Allomorphy of Italian determiners at the morphology-phonology interface*

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Αd Andrea. καί σε τοσοῦτον ἔθηκα θεοῖς ἐπιείκελ' ἀχιλλεῦ, ἐκ θυμοῦ φιλέων, ἐπεὶ οὐκ ἐθέλεσκες ἄμ' ἄλλφ οὕτ' ἐς δαῖτ' ἰέναι οὕτ' ἐν μεγάροισι πάσασθαι, πρίν γ' ὅτε δή ς' ἐπ' ἐμοῖσιν ἐγὼ γουνέσσι καθίσσας ὄψου τ' ἄσαιμι προταμὼν καὶ οῖνον επισχών. πολλάκι μοι κατέδευσας ἐπὶ στήθεσσι χιτῶνα οἴνου ἀποβλύζων ἐν νηπιέη ἀλεγειῆ. Π. ΙΧ, 485ff.

1 Introduction

There is no consensus on how to properly treat morpho-phonologically conditioned alternations, namely alternations that are sensitive to both the morpho-syntactic and the phonological information. In *morpho-phonological accounts*, they are accounted for via application of morphologically-conditioned phonological OPERATIONS (e.g., *readjustment rules*: Embick & Halle 2005). In *listing accounts*, they are LISTED as lexical independent entries (among others, Haugen & Siddiqi 2013).

This paper deals with the allomorphic distributions of the Standard Italian (henceforth, SI, to distinguish it from the other Italo-Romance varieties) determiners, which constitute a relevant case to such a hotly debated issue. Contra previous accounts, and in line with Calabrese's recent work (a.o., Calabrese 2016, forthcoming), this paper argues for a model that makes use

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of language-wide morpho-phonological operations to account for such alternations. I show that such an account is able to explain the allomorphic micro-variation of determiners detectable in the entire Italo-Romance area.

The discussion unfolds as follows. In section 2, I present the data from the Italian definite determiner and in section 3, I propose a morpho-phonological account for it. The discussion then turns to other SI determiners and prenominal adjectives in section 4. In section 5, I review a recent listing account for the definite determiner (Artés 2013); in taking stock of both accounts, I ultimately argue that the morpho-phonological account proposed is to be preferred as being effortlessly able to account for the inter- and intra-dialectal variation of determiners in Italo-Romance. Section 6 concludes the paper.

2 The SI definite determiner

The SI definite determiner presents alternations that are dependent on both morpho-syntactic (i.e., ϕ -features) and phonological (i.e., the syllabic structure) properties of the following unit.¹

First, the singular form of the determiner is realized as l before a vowel, regardless of gender.

The plural forms are instead le for the feminine, and Λi for the masculine.²

However, words like whiskey [wiski] or web [web] select the pair $il\sim i$, instead of the expected pair $l\sim i$. This is arguably due to the fact that the back glide [w] is considered a consonant.

A similar phenomenon happens with hosts that begins with a front glide [j] (b.). In such cases, vowel deletion does not apply, and the form of the determiner is the same as that found before extended-syllable-initial hosts. Due to page restrictions I will not deal with these cases, as they are not relevant to the purposes of the paper.

¹In all the examples below, the alternants are followed by nouns for illustration purposes only. The alternations are exclusively dependent on morpho-phonological properties; the same forms are found when the clitic host is not a noun.

²An interesting asymmetry concerns diphthong-initial hosts. Typically, the vowel of the definite determiner is deleted in the singular, and preserved in the plural, rather like what happens before vowel-initial hosts (a.):

a. $l \text{ [aw]mento} \sim \text{$\tilde{\Lambda}$i [aw]menti}$ 'the increase(s)' $l \text{ [aw]la} \sim le \text{ [aw]le}$ 'the room(s)' $la \text{ [jo]lla} \sim le \text{ [jo]lle}$ 'the boat(s)'

- (3) le [i]dee
 D.FPL idea.FPL
 'the ideas'
- (4) Λ i [i]ndici D.MPL index.MPL 'the indices'

Second, before consonants, the feminine forms of the determiner are $la \sim le$, for singular and plural respectively.

- (5) a. la [k]asa
 D.FSG home.FSG
 'the home'
 - b. le [k]ase
 D.FPL home.FPL
 'the homes'
- a. la [st]anza
 D.FSG room.FSG
 'the room'
 - b. le [st]anze
 D.FPL room.FPL
 'the rooms'

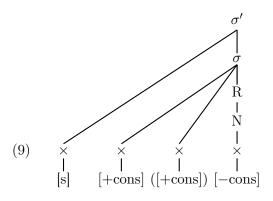
Unlike the feminine forms, the masculine forms alternate. They surface as $il \sim i$ before hosts as in (7), and as $lo \sim \Lambda i$ before hosts as in (8).

- (7) a. il [k]orso
 D.MSG course.MSG
 'the course'
- b. i [k]orsi
 D.MPL course.MPL
 'the courses'

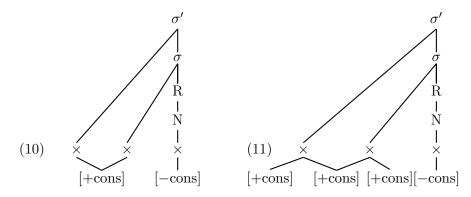
(8) a. lo [∭emo D.MSG fool.MSG 'the fool' b. Λi [∭emi D.MPL fool.MPL 'the fools'

Formally speaking, the pair $lo \sim \mathcal{K}i$ shows up before an extended syllabic structure consisting of an extra σ -tier (see Vaux & Wolfe 2009, and references therein) and occupied by one of the following phonological segments:

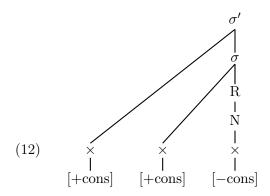
1. [+anterior] fricative /s/ (traditionally called 'spurious s'):



2. [+anterior, +distributed] fricatives (i.e., $[\int, \eta]$; (10)) and affricates (i.e, [ts, dz]; (11)), which are always geminated in Italian:



3. Greek-derived consonantal clusters (such as [pn-], [ps-], [ks-]):



The table below summarizes all of the forms of the determiner. Some other relevant examples follow.

