# Mutation, allomorphy and Galician clitics 

Itamar Kastner ( 1 )<br>University of Edinburgh, Dugald Stewart Building, Edinburgh, EH8 9AD, Scotland, United Kingdom<br>Email: itamar.kastner@ed.ac.uk

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#### Abstract

The Galician definite article and direct object clitics exhibit allomorphy-like alternations which raise a number of questions for the morphology-phonology interface. This squib highlights inadequacies of allomorphic approaches to these alternations, outlining a novel way forward in which segmental changes apply to a stem in a fashion reminiscent of Celtic mutation. Differences between the article and the object clitic can then be ascribed to their prosodic weights, evident elsewhere in the language. Taken together, these findings expand our view of potential triggers for morphophonological alternations.


## 1. Introduction

When is a morphophonological alternation a pattern of allomorphy and when might it be something else? When is an affixed element close enough to its host to undergo one alternation but too far for another? In Galician (Western Iberian, Romance), the form of the definite article def and the direct object clitic obj depends on the preceding segment in ways which pose challenges for theories of the morphology-phonology interface. The canonical vowel-initial form appears phrase-initially or postvocalically, (1)-(2). ${ }^{1}$
(1) $\boldsymbol{o}_{\text {deF }}$ pan [ $\mathbf{0} \mathrm{pay}$ ]
'the bread'
(2) a. como $\boldsymbol{o}_{\text {DEF }}$ pan [komo o pay] / [komoo pay]
'I eat the bread'
b. сото $\boldsymbol{o}_{\text {ов, }}[\mathrm{komoo}]$
'I eat it'

[^0][^1]Codas are fairly restricted in Galician: only $/ 1 /, / \mathrm{n} /, / \mathrm{r} /$ and $/ \mathrm{s} /$ are possible; $/ \mathrm{n} /$ velarizes to [ g ] in a number of environments, the most relevant of which is word-final. ${ }^{2}$ When DEF/OBJ follows a preposition or verb with these codas it cliticizes onto them, whereby $/ \mathrm{n} /$-final hosts do not undergo the regular word-final velarization, (3), and $/ \mathrm{r} /-$ or $/ \mathrm{s} /$-final hosts change to $/ 1 /$, (4)-(5). These examples are based on Dubert García (2014: 1). I follow Dubert García (1998, 1999, 2001) in focusing on what can be called the dialect spoken in Santiago de Compostela, returning to dialectal variation at the end of the squib. Where relevant, I point out areas of dialectal variation (and mark variation using "\%"), but will otherwise treat the patterns below as robust.
(3) a. comen ['komen] 'they eat'
b. comen $o_{\text {DEF }}$ pan ['komeno pay]
'they eat the bread'
c. cómeno oвл ['komeno] 'they eat it'
(4)
a. comer [ko'mer] 'eat.INF'
b. (por) comelo $_{\text {DEF }}$ pan [ko'melo pay] (\%comero pan) 'to eat the bread'
c. (por) comelo $_{\text {овJ }}[$ ko'melo] (\%comero)
'to eat it'
a. comes ['komes]
'you eat'
b. (ti) cómelo ${ }_{\text {DEF }}$ pan ['ksmelo pay] (\%cómeso pan) 'you eat the bread'
c. (ti) cómelo овл ['komelo] (\%cómeso) 'you eat it'

These elements are invariably enclitics, attaching to the end of a preceding host (usually in some head-complement relationship). Object clitics are postverbal in regular declarative clauses, but appear preverbally in some syntactic contexts (these include negation, subordinate clauses, questions, clitic climbing and with certain adverbs; see the reference grammars or Uriagereka 1995, 1996). Even when they are preverbal, their host is still the preceding element (unlike in some other Romance languages) and the choice of variant is still dictated by the preceding element: -Lo appears after /s/ in (6a), and non-velarized [ n$]$ appears in the host of (6b).
a. queres ver $\mathrm{o}_{\text {овJ }} \rightarrow$ queres $+\mathrm{o}_{\text {овנ }}+$ ver $\rightarrow$ querelo $o_{\text {oвנ }}$ ver
want. 2 SG see.INF OBJ.SG.M
'you want to see it'

[^2]```
b. non toque \(\mathrm{o}_{\text {obs }} \rightarrow\) non \(+\mathrm{o}+\) toque \(\rightarrow n o[\mathrm{n}]=[\mathrm{o}]\) toque
NEG touch.SBJ ObJ.SG.M
'don't touch that'
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The traditional paradigm for DEF and OBJ can be laid out as in (7): -o marks masculine, $-a$ marks feminine and $-s$ marks plural. I will refer to the variants as $-\mathrm{O},-\mathrm{LO}$ and -NO , abstracting away from gender and number. ${ }^{3}$ These alternations are discussed at length in the Galician philological literature (Álvarez Blanco 1983, Freixeiro Mato 2000a, 2000b, Álvarez Blanco \& Xove 2002, Dubert García 2016) and in more theoretically-oriented work (Dubert García 2001, 2014, Fernández Rei 2005, 2012), but less so in contemporary formal work.

