“I am not sure what to tell you”

Continuing the line of analysis pursued here, we can describe languages like those in (27) as extending the edge of v* to IP, provided the most basic of conditions is met, namely probing of I for the verbal amalgam V-v, along the lines of (28). Note that Romance infinitives are overtly inflected by a -r(e) suffix or in any event morphologically marked (by stress on the thematic vowel) providing an obvious independent reason for an Agree link of the type in (28).

(28) ... [IP u [IP vərə [vP v [vP V ʌ]]]]
|—————| I probing for v-V

In short, what varies between Italian and the languages in (27) are the conditions for phase extension. We assume that the probing in (28) is absent in imperatives due to their lack of T properties. They are (uncontroversially) pure modal forms.¹⁹

4.4. Summary

This section was to show that both the analysis based on movement and the one based on pro-drop converge on the same syntactic interface structures, containing the clitic adjoined to a phase head (projection), and a copy of it in argument position (whether the copy is derived by movement or it is a pronoun whose deletion is licenced by the base generated clitic under Agree). More importantly for present purposes, locality considerations favour the edge of v*P as the default position of clitics. Object proclitics, including 3ACC, sit at the edge of IP because of phase extension, while object enclitics, including 3ACC, occur lower in the tree, in the default position at the edge of vP.

5. Clitics at the syntax/phonology interface

5.1 The model

We are now in a position to connect the phonological analysis of clitic alternations with the syntactic analysis of enclisis and proclisis structures. These have been conducted in strict compliance with modularity, that is without any interloping of principles or primitives belonging to one component into the other. If the respective phonological and syntactic analyses are correct, in the optimal case we expect them to be a good match. This is indeed the case, as we will show below.

Starting with Uriagereka (1999) and Chomsky (2000, 2001), the Transfer procedure from syntax to the interfaces, namely phonology (PHON) and semantics (SEM), does not happen wholesale at the end of the derivation, but rather piecemeal. This mechanism responds to functional optimization since it "guarantees that mappings to the two interfaces can forget about what they have already done, a substantial saving in memory" (Chomsky 2005: 16). Therefore, once a chunk is transferred it becomes impenetrable to syntactic operations. This is expressed by the PIC: the domain defined by the PIC as inaccessible to computation is the domain undergoing Transfer. Under the classical definition of the PIC provided by Chomsky (2001), what gets transferred/externalized at phase head X_i is the complement of phase head X_{i-1} .

¹⁹ The same varieties that present generalized proclisis in the infinitive present the phenomenon of so-called interposition, both in finite and infinitival sentences – i.e. the positioning of adverbs between the clitic and the verb. A couple of examples are given below.

- (i) u sembi viyu (Camerota, Campania M&S III: 539)
him=always see-1sg
- (ii) u sembə βiyə (Senise, Lucania M&S III: 539)
him=always see-1sg
"I always see him"

Based on the interpolation pattern, Ledgeway & Lombardi (2005) (cf. also Pescarini 2021) conclude that the position of the verb in South Italian varieties is lower than I. One may therefore legitimately enquire whether the position of the clitic may itself be lower (vP-internal). In the latter case however we would equally expect patterns Adv-Cl-V (of the type found in French infinitives e.g. ... *de souvent le voir* 'to often see him') which are not generally found in these varieties.

However here we adopt the revision in (29), suggested by Chomsky (2021: 36), namely that "v need no longer be at the edge of the v*P phase, but can be within the domains of PIC and Transfer" (once syntactic verb movement is eliminated in favour of a Spell-Out operation).

(29) *PIC (Revised, Chomsky 2021)*

The head X of a phase XP and its domain are not accessible to operations at ZP (where Z is the next phase head up); only the edge of X is accessible to such operations.

This formulation brings the technical definition of the PIC close to the intuitive notion of phase (the PH and its complement, excluding only the edges, i.e. the ‘escape hatches’), as Chomsky himself points out. The present account of alternations involving proclitic /V/ vs. enclitic LV/ relies on the syntactic framework defined by the PIC in (29) and can be seen as an argument in favour of it. According to the discussion in section 4, the syntactic analysis can be summarized as in (30), where both (30a) and (30b) follow from general principles of grammar or an independently needed parameter (e.g. the nature of I). In particular, 3ACC enclitics are adjoined to the v*P phasal chunk subject to Transfer according to (29) – while 3ACC proclitics are adjoined to IP and hence internal to the CP phasal chunk.

(30) *Syntactic analysis*

- a. 3ACC proclitics (at the edge of IP) are internal to the CP phasal chunk
- b. 3ACC enclitics are at the edge of the v*P phasal chunk

For ease of reference, we summarize the results of the other mainstay of the explanation, namely the phonological analysis, in (31).