	[-F	EM]	[+FEM]		
	[-PL]	[+PL]	[-PL]	[+PL]	
_ [σ	il	i	la		
_ [\sigma'	lo	Лi	1a	le	
_ [V	1	ΛΙ	1		

Table 1: Forms of the SI definite determiner

C-initial feminine hosts					
la [p]orta \sim le [p]orte	la [p]orta \sim le [p]orte 'D door(s)' la [dz]anzara \sim le [dz]anzare 'D mosquito(es)'				
la [s]alsa \sim le [s]alse	'D sauce(s)'	la [st]azione \sim le [st]azioni	'D station(s)'		

C-initial masculine hosts					
core-syllable-init	tial hosts	extended-syllable-in	itial hosts		
il [k]ane \sim i [k]ani	'D $dog(s)$ '	lo [st]ruzzo \sim κ i [st]ruzzi	'D ostrich(es)'		
il [tr]eno \sim i [tr]eni	'D train(s)'	lo [ps]icologo ~ λi [ps]icologi	'D psychologist(s)'		

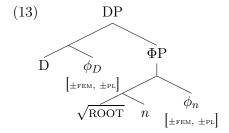
V-initial hosts				
masculine		feminine		
l [o]rko $\sim \text{\'a} [\text{o}]\text{rki}$ 'D ogre(s)	' $l[s]ka \sim le[s]ke$	'D goose/geese'		

Table 2: Some examples of the forms of the SI definite determiner

3 Morpho-phonological analysis

The analysis I propose assumes the main tenets of Distributed Morphology (henceforth, DM; Halle & Marantz 1993, 1994). In this framework, syntactic properties are realized with phonological segments (called *exponents*) at Spell-Out through the process of Vocabulary Insertion (henceforth, VI). In the wake of the long-standing debate on the appropriate treatment of morphophonological alternations (see sec. 1), I argue that the allomorphic distribution just seen may be accounted for by a series of language-specific, but language-wide morpho-phonological operations.

The derivation goes through as follows. At Spell-Out, the structure (13) has a complex internal structure consisting at least of the root, the categorydefining head n, and a ϕ_n -head in which number and gender features are specified. Such morpho-syntactic features are assumed to percolate onto the ϕ_D head via Concord. VI cyclically applies as formalized in (14), where the exponent of the definite determiner is /l/.



- (14) Vocabulary Items:
 - $D_{[+_{\mathrm{DEF}}]} \leftrightarrow l$
 - b. $[+PL, +FEM] \leftrightarrow e / _]_{\phi_D}$ c. $[+PL, -FEM] \leftrightarrow i / _]_{\phi_D}$

 - d. $[-PL, +FEM] \leftrightarrow a / _]_{\phi_D}$ e. $[-PL, -FEM] \leftrightarrow o / _]_{\phi_D}$

Once the appropriate Vocabulary Items are inserted, post-syntactic operations may apply. After cliticizing onto its host (signaled by \oplus below), the definite determiner may undergo a series of morpho-phonological operations in the appropriate environment.

Cross-boundary hiatus is generally repaired by vowel deletion:³

(15)
$$hiatus: \begin{array}{c} N & N \\ | & | \\ \times & \rightarrow \varnothing / \underline{\quad} \oplus \quad \times \\ | & | \\ [-cons] & [-cons] \end{array}$$

The operation above applies before vowel-initial hosts carrying the unmarked value for number, but does not apply in plural forms. Sample derivations follow.

	$/ ext{l-o} \oplus ext{amore}/$	$/$ l-a \oplus $_{0}$ ka $/$	$/l-e \oplus oke/$
hiatus	l_amore	l_əka	_
SR	[la.mo.re]	[lɔ.ka]	[le.ɔ.ke]

Table 3: Sample derivations of the definite determiner before vowel-initial hosts.

When cliticizing onto a core-syllable-initial host, the masculine singular form of the definite determiner undergoes an operation of truncation (*tron-camento*):

(16) troncamento:
$$\begin{bmatrix} N \\ X \\ -\cos \end{bmatrix} \longrightarrow \varnothing / _ \oplus X \times X \\ [-\cos] \begin{bmatrix} -\cos \end{bmatrix}$$
 [-FEM, -PL]

(i) *
$$\times$$
) \oplus (\times (ii) \times $\to \varnothing$ / _)[-PL] [-cons]

³For ease of illustration, all the operations in this paper will be formalized as rules, but some should be formalized as resulting from the interplay of filters and repairs. For example the operation in (14) should be more correctly formalized as the filter in (i), in which cross-boundary vocalic segments are dispreferred in Italian. When violated, the constraint above triggers application of a vowel deletion rule (ii).

In spite of its idiosyncrasy, troncamento (16) expresses the weakness of the unmarked feature bundle [-FEM, -PL], which is widely attested in Romance.⁴

Once (16) applies, resyllabification fails, as the lateral is left unsyllabified: *[lkane]. Therefore, a post-cyclic epenthesis rule (17) applies:⁵

(17) epenthesis:
$$\varnothing \to \begin{bmatrix} -\cos s \\ + \text{high} \\ - \text{back} \end{bmatrix} / \underline{\hspace{1cm}} \times \text{where } \times \text{ is unsyllabified}$$

Relevant derivations follow.

Within Romance, two other examples are worthy of note. First, in Spanish the definite determiner displays a similar behavior if we compare the singular forms of masculine and feminine nouns:

The absence of asymmetry between simple-consonant initiality and complex-consonant initiality is neutralized due to co-occurring language-specific constraints on the syllabic structure.

Second, French α -dropping operates on the masculine singular, and interacts with liaison (Dell 1980; Tranel 1987):

⁵Akin to the hiatus resolution rule above, this operation should more correctly be formalized as the result of rule (i) repairing the violation of constraint (ii):

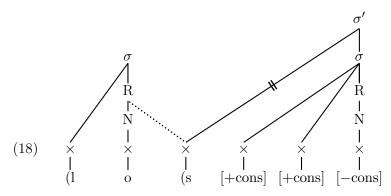
(i)
$$\varnothing \longrightarrow \left[\begin{array}{c} -\cos s \\ + high \\ -back \end{array} \right] / \underline{\hspace{1cm}} \times$$
 (ii) *× where × unsyllabified

⁴As we will see below, *troncamento* turns out to play a crucial role in the microparametric variation of Italo-Romance determiners (see section 4 and appendices).

	$/l-o \oplus kane)/$	$/l-o \oplus studente/$
troncamento	l_kane	_
epenthesis	ilkane	_
SR	[il.ka.ne]	[los.tu.den.te]

Table 4: Sample derivations of the definite determiner before masculine hosts

Note in the table above that none of the relevant operations apply before an extended syllable as in [stu]dente; here, resyllabification proceeds smoothly, as the appendix of the host-initial syllable is resyllabified as rhyme of the preceding syllabic unit, as shown below:

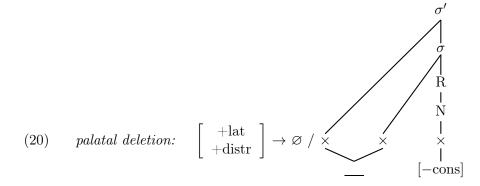


The plural masculine allomorphs of the definite determiner show a similar patterning. The determiner surfaces as i before core-syllable-initial hosts, and as Λi before extended-syllable-initial hosts. I argue that the underlying form of the masculine plural determiner — i.e., /l-i/ — undergoes the same processes as the singular form, with the addition of the following palatalization rule:

(19) l-palatalization:
$$/l/ \rightarrow \begin{bmatrix} -ant \\ +distr \end{bmatrix} / - \begin{bmatrix} -cons \\ +high \\ -back \end{bmatrix})_{D[+PL]}$$

As we will see in the next section, further evidence for this rule comes from the fact that *l*-final roots of demonstratives (e.g., *quell*- 'that') and adjectives (e.g., *bell*- 'beautiful') undergo the same process.