## (7) Singular o/lo/no a/la/na <br> Plural os/los/nos as/las/nas

Two things stand out about the variants in (7). The first is that they depend on the preceding coda, namely whether it is $n-, r-/ s$ - or something else. The second is that -LO causes said coda to be deleted (and if we take -No to be an allomorph, then its preceding nasal is likewise deleted). These two issues have carved out a small space for Galician in discussions of opacity in phonology (Nevins 2011), since insertion of -LO triggers deletion of the very segment that caused it to appear. If the motivation for choosing -LO over -o is to optimize the output, why delete the trigger (Kikuchi 2006, Ulfsbjorninn 2020)?

In order to answer that question, I first introduce another puzzle: there are some differences in the morphophonology of deF and obJ, including one context in which OBJ but not DEF is preceded by $/ \mathrm{n} /$. Taken together, both puzzles point us towards a novel kind of answer: what we are dealing with is not allomorphy at all, but a series of phonological adjustments that Galician makes to stem codas when a clitic attaches. With the basics of -Lo already established, the main differences between DEF and OBJ are introduced next in Section 2, followed by an analysis in Section 3 and a comparison with alternative approaches in Section 4. Section 5 concludes.

## 2. DEF and OBJ

The literature on clitics in Romance alone is substantial, not to mention the syntax-prosody interface more generally (Nespor \& Vogel 1986/2007, Selkirk 1995, Peperkamp 1996, 1997, Loporcaro 2000, Anderson 2005, Bennett \& Elfner 2019). In this paper, I refer to elements that are not part of an inflectional paradigm but which end up being phonologically adjoined to another element as "clitics". No element intervenes between them and their host. These include, below, some cases of prepositions (Section 2.1), object pronouns and the definite article (Sections 2.2-2.3). The exact syntactic nature of these cliticizations does not bear on the empirical generalizations, but we will return to it in Section 4.4. So when we say here that a preposition cliticizes onto a determiner, this means that, whatever the syntactic underpinnings are, the "clitic" P ends up being pronounced as a prefix-like (proclitic) or suffix-like

[^3](enclitic) element on the "host" D, sometimes with morphophonological consequences as discussed below.

Three differences between DEF and obj will now be presented. These can be attributed to a prosodic distinction between the two: the suggestion here is that while DEF can either host a clitic or cliticize onto a host itself, obs is too weak prosodically to host other elements and must cliticize onto a host.

### 2.1. Def hosts light $P$, obs cannot

Some prepositions cliticize onto articles and determiners, while other Ps remain their own prosodic words. The two light prepositions which contract most productively are $d e$ 'from' and en 'in', (8)-(9). They attach to all vowel-initial D hosts except obs and retain only their first consonant upon cliticization.
(8) a. de Alba 'of Alba' $(\% d a l b a)^{4}$
b. de + aquel 'of that' $\rightarrow$ daquel
c. de + ela 'of her' $\rightarrow$ dela
(9) a. en Escocia 'in Scotland' (*nescocia)
b. en + DEF 'in the' $\rightarrow$ no/na/nos/nas
c. en + este 'in this' $\rightarrow$ neste

Other light prepositions attach only to DEF but not to other D elements (Dubert García 2014):
(10) ca 'than'
a. cós ${ }_{\text {DEF }}$ nenos 'than the boys'
b. cás ${ }_{\mathrm{DEF}} n e n a s$ 'than the girls'
c. ca este 'than this' (* caste)
(11) $a$ 'to'
a. a $o_{\text {DEF }}$ neno [a o neno] 'to the boy' $\rightarrow \dot{o}_{\text {DEF }}$ neno [ O neno]
(Instituto da Lingua Galega 2020: 40382,40386)
b. a as $\mathrm{S}_{\mathrm{DEF}}$ nenas [a as nenas] 'to the girls' $\rightarrow$ ás $\mathrm{S}_{\mathrm{DEF}}$ nenas [a:s nenas]
(Freixeiro Mato 2000a: 73, Instituto da Lingua Galega 2020: 5, but see Álvarez Blanco 1983: 181 for variation and Freixeiro Mato (2000a: 199) on other cases of /...a a/)