(31) *Phonological analysis*

- a. on the surface, 3ACC proclitics /LV/ lack the L but realize the V because the L is unable to geminate and therefore not pronounced.
 - b. 3ACC enclitics /LV/ phonetically realize both L and V because the initial L can geminate on an extra CV unit.
- *Hypothesis*: the extra CV unit in (b) is Phase Space.

We now ask the crucial question as to which predictions are made when we combine the phonological and the syntactic analysis. Let us begin with enclitics adjoined to v*P, as illustrated in the abstract structure in (32). We tentatively assume that they are transferred as part of the v*P phasal chunk, for the simple reason that they essentially outsource a piece of v* morphology, namely the ϕ -feature probe (cf. Roberts 2010 in a different framework).

(32) *Predictions of syntactic analysis at Transfer: enclisis*

- a. enclitics are at the boundary of the transferred v*P phasal chunk

- b. C [IP I

[_{VP} Cl [_{VP} v* [_{VP} V pro]]]
--

Spell-Out domain

By contrast, proclitics are transferred as part of the CP phasal chunk. Crucially, they are internal to the domain being transferred under any possible construal of it, and not at its boundary, as illustrated by the abstract structure in (33).

(33) *Predictions of syntactic analysis at Transfer: proclisis*

a. proclitics are internal to the transferred CP phasal chunk



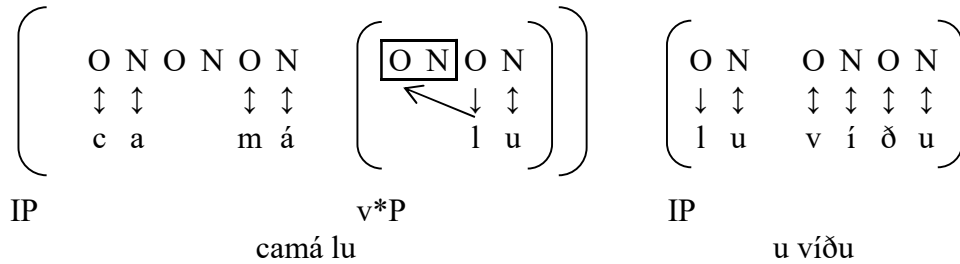
Spell-Out domain

Therefore, the conditions predicted by the syntactic analysis at Transfer prove to match remarkably well the conditions required by the phonological analysis. As discussed in section 3, we follow Phase Space, i.e. the idea that the Externalization (EXT) procedure executes the Spell-Out of (left) boundaries in terms of extra syllabic space (an empty CV unit). In the ideal case, we expect to find that there is a coincidence between the syntactic boundaries and the boundaries phonology executes via Phase Space. We argue that the evidence from enclisis/proclisis alternations in syntax and in phonology provides such an ideal case study (but as was mentioned in section 3.7, this may not always be the case, see D'Alessandro and Scheer 2015).

The crucial difference for the phonological realization of clitics is the fact that items which after linearization appear as enclitics are vP-initial, hence phase-initial as in (32), while those which emerge as proclitics are IP-initial, hence phase internal, as in (33). Therefore, extra Phase Space (boxed under (34a)) is inserted to the left of enclitics at the edge of vP, while this is not the case for proclitics in (34b) (examples are from Conflenti, Calabria (1)c). As a consequence, in the former case, the L of enclitic LV items can spread on the extra syllabic space and is realized as a singleton [l] (see section 2.3.3). By contrast, the L of proclitic LV items has nowhere to expand and therefore remains unpronounced (also see section 2.3.3).

(34) a. enclisis: clitic is phase-initial (v^*P)

b. proclisis: clitic is phase-internal



5.2 Absence of Phase Space in proclisis

Since the (34) is based on abstract syntactic structures (32) and (33), let us see whether it also holds when we turn to actual phonological implementations of those structures.

Consider in particular proclitic structures. The structure in (34b) refers to a main clause example. We have assumed that C is a phase head and that the CP it projects is sent to the interfaces as a phasal chunk. Two distinct problems arise at this point. First, phasal chunks are sent to the interfaces upon merge of a higher phase head – but none is merged if CP is a main sentence. This is what Grohmann, 2017 (2017) call the Apex problem. Second, and more important, note that in the actual examples that we quoted there is in fact no phonological material to the left of the proclitic. Therefore a phasal CV unit inserted at the left edge of the CP boundary would be phonologically adjacent to the proclitic. What then prevents /l/ from spreading on this extra Phase Space, just as in enclisis under (34a), and thus be pronounced?²⁰

The two problems should in fact be taken together. As for the Apex problem, we take the only solution that seems to us to be logically available – namely that a root node is shipped to the interfaces by default. Note that this does not necessarily involve look ahead. Quite simply, if (what is at that stage) a root node is sent to Transfer then the derivation cannot proceed any further, effectively defining that node as a root node (and only if it has certain properties will the derivation converge).