Before core-syllable-initial hosts, the determiner undergoes *troncamento* (16) and then epenthesis (17). At this point, geminated palatal onsets are deleted in open syllables:



Some relevant derivations follow.

	a. /l-i \oplus kani/	b. /l-i \oplus studenti/
lat. palatalization	лікапі	λistudenti
troncamento	_	_
epenthesis	_	_
palatal deletion	ikani	_
SR	[i.ka.ni]	[ʎis.stu.den.ti]

Table 5: Sample derivations for the plural forms of the SI definite determiner

3.1 Definite prepositions

Further support for the analysis above comes from the contracted forms of prepositions with the definite determiner. The relevant forms are given below. 6

 $^{^6}$ The prepositions per 'for, through' and tra/fra 'among, between' are set aside here. They do not ever fuse with the definite determiner: $per\ il$, $per\ lo$, $tra/fra\ il$, $tra/fra\ lo$ are grammatical, whereas *pel, *pello, *tral, *trallo are archaic forms. This may be due to the fact that two liquids are forbidden across morphological boundaries in Italian. The preposition con 'with' is also set aside, as contracted and non-contracted forms are equally grammatical.

		[-FEM]				[+FEM]		
		[-PL]		[+PL]		[-PL]		[+PL]
	σ	σ'	V	σ	σ', V	C	V	C, V
of + D	del	dello	dell	dei	degli	della	dell	delle
at + D	al	allo	all	ai	agli	alla	all	alle
from + D	dal	dallo	dall	dai	dagli	dalla	dall	dalle
$in^7 + D$	nel	nello	nell	nei	negli	nella	nell	nelle
on + D	sul	sullo	sull	sui	sugli	sulla	sull	sulle

Table 6: Definite prepositions in SI

The definite forms of prepositions can be easily explainable with the account given above. After the determiner cliticizes onto its host, the preposition cyclically cliticizes onto the DP, and undergoes the appropriate morphophonological adjustments. First, it undergoes vowel lowering (22), similarly to what happens in clitic clusters:⁸

(21)
$$[-\cos] \rightarrow [-high] / _ \oplus (CL_{<-\omega>} \dots)_{\omega})_{\omega}$$
 where $CL_{<-\omega>}$ is a clitic unit

Hiatus resolution (15) then applies; note that troncamento (16) does not apply, as prepositions do not carry any ϕ -specification. For example, the definite forms of the prepositions di 'of' and a 'to, for' are derived as follows:

⁸For example:

⁽i) a. Mi ha mandato una lettera. CL.1SG.DAT AUX.3SG send.MSG D.FSG letter.FSG '(S/he) sent me a letter.'

b. Me l' ha mandata. CL.1SG.DAT CL.3MSG.ACC AUX.3SG send.FSG '(S/he) sent it to me.'

		$/l-o \oplus kane/$	/l-i \oplus kani/	$/l$ -i \oplus studenti $/$
3 1	lat. pal.		лікапі	ліstudenti
cycle	troncamento	l_kane		_
C	palatal deletion	_	ikani	_
0)		$/\mathrm{di} \oplus \mathrm{lkane}/$	$/\mathrm{di} \oplus \mathrm{ikani}/$	$/\mathrm{di} \oplus \Lambda \mathrm{istudenti}/$
,	v. lowering	delkane	/deikani/	/de&istudenti/
cycle	hiatus res.		—	—
	other rules			deλλistudenti
	SR	[del.ka.ne]	[dei.ka.ni]	[deʎ.ʎis.tu.den.ti]

Table 7: Sample derivations of definite prepositions (I)

		$/l$ -o \oplus kane/	/l-i \oplus kani/
3 1	lat. pal.		лікапі
cycle	troncamento	l_kane	
C	palatal deletion	_	ikani
	-		
8)		$/a \oplus lkane/$	/a \oplus ikani/
ile 2	v. lowering	/a ⊕ lkane/ —	$/a \oplus ikani/$
cycle 2	v. lowering hiatus res.	/a ⊕ lkane/ — —	/a ⊕ ikani/ —

Table 8: Sample derivations of definite prepositions (II)

In the next section, I show that the allomorphic distribution of the other SI determiners (indefinite and demonstratives) and pre-nominal adjectives provides additional support for the morpho-phonological account proposed above.

4 Widening the allomorphic spectrum

The indefinite determiner has a two-way alternation. The allomorph un surfaces before vowels:

(22) a. un idɛa D.FSG idea 'an idea' b. un inditfe
D.MSG index
'an index'

It is always una before feminine consonant-initial hosts (23c, d). Before masculine consonant-initial hosts, it either shows up as uno (23a) or un (23b), akin to the definite determiner.

- (23) a. uno [∭]emo D.MSG foolMSG 'uno fool'
 - b. un [k]orso
 D.MSG course.MSG
 'a course'
- c. una [k]asa
 D.FSG home.FSG
 'a home'
- d. una [st]anza
 D.FSG room.FSG
 'a room'

The table below summarizes the forms.

	[-FEM]	[+FEM]	
$_{-}$ $_{N}[\sigma$	un	una	
$_{-}$ $_{N}[\sigma'$	uno	una	
$_{-}$ $_{N}[V$	un		

Table 9: Forms of the SI indefinite determiner

The SI demonstrative quello [k^w ello] 'that' (24) shows the by-now usual patterning.⁹

- (24) quello 'that/those'
 - a. quell [i]dea \sim quelle [i]dee

D.fsg idea.fsg D.fpl idea.fpl

'that (those) idea(s)'

b. quell [i]ndice \sim que $\Lambda\Lambda$ i [i]ndici

D.MSG index.MSG D.MPL index.MPL

'that (those) index/indices'

c. quello [∭emo ~ queʎʎi [∭emi

D.MSG fool.MSG D.MPL fool.MPL

'that (those) fool(s)'

d. quel [k]orso \sim quei [k]orsi

D.MSG course.MSG D.MPL course.MPPL

 $^{^9\}mathrm{I}$ will not deal with the distal demonstratives codesto [kodesto] 'that' and questo [kwesto] 'this', as they do not undergo troncamento. I argue that this is due to $phonological\ blocking$, which arises when an operation leads to a series of illicit configurations that the system is not able to repair anyhow. As extensively shown in Calabrese (2005), in such cases the system licenses the input as is, thus tolerating eventual violations of active constraints in the language.