And con 'with' loses its final nasal upon contraction with DEF:
(12) con 'with'
a. con $o_{\text {DEF }}$ neno 'with the boy' $\rightarrow$ co [ko] neno (Instituto da Lingua Galega 2020: 12985)
b. con $a_{\text {DEF }}$ nena $\rightarrow$ coa [koa] (Instituto da Lingua Galega 2020: 12987)
c. con este 'with this' (\%coeste)

[^4]These contractions are lexically specific, not part of the general phonology of the language. The observation is that P might lose some of its segmental material: $a, c a, d e$, en and con keep only their (first) consonant, descriptively speaking, while prosodically heavier prepositions and adverbs (por 'for', despois 'after') are largely unaffected. These patterns indicate that at least lighter prepositions cliticize onto D (or a superordinate prosodic constituent), although contraction does happen elsewhere in the language, especially in rapid speech (cf. Bermúdez-Otero \& Luís 2009 and Luís 2009 on European Portuguese).

Regarding D itself, various kinds of (vowel-initial) D elements host P clitics; the list includes un 'INDEF', este 'this' (9c), algún 'some', aquel 'that' (8b), outro 'other', iso 'this one' (13b), isto 'that one' and all personal pronouns (aside from the clitics). Since D elements can be prosodically large and carry primary stress, this is further evidence that D is the host for P proclitics.

While these observations hold for Def as above, obj cannot host $P$. This can be seen in verbs which take en 'in' and an indirect object (Rodríguez Guerra 1997, Martí i Girbau 1999) as in (13), as well as the non-existence of contractions like those in (14).
(13) a. pensar + en $+o_{\text {DEF }}+$ futuro $\rightarrow$ pensar no $o_{\text {DEF }}$ futuro 'to think about the future'
b. pensar + en + iso $\rightarrow$ pensar niso 'thinking about that'
c. * pensar en $o_{\text {ов, }}$ 'thinking about it'
d. * pensar $n o_{\text {овл }}$ 'thinking about it'
(14) a. $c a+o s_{\text {овы }}$ 'than the' $\neq{ }^{*} \cos _{\text {ов }}$
b. $a+o_{\text {ов }}$ 'to the' $\neq$ * $^{\prime}$ ов $^{\prime}$

In sum: obj is too light to serve as host, unlike def.

### 2.2. D cliticizes onto V: Clitic clusters

Both def and obj can cliticize onto V, as seen initially in (2)-(5) when we encountered the -Lo and -no variants. Consider next how the indirect object (dative) 1st/2nd/3rd person clitics
 with the dative clitic, especially in rapid speech (see also Dubert García 2014: 2):
a. ela díxo $=$ che algo $\rightarrow$ ela díxoche algo
she told to.you something
'She told you something.'
b. ela díxoche $\boldsymbol{o}_{\text {def }}$ seu nome
'She told you her name.'
c. ela dixocho Def Seu nome
'She told you her name.'
But dative clitics must contract with OBJ (Dubert García 2001):
(16) a. ela + díxo + che $+o_{\text {овנ }} \rightarrow$ ela díxoch ${ }_{\text {ов, }}$ 'She told you that.'
b. * ela díxoche $\boldsymbol{o}_{\text {ов }}$

This pattern too follows from the difference sketched above: since obj must lean on a host, it contracts with the indirect object clitic which has already cliticized onto the verb. But since DEF need not find a host, it can stay put.

### 2.3. D cliticizes onto $V$ :/n/-insertion

Another difference attributable to prosodic weight can be found when the verbal stem ends in two vowels within the same syllable (a diphthong). While this does not matter to Def, the special post-vocalic form of obj is now -no (Freixeiro Mato 2000b: 123, Freixeiro Mato 2001, Kikuchi 2006):
(17) comeu 'he/she ate' + the two variants of -o :
a. DEF: comeu $+o_{\text {DEF }} p a n$ 'he/she ate the bread' $\rightarrow$ comeu $\boldsymbol{o}_{\text {DEF }}$ pan
b. овJ: сотеи $+o_{\text {овл }}$ 'he/she ate it' $\rightarrow$ comeuno $_{\text {овл }}$