Two syntactic and phonological configurations may be created by root Transfer. Some root sentences are clearly CP phases, for instance all those CPs that are filled by material moved to the edge of CP (wh-phrases, foci, topics). In that case it is evident on the one hand that C is a phase head (supporting edge features obligatorily checked by movement) – and on the other hand that there is actually phonological material (in boldface under (35)) intervening between the CP boundary and the proclitic. Assuming that the extra CV unit is inserted at left edge of the CP phase, it is not adjacent to the clitic (either syntactically or phonologically). Therefore after spell-out, the L of the LV item cannot spread on the phase-initial CV and will thus remain unpronounced.

(35) $\begin{array}{c} \uparrow \\ \text{CV} \end{array}$ [CP **XP** [C' C [IP Cl....

There is of course a second possibility – which is the one actually seen in our examples, namely that neither C nor the periphery of C are phonologically instantiated. We may want to say that C is syntactically present, for instance because Formal Features (FFs) such as phi-features must be associated with the C phase head. Even so, phi-features are ‘inherited’ by I (Chomsky 2008) for the purposes of satisfying the EPP and other syntactic requirements. Therefore either such root sentences are IPs – or they are CPs but, being in essence devoid of any syntactic role, they are not phases – or weak phases. In either case, it is reasonable to assume that the signature of phasal chunks, namely the extra CV unit, is not inserted, as shown under (36). On the phonological side, the L of the LV item therefore cannot spread and as before will remain unpronounced.

(36) ~~$\begin{array}{c} \uparrow \\ \text{CV} \end{array}$~~ [CP (C_{weak}) [IP Cl....

Pretty much the same can be said for embedded sentences. A strong C has features to be checked either by first merge of a complementizer or by left peripheral

²⁰ This problem is explicitly raised by a reviewer.

give=me=it
 “Give it to me!”

Recall that in order to derive the phonological alternations at hand, we assume that 3ACC enclitics are at the edge of the phase chunk undergoing Spell-Out: Phase Space inserted in this situation is responsible for the L to appear on the surface. In other words, the phase domain undergoing Spell-Out includes 3ACC *lə* but not 1DAT *mə*, as in (39).

- (39) [I I [vP mə [vP lə [vP v* [VP V lə]]]]]]
 Spell-Out domain

Given our analysis, then, 3ACC must occur in a separate phase. As far as syntax is concerned, the splitting of clitic groups is hardly ever observed, though. Therefore one may reasonably predict that at Transfer the clitic group would also be treated as a unit.²² Thus one may expect that the Spell-Out domain is just the *v** head and its complement – excluding all clitics, as in (40a). Or alternatively, one may expect the entire clitic sequence to be included in the Spell-Out domain, as in (40b). Given our analysis, the correct option must be (39).

- (40) a. [I I [vP mə [vP lə [vP v* [VP V ...]]]]]]
 Spell-Out domain → *
- b. [I I [vP mə [vP lə [vP v* [VP V ...]]]]]]
 Spell-Out domain → *

We therefore need some principled reason why (39) is allowed and (40a,b) are excluded (in the languages under discussion). We believe that Roberts (2010) is on the right tack when he suggests that the accusative is not so much adjoined to *v** as it is an integral part of *v** itself. To be more precise, it can be viewed as an instantiation of the ϕ -feature probe of *v**. Rephrasing his insight, the PIC boundary passes between the ACC clitic and the rest of the clitic cluster, because the ACC clitic is non-distinct from *v**.²³ On this view, the logically possible structures in (40a,b) are excluded.²⁴

²² A possible exception is mesoclis, whose syntactic nature is however debated, see Halle & Marantz (1994), Harris & Halle (2005) for a morphophonological treatment vs. Kayne (2010), Manzini & Savoia (2011) for syntactic analyses. Interestingly, in Italo-Romance mesoclis the accusative clitic is split from the rest of the clitic group, consistently with the present analysis. We return to mesoclis in section 4.2 of the Appendix.

²³ Roberts does not discuss morphophonological alternations. He introduces the concepts mentioned in the text in order to justify cliticization as a head-movement operation.