- 'that (those) course(s)'
- e. quella [k]asa \sim quelle [k]ase D.FSG home.FSG D.FPL home.FPL 'that (those) home(s)'
- f. quella [st]anza \sim quelle [st]anze D.FSG room.FSG D.FPL room.FPL 'that (those) room(s)'

The form quell occurs before vowel-initial hosts (23a, b); the forms quel \sim quei and quello \sim quello cour before simple-consonant-initial (23c) and complex-consonant-initial (23d) masculine hosts, respectively; the feminine forms quella \sim quelle do not show any allomorphy (23e,f).

Finally, adjectives occurring in pre-nominal position show similar alternations. For example, the final vowel of the adjectives *buono* 'good' (25) and *bello* 'beautiful' (26) is only deleted before vowel-initial, and masculine singular core-syllable-initial hosts — the two morpho-phonological environments we have seen SI determiners are sensitive to:

(25) buono 'good'

- a. buon [i]dea \sim buone [i]dee good.FSG idea.FSG good.FPL idea.FPL 'good idea(s)'
- b. buon [i]ndice \sim buoni [i]ndici good.MSG index.MSG good.MPL index.MPL 'good index/indices'
- c. buono [\iiint]emo \sim buoni [\iiint]emi good.MSG fool.FSG good.MPL fool.MPL 'good fool(s)'
- d. buon [k]orso \sim buoni [k]orsi good.MSG course.FSG good.MPL course.MPL 'good course(s)'
- e. buona [k]asa \sim buone [k]ase good.FSG home.FSG good.FPL home.FPL 'good home(s)'
- f. buona [st]anza \sim buone [st]anze good.FSG room.FSG good.FPL room.FPL 'good room(s)'

(26) bello 'beautiful'

a. bell [i]dea \sim belle [i]dee beautiful.FSG idea.FSG beautiful.FPL idea.FPL

- 'beautiful idea(s)'
- b. bell [i]ndice ~ beʎʎi [i]ndici beautiful.MSG index.MSG beautiful.MPL index.MPL 'beautiful index/indices'
- c. bello [\iiint]emo \sim be Λ Ai [\iiint]emi beautiful.MSG fool.MSG beautiful.MPL fool.MPL 'beautiful fool(s)'
- d. bel [k]orso \sim bei [k]orsi beautiful.MSG course.MSG beautiful.MPL course.MPL 'beautiful course(s)'
- e. bella [k]asa \sim belle [k]ase beautiful.FSG home.FSG beautiful.FPL home.FPL 'beautiful home(s)'
- f. bella [st]anza ~ belle [st]anze beautiful.FSG room.FSG beautiful.FPL room.FPL 'beautiful room(s)'

The adjective grande 'big' may optionally show vowel-final dropping in the same morpho-phonological contexts just seen: before vowels (regardless of gender) (27a, b), and before core syllable (in the masculine singular) (27d); in the latter case, the alveolar stop [d] drops too.

(27) grande 'big'¹⁰

- a. grand(e) [i]dea \sim grandi [i]dee big.FSG idea.FSG big.FPL idea.FPL 'big idea(s)'
- b. grand(e) [i]nditfe \sim grandi [i]nditfi big.MSG index.MSG big.MPL index.MPL 'big index/indices'
- c. grande [\iint]emo \sim grandi [\iint]emi big.MSG fool.MSG big.MPL fool.MPL 'big fool(s)'
- d. gran(de) [k]orso ~ grandi [k]orsi big.MSG course.MSG big.MPL course.MPPL 'big course(s)'
- e. grande [k]asa ~ grandi [k]ase big.FSG home.FSG big.FPL home.FPL 'big home(s)'
- f. grande [st]anza \sim grandi [st]anze big.FSG room.FSG big.FPL room.FPL

'big room(s)'

Finally, "epithetic" adjectives such as *santo* 'saint' undergo similar morphophonological changes before proper nouns.¹¹ As usual, the final vowel of the adjective only drops before vowel-initial proper nouns (28ai, bi) and masculine singular core-syllable-initial proper nouns (28bii), but never elsewhere

Speakers seem to agree that the non-truncated form (ia) is preferred in contexts where the interpretation of the adjective is speaker-oriented (the speaker has a strong feeling of affection for him, because e.g. he taught the speaker many things), whereas the truncated form (ib) is used when the interpretation of the adjective is subject-oriented ("as an expert, he is great"). These two interpretive possibilities are compatible with Cinque et al. (1994)'s proposal of assuming two NP-preceding adjectival heads, one carrying the speaker-oriented interpretation and the other carrying the subject-oriented interpretation (see also Jackendoff 1972):

(ii)
$$[DPD ... [XPAP_{sp.or} [YPAP_{subj.or} [NPN ...]]]]$$
 (Cinque et al. 1994)

The association between the presence/absence of truncation and the subject/speaker-oriented interpretation would then be syntactically motivated, in line with the tenets of both cartography and DM approaches. Future research is advisable in this regard.

¹¹Besides, other epithetic adjectives — such as *frate* 'brother' and *suora* 'sister' — always surface in their truncated form, regardless of gender and of the noun-initial syllabic structure:

- (i) a. fra(*te) Antonio brother.msg Anthony 'brother Anthony'
 - b. fra(*te) Pasquale brother.msg Pasquale 'brother Timothy'
 - c. fra(*te) Stefano brother.msg Stephen 'brother Stephen'
- (ii) a. suor(*a) Ilaria sister.msg Hilary 'sister Hilary'
 - b. suor(*a) Teresa sister.msg Theresa 'sister Theresa'
 - c. suor(*a) Stefania sister.msg Stephanie 'sister Stephanie'

Unlike 'saint' alternants, these should be considered fossilized forms, which have lost any sensitivity to the current morpho-phonological environment.

 $^{^{10}}$ The optionality of such operations is possibly connected to the fact that *grande* is a class-II adjective in which gender marking is neutralized, and only number is morphologically realized via the pair -e (sg.) $\sim -i$ (pl.). Speakers also reported a slight, but clear dichotomy between truncated and non-truncated forms. For example:

(28aiii, bii-iii).

(28) santo 'saint'

- a. [-FEM]
 - (i) sant(*o) [a]ntonio saint.MSG Anthony 'Saint Anthony'
 - (ii) san(*to) [p]asquale saint.MSG Pasquale 'Saint Timothy'
 - (iii) san*(to) [st]efano saint.MSG Stephen 'Saint Stephen'

b. [+FEM]

- (i) sant(*a) [i]laria saint.FSG Hilary 'Saint Hilary'
- (ii) santa [t]eresa saint.FSG Theresa 'Saint Theresa'
- (iii) santa [st]efania saint.msg Stephanie 'Saint Stephanie'

The morpho-phonological account presented above can explain the above alternations quite effortlessly. Assume the following vocabulary items:

(29) Vocabulary Items

- a. $D_{[-DEF]} \leftrightarrow un$ b. $D_{[+DISTAL]} \leftrightarrow k^w ell$
- c. $\sqrt{\text{GOOD}} \leftrightarrow \text{bwon}$

- $d.\sqrt{\text{BEAUTIFUL}} \leftrightarrow \text{bell}$
- e. $\sqrt{\text{BIG}} \leftrightarrow \text{grand}$
- f. $\sqrt{\text{SAINT}} \leftrightarrow \text{sant}$

Once gender and number have appropriately been realized in compliance with VI (14), hiatus (15) and *troncamento* (16). Relevant derivations follow.

	$/\mathrm{un}\text{-}\mathrm{o} \oplus \mathrm{kane}/$	$/\mathrm{k}^w$ ell-o \oplus kane/	$/\mathrm{k}^w$ ell-i \oplus studenti/
lat. pal.	_	_	\mathbf{k}^w eßstudenti
troncamento	un_kane	k^w el_kane	_
SR	[un.ka.ne]	$[k^w$ el.ka.ne]	$[k^w e \hat{\Lambda}.\hat{\Lambda} is.tu.den.ti]$

Table 10: Sample derivations of indefinite and distal determiners

	/bwon-o \oplus kane/	$/ \mathrm{bell}\text{-}\mathrm{o} \oplus \mathrm{kane} /$	$/ \mathrm{bell}\text{-}\mathrm{i} \oplus \mathrm{studenti} /$
lat. pal.	_	_	beλλistudenti
troncamento	bwon_kane	bel_kane	_
epenthesis	_	_	_
\overline{SR}	[bwon.ka.ne]	[bel.ka.ne]	[beʎ.ʎis.tu.den.ti]

Table 11: Sample derivations of pre-nominal adjectives

At this point, the analysis needs just one minor refinement for the form of 'saint' before core-syllable-initial proper nouns — e.g., san(*to) Pasquale. In this form, I assume that, after the final vowel drops due to truncation, the preceding obstruent drops in compliance with a rule that deletes obstruents in triconsonantal clusters.¹²

(30) obstruent deletion:
$$\begin{bmatrix} -\sin \end{bmatrix} \rightarrow \varnothing / \begin{bmatrix} +\cos \end{bmatrix} _ \begin{bmatrix} +\cos \end{bmatrix}$$

	$/$ sant-o \oplus antonio $/$	$/ \mathrm{sant}$ -o \oplus pasquale/	$/ \mathrm{sant}$ -o \oplus stefano $/$
hiatus	sant_antonio		_
troncamento	_	sant_pasquale	
obstruent deletion	_	san_pasquale	_
SR	[san.tan.to.nio]	[san.pas.qua.le]	[san.tos.te.fa.no]

Table 12: Sample derivations of pre-nominal adjectives

In the next section, I turn to reviewing a listing account that has recently been proposed for some of the alternations of the SI definite determiner. As we will see, such an account ultimately ends up (i) assuming multiple alternations for each of the determiners and pre-nominal adjective, and therefore (ii) overlooking the consistent generalization that all determiners and pre-nominal adjectives undergo the same morpho-phonological operations.

¹²This operation should more correctly be formalized as the result of rule (i) triggered by the violation of the constraint (ii):

5 Is morpho-phonology actually indispensable?

In the previous section, I argued that the rule of troncamento (16) is the only responsible factor for the alternations in SI determiners. Such a rule, though general, idiosyncratically mashes up morphological and phonological alphabets. Is this theoretically reasonable? Listing accounts hold that it is not, and that the morphological and the phonological modules must be kept separate. By way of considering a listing account for SI determiners, this section explores the consequences of such an approach, and ultimately highlights some of its major drawbacks when dealing with the allomorphic alternations at hand.

Among several listing accounts that have previously been proposed for the allomorphy of SI definite determiner (for a review, see Garrapa 2011), Artés (2013) is a recent attempt.¹³ Under the assumption that the phonological module cannot make use of morphological information, Artés (2013) proposes that for SI definite determiner two exponents are selected in the unmarked masculine singular:

(31) Vocabulary Insertion

```
\begin{split} &a.\ D_{[+\text{def}]} \leftrightarrow l \\ &b.\ [\text{FEM}] \leftrightarrow a \\ &c.\ [ \quad \ ] \leftrightarrow \{o > \varnothing\} \end{split}
```

In (31c), both entries — o and \varnothing — are sent off to PF in the order formalized via the operator '>', which prioritizes the former exponent over the latter (Bonet et al. 2007).¹⁴ At this point, the optimal candidate is chosen by virtue of the interplay of the following constraints (Prince & Smolensky 1993):¹⁵

- (32) a. *SyllStruc: Constraint cluster governing the idiosyncratic structural requirements of Italian:
 - (i) *Complex: No complex syllable margins (Prince & Smolensky

¹³I will not discuss other possible analyses such as those involving floating features. These analyses essentially handle morpho-phonological alternations akin to other listing accounts, and therefore are here considered as such.

¹⁴The exponent /o/ is assumed to be less marked than $/\varnothing$ / in line with Cardinaletti & Repetti (2008; *morphological epenthesis*). I put aside the issue as to why this might be the case, since it is not relevant to the actual purposes of the discussion.

¹⁵It is worth pointing out that the use of OT constraints in such accounts is fairly common, although not crucial for the current argument. If anything, it is a theoretical consequence of the assumption that phonology must be morphology-free, hence "natural". I will not be able to address this issue here, but suffices it to say that there is compelling evidence that phonology cannot be just natural (see, for example, Anderson 1981).

1993).

- (ii) SonSeq: Complex onsets rise in sonority, and complex codas fall in sonority (cf. Clements 1990).
- (iii) SyllContact: If C_1 and C_2 are adjacent non-tautosyllabic consonants, C_1 must have higher or equal sonority to and C_2 .
- b. Onset: Every syllable must have an onset.
- c. O-Contiguity: The portion of S₂ standing in correspondence forms a contiguous string (McCarthy & Prince 1995).
- d. PRIORITY: Respect lexical priority (ordering) of allomorphs. Given an input containing allomorphs m_1 , m_2 , m_n , and a candidate containing m_i ' in correspondence with m_i , the constraint assigns as many violations marks as the depth of the ordering between m_n and the highest dominating morph(s) (Bonet et al. 2007).

Before vowel-initial hosts, the candidate faithful to the input is selected. 16

$/l-{o>\varnothing}$ indit $fe/$	O-Contiguity	Dep	Onset	Priority
a. lindife				*
b. <u>i</u> linditse		*	*	*
c. loinditse			*	*
d. l <u>i</u> inditse	*	*	*	*

Tableau 13: Selection of the singular masculine allomorph before V-initial hosts.

Before hosts beginning with an extended syllable, *SYLLSTRUCT is violated as many times as two phonological segments are illicitly adjacent to each other. Here, PRIORITY is crucial for the desired output [lostruttso] to win over the candidate [listruttso]:

$/l-\{o>\varnothing\}struttso/$	*SyllStruct	O-Contiguity	Dep	Onset	Priority
a. lstruttso	***				*
b. <u>i</u> lstruttso	***		*	*	*
C. lostruttso	**		*		
d. l <u>i</u> struttso	**	*	*		*

Tableau 14: Selection of the singular masculine allomorph before extended-syllable-initial hosts.