²⁴ A separate question, raised by a reviewer is what accounts for the internal order of the clitic string – so that the 3ACC clitic is cluster final. In footnote 14, we refer to Manzini and Pescarini (2022), who discuss at length why clitic order does not either reproduce or mirror phrasal order. Under movement theories, this fact can be accounted for by post-syntactic reordering. Under base-generation theories, the relevant order may equally be generated at first Merge. In any event, it is fair to say that current theories have means to encode the order of the clitic string, not to predict it. The reviewer is perhaps wondering whether either type of encoding is available to us. The ordering of clitic categories in the syntax

5.4 Summary

The potential significance of this result for the syntax/phonology interface is worth stressing. In the first part of the article, we have discussed a model of phonological alternations in 3rd person accusative clitics (and determiners) making no reference to phonology-external components of the grammar. In section 4 we have worked our way through the two main existing syntactic accounts of clitics, concluding that under either of them syntax-internal evidence favours a certain model of enclisis/proclisis alternations. We have then let the two analyses interact at Spell-Out on the assumption that: (i) syntax packs off material phase-by-phase, the notion of phase being defined internally to the syntax; and (ii) at Spell-Out extra phonological material may be inserted at the left edge of the transferred chunk, namely an initial empty CV unit. From this restrictive model, we are able to obtain the right result that enclitics are characterized by richer syllabic structure than proclitics, hence in particular the enclitic/proclitic alternations in (32) and (33). In a nutshell, if our discussion is on the right track, we provide an explanation for a generalization on Romance that has so far just been described, or encoded via contextually determined allomorphy – which appears under (41), repeated from (2).

(41) *Generalization*

If a clitic has two alternants of varying phonological complexity, then the poorer alternant may appear in proclisis and the richer alternant in enclisis, but not the reverse.

6. Conclusion

To conclude, we believe that three points are worth mentioning: i. phonology referees syntactic analyses, ii. no intermediate buffers are needed, iii. pro- / enclitic alternations are not allomorphic.

While it is standard and empirically inevitable for phonological analyses to take syntactic information into account, arguments from phonological analysis usually play no role in work that is concerned with syntactic patterns.²⁵ This asymmetry is

(Sportiche's 1996 'Voices') is clearly available. Reordering as part of a Linearization operation is also compatible with our treatment, as long as Linearization takes place immediately upon transfer to EXT (on linear order as a property of the phonological branch of grammar see Chomsky 2013:36).

In the interest of completeness, we may want to mention that L-alternations also characterize some Corsican dialects (Manzini and Savoia 2016) where proclitic 3ACC is string-initial (as in French). In Corsican, however, enclitic 3ACC is again string final, because Corsican is one of those languages (e.g. Greek) where the enclitic order is different from the proclitic one (see Manzini and Savoia 2016 for discussion).

²⁵ Syntactic patterns such as second position clitics (Wackernagel position) are on some analyses influenced by phonology: Bošković (2001: 7ff) reviews purely syntactic, purely phonological and mixed syntactic-phonological analyses for Slavic. In case phonology is supposed to be involved, some "movement" is done in the phonology: syntax does clitic placement, which may be modified in case it sits uneasy with phonological requirements. Note that these and similar cases are quite different from the one discussed in the present article: phonological *evidence* is used to fine-tune the output of syntax (also

understandable given the fact that syntactic bearing on phonology is overtly observable while the reverse is not the case. But we believe that the minimalist interface based on piecemeal shipping of chunks of the syntactic tree opens the possibility for phonological traces of shipping to referee competing syntactic analyses. This is a potential of Phase Theory that is largely left fallow for the time being: based on a specific pattern, we hope to have shown that it is indeed operational and has an interesting prospect. In our case, we have shown how phonological and syntactic evidence for phase structure, gained on entirely separate grounds, may converge and thus strengthen the argument for the structure at hand. The same phonological evidence speaks to the syntactic debate whether enclisis / proclisis alternations involve two different positions of the clitic or two different positions of the verb (Kayne 1991): it sides with the former analysis.

In order to take advantage of the refereeing potential of phonology regarding syntactic analyses, not just any view of the interface will do, though. We argue that specific assumptions need to be made, including i) a ban on diacritics (#, ω and the like, which do not produce any predictable phonological effect), ii) the privativity of carriers of morpho-syntactic information (they are only inserted when they produce an effect) and iii) their location at the left edge of spell-out domains. This is what Phase Space is about.

Another debated aspect of the interface are intermediate buffers which recur to computation solely to translate syntactic into phonological structure (DM fission, fusion and impoverishment are cases in point). In our analyses, this kind of mechanism is not needed: spell-out reads directly the boundaries of the syntactic object shipped at Transfer and may mark its left edge with a phonological footprint, i.e. extra syllabic space.

Finally, our analysis shows that what looks like a clear case of allomorphy (how could the syntactic contrast between pro- and enclisis mandate a phonological operation deriving [LV] and [V] from a common underlier?) is a mirage if specific assumptions are made on how syntax, phonology and their interface work. The alternation then falls out as a perfectly regular case of purely phonological computation based on a single lexical item.

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for the decision which copy of a clitic will be pronounced, Franks & Bošković 2001). We are unaware of cases where a phonological *analysis* would referee competing syntactic accounts, or interferes with the purely syntactic definition of phase structure.

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