¹⁶In the tableaux below, epenthetic phonological segments are underlined.

Problems arise before core-syllable-initial hosts. In such cases, an additional constraint Respect must be assumed for [ilkane] to win over [lokane].

(32) e. Respect: Respect idiosyncratic lexical specification.

$/l-{o>\varnothing}kane/$	*SyllStruct	O-Contiguity	Dep	Respect	Onset	Priority
a. lkane	*					*
🖻 b. <u>i</u> lkane			*		*	*
c. lokane				*		
d. l <u>i</u> kane		*	*			*

Tableau 15: Selection of the singular masculine allomorph before coresyllable-initial hosts.

It is unclear what these "lexical specifications" are, and, more importantly, how they could be evaluated in an OT module that is assumed to be completely separated from the other modules of grammar.¹⁷

Another point is worth making here. Artés (2013)'s analysis, as well as any other listing account, holds that syntactic operations are not involved in the allomorph selection, which is exclusive prerogative of phonology. The assumption, however, seems to be contradicted in the example below:

(i)
$$[+PL] \leftrightarrow \{ \Lambda i > i \}$$

In the tableau below, notice that RESPECT is again the only thing that prevents the system from being in a tie that would otherwise be hard to break.

$/\{$ $\lambda i > i\}$ $\lambda i / ($	Respect	Onset	Priority
👺 a. ikani			*
b. лікапі	*	*	

Besides, the nature of such constraints as RESPECT and PRIORITY is rather opaque: on the one hand, they look like faithfulness constraints, as militating against candidates not sticking to the ordering defined in the lexicon; on the other hand, they also look like markedness constraints, since they force selection of a lexical entry over another.

 $^{^{17}\}mathrm{Due}$ to page limitations, I just point out here that a similar effect arises when looking at plurals. Recall that i and $\mathit{K}\!i$ are the plural forms corresponding to the singular forms il and lo, respectively. Therefore, is tempting to posit a PRIORITY-relationship between the two plural forms similarly to (31):

(33) a. Ieri lessi *un* paper corto... yesteday read.PFV.1SG DET.MSG paper.MSG short.MSG 'Yesteday I read a short paper...

b. ... oggi ne leggo *uno* _ lungo. today NE.CL read.PRES.1SG DET.MSG paper.MSG long.MSG Today I read a very long one.'

Above, the indefinite determiner surfaces as uno even though is linearly followed by the core-syllable-initial adjective lungo (33b). An account like Artés (2013)'s, in which the phonology and the morphology are not allowed to interact, would instead mispredict that the allomorph un be chosen, as the determiner is linearly adjacent to the core-syllable-initial adjective lungo. A viable option would be to constrain the VI procedure in the morpho-syntactic module with some ad-hoc formalism that unreasonably overloads the grammar. Such an endemic adoption of "rampant" solutions is reminiscent of what listing accounts themselves argue against. In a morpho-phonological analysis, no further adjustment is needed. Assuming that NP-ellipsis applies at Spell-Out (Saab & Lipták 2016), the determiner in (33b) latches onto an already elided element, which lacks phonological content, and therefore does not trigger troncamento.

5.1 Afterthoughts on rampant morpho-phonology

It is evident that my analysis implies a lesser degree of theory-internal complexity compared to such a listing account as Artés (2013)'s: the entire allomorphic spectrum of SI determiners and pre-nominal adjectives is effort-lessly accounted for thanks to one idiosyncratic, but language-wide morphophonological operation of *troncamento* (16).

The theoretical feasibility of such an account gains even more support when looking at the allomorphic variation of determiners in Italo-Romance (henceforth, IR). For the current purposes let us look at the definite determiner (the data for the other determiners and pre-nominal adjectives are available in the Appendices at the end of the paper).

		[-FEM]					[+FEM]			
		σ	_	$[\sigma]$		[V		[C	_	[V
	[-PL]	[+PL]	[-PL]	[+PL]	[-PL]	[+PL]	[-PL]	[+PL]	[-PL]	[+PL]
	il		il					(r)e		
Lombardia &	al		al		1		la	le		e
Triveneto	el		e(l)	(l)i	1		16	IC		
	ol		ol	(1)1				i		i
	ul/ur		u(l)		ul/ur	i	ra	е	1	e
Piemonte	al	i	(l)u						_	(l)e
Liguria	u		(1) u				(l)a			(1)6
Emilia Romagna	al		al	i				(l)e		al/li
Marche	aı		(l)o		1		la			l
Tuscany	i(l)		lo	$(\Lambda)i$		l, ʎi	ia			(l)e
Rome and central area	er		О	i		1	a	e		
Southern varieties ¹⁸	lu	li	lu	li	lu/l	li/l	la	le	la/l	le/l

Table 16: Micro-parametric variation of the definite determiner in Italo-Romance

By looking at the forms in Table 16, it is intuitively unreasonable to list all alternants of each IR variety as independent suppletive entries. It is actually even more unreasonable if we look at the diatopic variation of IR determiners, which quite consistently reveals that allomorphy of determiners shows up only in conjunction with troncamento: indeed, northern and central varieties show a proliferation of alternations for determiners and a generalized use of truncation operations, whereas southern varieties lack both. My morpho-phonological account can easily explain this correlation just by assuming that application of the troncamento rule (16) may be microparameterically deactivated. Listing accounts instead prefer assuming a proliferation of independent lexical entries (for each determiner, for each variety) than taking into account morpho-phonological operations that appear to be at play over the entire macro-linguistic area.

Suppletion (i.e., in our terms, listing) is dogmatically endorsed as the only possible source for morpho-phonological alternations in the name of the *autonomy of morphology* (Baudouin de Courtenay 1972). In this view,

 $^{^{18}}$ The Neapolitan definite determiner shows special forms (see A.3) that surface differently from the forms in the other nearby varieties. The analysis for these forms goes beyond the purposes of this paper, so it will not be dealt with here (but see Petrosino 2018).

"rampant" readjustment rules are the devil to cast out, since they dangerously mash morphology and phonology together (a.o., Bermúdez-Otero 2012). This is a precise theoretical choice that forces one to wobble on a narrow rope it is easy to fall from, as we have seen above.

Allomorphy is a very multi-faceted phenomenon, and both devices — namely, lists and rules — are equally able to account for it (Aronoff 2012). Abstracting away from ideological beliefs on the issue, what is actually needed is an "evaluation metrics" able to assess what is the most appropriate device for the alternation at hand. Here I refer to Kiparsky (1996)'s characterization of allomorphic alternations:

(34) Evaluation metrics for allomorphic alternations

- a. Suppletive alternations:
 - (i) are idiosyncratic;
 - (ii) may involve more than one segment;
 - (iii) obey morphological locality conditions;
 - (iv) occur before (morpho-)phonological processes.
- b. Morpho-phonological alternations:
 - (i) are general (not item-specific);
 - (ii) involve a single segment;
 - (iii) observe phonological locality conditions;
 - (iv) occur after suppletive alternations (i.e., after VI).

(adapted from Kiparsky (1996))

In the previous section I showed that the alternations involved SI determiners (i) are general, as they arise not only for determiners but also for pre-nominal adjectives; (ii) involve a single segment — namely, deletion of the vocalic suffix; (iii) observe phonological adjacency, as they occur in a specific phonological context; and finally, (iv) must occur after VI of the appropriate entries. Treating these alternations as suppletive means treating them as completely arbitrary, and overlooks general morpho-phonological operations.

6 Conclusions

In contrast with previous accounts, this paper argued that the alternations of the SI definite determiner can be accounted for a few language-wide morphophonological operations. I showed that the operations of hiatus resolution and *troncamento* substantially contribute to the alternations involving SI determiners as well as pre-nominal adjectives. These operations gain further

theoretical support when we extend our analysis to determiner-allomorphy in non-standard IR varieties (see Appendices for further data). Analysis of the diatopic variation also reveals a correlation between the existence of alternations in the D-domain and *troncamento*: varieties that have no truncated forms show no alternations at all. Such a strong correlation would be completely overlooked in an account in which morphology and phonology are not allowed to interact. On the other hand, it effortlessly falls out in the morpho-phonological account proposed here by assuming a micro-parametric deactivation of the procedure of *troncamento*.

Ultimately, this paper offers new insights concerning the long-standing debate on the nature of allomorphic alternations, and provides evidence in favor of a framework in which both suppletion and morpho-phonology may be used in accounting for allomorphy. Forbidding morpho-phonology in toto leads to disregarding robust generalizations at the interface between morphology and phonology. In doing this we fail twice: as theoreticians, we fail to provide reliable models to analyze data with; as scientists, we fail to generalize over consistently co-occurring phenomena.

A Allomorphy of the definite determiner in Italo-Romance

A.1 Northern varieties

The definite determiner shows a huge degree of variation in northern varieties, as the table below shows:

			[-F	EM]				[+F	EM]	
	l	$[\sigma]$	l	$[\sigma]$	_ [V		_ [C		_ [V	
	[-PL]	[+PL]	[-PL]	[+PL]	[-PL]	[+PL]	[-PL]	[+PL]	[-PL]	[+PL]
	il		il					(r)e		
Lombardia &	al		al		1		la	le		e
Triveneto	el		e(l)	(l)i			100	10		
	ol		ol	(1)1				i		i
	ul/ur		u(l)		ul/ur	i	ra	e	1	е
Piemonte	al	i	(l)u						-	(l)e
Liguria	u		(1) u				(l)a			(1)6
Emilia Romagna	al		al	i				(l)e		$\mathrm{al/li}$
Marche	al		(l)o		1		la			l
Tuscany	i(l)		lo	(λ)i		l, ʎi	18			(l)e

Table 17: Micro-parametric variation of the definite determiner in northern varieties of Italo-Romance

In Table 17 above, most of the forms — i.e., the feminine singular and plural, and the masculine plural — look alike. Only the masculine singular form varies in the vowel preceding the lateral. All dialects but Florentine (i.e., SI) preserve the form Vl (with V being a language-specific vowel), regardless of whether or not a syllabic appendix occurs noun-initially.

(35) a. Introbio (Lombardia, LC):
el pa 'the father'; el stap 'the pond'
b. Prosito (Ticino, Switzerland):
al pa; al stap
c. Arcumeggia (Lombardia, VA):
ur pa; u(l) stap

This type of reduction in allomorphic complexity may be due to differences in syllable structure; e.g., it may be due to the fact that these dialects allow complex codas such as [ls]/[rs].

A few micro-varieties have a single form for all masculine singular hosts, regardless of the noun-initial context:

(36) Arcumeggia (Lombardia, VA): ur orts 'the bear'; ur amis 'the friend'; ur imfern 'the hell'

Exceptionally, Veneziano, the dialect spoken in Venice, has preserved sensitivity to the following host-initial syllable structure: as shown in (37), the lateral drops before a extended-syllable-initial host.

(37) Venice (Veneto, VE): el papa 'the father'; e stapo 'the pond'

When moving to the borders with France (in the regions of Piemonte and Liguria), an epenthetic vowel (whose phonetic nature slightly changes diatopically) is always inserted before extended-syllable-initial hosts; this crucially means that the form that should surface in such contexts (i.e., *lo*) never does:

(38) Corio (Piemonte, TO): al pare 'the father'; l a-stap'the pond'

Finally, varieties spoken Liguria have all the lateral dropped, similarly to what we will see in Neapolitan (see below, sec. A.3):

(39) Genoa (Liguria, GE): u pwè 'the father'; u stapu 'the pond'

Going south, while dialects of Emilia Romagna and Marche fairly uniformly select al, most Tuscan dialects are quite different from Florentine (i.e., SI) in the treatment of the masculine singular determiner. Here, the lateral of the masculine singular uniformly assimilates with the following host-initial core syllable (Table 18a); with vowel-initial nouns the masculine plural form usually has the suffixal vowel dropped (Table 18b), instead of the SI palatalized lateral. The form lo surfaces with extended-syllable-initial hosts (Table 18c).

	Radda (Toscana, SI)	cf. SI	gloss
a.	i kkane		'the dog (m. sg.)'
b.	l agi		'the needles (m. pl.)'
c.	l əke	le əke	'the geese (f. pl.)'
d.	lo stanno		'the pond (m. sg.)'

Table 18: Forms of a Tuscan varies as compared to SI

A.2 Central dialects

The nature of the initial syllable of the following host also causes allomorphy on the definite determiner in Romanesco, the variety of Italian spoken in Rome (Loporcaro 1991), as shown below.

	[-F	EM]	[+FEM]					
	[-PL]	[+PL]	[-PL]	[+PL]				
_ [\sigma	er	ix	ax	eï				
$_{-}$ $[\sigma'$	Οĭ	1.	a.	6.				
_ [Ù		1						
_ [V		Ø	[V:					

Table 19: Forms of the SI definite determiner in Romanesco

Before core-syllable-initial masculine singular hosts, the determiner has the form er, similar to the forms detected in standard Italian and northern varieties (sec. A.1). The presence of [r] instead of [l] is due to the fact that Romanesco laterals commonly rhoticize in coda position. When followed by any other consonant-initial hosts, the determiner shows a lengthened form of the ϕ -marking vowel. Before vowel-initial hosts, the surface form depends on the stress position. If stress is on the initial syllable of the host, the determiner surfaces as l; otherwise, the host-initial vowel gets lengthened.

σ '-initial hosts	σ -initial hosts	stressed-V-initial hosts	unstressed-V-initial hosts
o: stupido	er kane	lerba	aːmika
'the fool (m.sg)'	'the dog (m. sg)'	'the grass (f. sg.)'	'the friend (f. sg.)'
aː stupida	aː piskella	loke	armike
'the fool (d.sg)'	'the girl (f. sg.)'	'the goose (f. pl.)'	'the friends (f. pl.)'
i: stupidi	iː kani	l urtimo	e:d&ittsjano
'the fools (m.pl.)'	'the dogs (m. pl.)'	'the last (m. sg.)'	'the Egyptian (m. sg.)'
er stupide	er piskelle	l ortsi	eːdʤittsjani
'the fools (f.pl.)'	'the girls (f. pl.)'	'the bears (f. pl.)'	'the Egyptians (m. pl.)'

Table 20: Some relevant examples of the forms of the definite determiner in Romanesco $\,$

A.3 Southern dialects

Southern dialects show a rather minimal allomorphic distribution.

	[-F	EM]	[+FEM]		
	[-PL]	[+PL]	[-PL]	[+PL]	
_ [C	lu	1;	la	lo	
_ [V	lu, l	11	la, l	le	

Table 21: Forms of the definite determiner in southern varieties

We can distinguish two sub-groups. The first sub-group does not show allomorphy on determiners at all; for example, in Salentino, spoken in Apulia:

C-initial feminine nouns						
la [p]orta \sim le [p]orte	'D door(s)'	la [dz]anzara \sim le [dz]anzare	'D mosquito(es)'			

C-initial masculine nouns						
lu [k]ane \sim li [k]ani	$D \log(s)$	lu [str]utzze \sim li [str]uzzi	'D ostrich(es)'			

V-initial nouns					
masculin	ie		feminine		
l [o]rko ∼ l [o]rki	'D ogre(s)'	$l[\mathfrak{d}]$ ka \sim le $[\mathfrak{d}]$ ke		'D goose/geese'	

Table 22: Some examples of the forms of the definite determiner in the first sub-group of southern varieties

The second sub-group of varieties shows a certain degree of allomorphy that has a different morpho-phonological scope from *troncamento* (16); Neapolitan, the dialect spoken in Campania, is its main representative (Ledgeway 2009).

[-FEM]			[+fem]				
	[-PL]	[+PL]			[-PL]	[+PL]	
_ [C	О	e	gloss		a	e[CC]	gloss
a.	o <u>tavələ</u>	e <u>tavələ</u>	'the table(s)'	a'.	a <u>tavələ</u>	e <u>ttavələ</u>	'the board(s)'
<i>b</i> .	o <u>perə</u>	e p <i>je</i> rə	'the foot(s)'	<i>b</i> '.	a <u>sed</u> фə	е s sɛdʤə	'the chair(s)'
- V			gloss		1	əll	gloss
c.	l əccjə	l woccjə	'the eye(s)'	c'.	l оррә	əll oppə	'the nail(s)'

Table 23: Forms of the definite determiner in Neapolitan (roots are underlined)

When preceding consonant-initial hosts, the determiner surfaces as o in the masculine singular, a or in the feminine singular, and e in the plural. Additionally, plural feminine hosts have the initial segment geminated (in the table above, in bold). When preceding vowel-initial nouns, the definite determiner surfaces as l. In plurals, l is geminated and preceded by o.

B Allomorphy of the indefinite determiner

The indefinite determiner is sensitive to the same morpho-phonological environments as the definite determiner: in northern and central varieties it has the suffixal vowel deleted before core-syllable-initial singular masculine, and vowel-initial hosts. In southern varieties it is only subject to vowel elision.

	[-FEM]			[+FEM]		
	$_{-}$ $[\sigma$	_ [σ'	_ [V	_ [C	_ [V	
North	un	un(o)	un	(u)na	(u)n	
Center	un	no	n	na	n	
South	(u)nu	nu	n	(u)na	(u)n	

Table 24: Forms of the indefinite determiner in Italo-Romance

¹⁸Plural masculine nouns with a stressed mid vowel instead undergo metaphony (in Table 23, in italic). Note that, unlike initial consonant gemination in feminine plural nouns, this phenomenon occurs independently of the presence of the determiner. For an analysis, see Calabrese (2011, 2016).

However, there is less variation in the underlying form of the indefinite determiner, which contrasts with the wide variety of realizations of the definite determiner. Unlike the latter, the former just has the back vowel $/\mathrm{u}/\mathrm{d}$ dropped in some varieties, but its exponence seems to be quite stable across dialects.

C Allomorphy of demonstratives and pre-nominal adjectives

While northern dialects display the same distribution of forms for demonstratives and pre-nominal adjectives that we have seen for standard Italian (see sec. 4), southern dialects do not show any other morpho-phonological phenomenon undergone by demonstrative and pre-nominal adjectives than hiatus resolution (15). As an example of such lack of variation, the forms below are taken from Neapolitan.

```
(40) killə 'that/those'
```

- a. kell [i]deə ~ kell [i]deə D.FSG idea.FSG D.FPL idea.FPL 'that (those) idea(s)'
- b. kell [i]ndicə \sim kill [i]ndicə D.MSG index.MSG D.MPL index.MPL 'that (those) index/indices'
- c. killu [∬]emə ~ killi [∭]jemə D.MSG fool.MSG D.MPL fool.MPL 'that (those) fool(s)'
- d. killu [k]orsə ~ killi [k]ursə

 D.MSG course.MSG D.MPL course.MPPL

 'that (those) course(s)'
- e. kella [k]asə \sim kelli [kk]asə D.FSG home.FSG D.FPL home.FPL 'that (those) home(s)'
- f. kella [st]anzə \sim kelli [st]anzə D.FSG room.FSG D.FPL room.FPL 'that (those) room(s)'

What the data above shows is that the same morpho-phonological strategies that Neapolitan has for marking the plural on the definite determiner are active for demonstratives too: in the masculine plural, the front mid vowel gets metaphonized (40b, c, d); in the feminine plural, the noun-initial con-

sonant gets geminated (40e). Hiatus (15) seems to be forbidden at all times (40a, b), where no truncation phenomena seem to affect southern dialects at all.

Similarly, the epithetic adjective *santu* 'saint' shows no alternation. Compare the following forms with the corresponding SI forms in (28a)-(28b):

- (41) santə 'saint'
 - a. [-FEM]
 - (i) sant(*u) Andoniə saint.MSG Anthony 'Saint Anthony'
 - (ii) santu Timoteə saint.MSG Timothy 'Saint Timothy'
 - (iii) santu Stefənə saint.MSG Stephen 'Saint Stephen'

b. [-FEM]

- (i) sant(*a) Ilariə saint.FSG Hilary 'Saint Hilary'
- (ii) santa Təresə saint.FSG Theresa 'Saint Theresa'
- (iii) santa Stəfaniə saint.FSG Stephanie 'Saint Stephanie'

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