What seems to matter here is not the string of vowels or hiatus as such, but syllabification. This inserted $/ \mathrm{n} /$ only appears when the preceding two vowels form a diphthong within one syllable, leading the trivocalic sequence to be resyllabifieid. Another way of thinking about the generalization is that it establishes licit syllables; /w/ in (18) and $/ \mathrm{j} / \mathrm{in}$ (19) are not legal onsets.
(18) Two vowels in one syllable, illicit /w/ onset, $/ \mathrm{n} /$ :
a. Preterite, comeu + obJ $\rightarrow[$ ko.mew $]=$ OBJ $\rightarrow\left[\right.$ ko.mew.no $\left.{ }_{\text {obs }}\right]$ 'ate. $3 \mathrm{sG}=\mathrm{it'}^{\prime}(\boldsymbol{X}[$ ko.me. wo $_{\text {ов }}$ ])
b. $\overline{\text { Present, }}$ estou + овJ escribindo $\rightarrow$ es.tou.no $o_{\text {овJ }}$ 'am. $1 \mathrm{SG}=$ it writing' $(\boldsymbol{X}$ [es.to. wo $_{\text {ов }}$ ])
(19) Two vowels in one syllable, illicit $/ \mathrm{j} /$ onset, /n/: Present or imperative singular,

(20) Three vowels across two syllables, licit onset, no /n/: Imperfect, comía + obj $\rightarrow[\mathrm{ko}$. $\mathrm{mi} . \mathrm{a}]=\mathrm{o}_{\text {obJ }} \rightarrow\left[\mathrm{ko} . \mathrm{mi} . \mathrm{ao}_{\text {obנ }}\right]$ 'ate. $3 \mathrm{SG}=\mathrm{it}$ '

This phenomenon is a kind of derived environment effect (e.g. Inkelas 2014) in that $/ \mathrm{n} /-$ insertion only happens upon cliticization. These onsets are licit within roots (faio 'attic') and suffixed non-cliticized verbs (cae $+o_{1 \mathrm{sG}} \rightarrow$ caio 'I fall'). I am not aware of other cases in which $/ \mathrm{n} /$ is used as a morphophonological repair in the language, although it might be relevant in a diachronic context that the combination of P and the 1 SG pronoun is not e.g. *de eu 'of me' but de min.

Summing up, if obj must cliticize, then it will do so even onto a verb ending in a diphthong. When the resulting syllabification is disallowed, we can understand the appearance of $/ \mathrm{n} /$ as a phonological repair.

Taking together the data seen so far, a number of contrasts between def and obs can be traced to their prosodic size: obs must cliticize, def can cliticize and can host weaker elements, and other D elements are heavy enough not to cliticize at all. The table in (21) presents the observations that this generalization is based on. The first row indicates that obj and Def trigger the segmental alternations. The other rows show different effects of the proposed prosodic difference between the two.
(21)

|  | OBJ | DEF | Det |
| :--- | :---: | :---: | :---: |
| Cliticizes to V, feeding -LO/-NO | $\boldsymbol{\checkmark}$ | $\boldsymbol{\checkmark}$ | N/A |
| Host for $\mathrm{P} \rightarrow$ D contraction | $\boldsymbol{x}$ | $\boldsymbol{\checkmark}$ | $\boldsymbol{\checkmark}$ |
| Clitic cluster feeding contraction | $\boldsymbol{\checkmark}$ | $\boldsymbol{\checkmark} / \boldsymbol{x}$ | $\boldsymbol{x}$ |
| VV syllable after cliticization | /n/-repaired | not created | N/A |

## 3. Floating features and modified codas

We are now in a position to address the puzzle of -Lo by making the case that it is not allomorphic in the traditional sense. Under the current account, what is happening with -LO is a special process of stem-final modification, which we can formalize as the docking of floating features.

The "third allomorph" -No can be treated straightforwardly: a general rule of nasal velarization applies throughout the language, as mentioned earlier. This is enough to give the - No forms, since the environment for [ y ] is simply not created; there is no need for a separate -NO allomorph of def (Fernández Rei 2012).

$$
\begin{equation*}
/ \mathrm{n} / \rightarrow[\mathrm{y}] / \ldots \tag{22}
\end{equation*}
$$

Now let us address $/ \mathrm{n} /$-insertion. This happens when $\mathrm{VV}=\mathrm{V}$ leads to the middle vowel becoming an illicit onset as in Section 2.3. A simple rewrite rule is given in (23): add [n] after a diphthong syllable, with the conditioning environment "syllable boundary, element, clitic boundary, vowel". This pseudo-formalization will do for present purposes, although it cannot be the full analysis since it doesn't explain the problem with a vowel-initial clitic specifically as opposed to a vowel-initial affix. ${ }^{5}$

23

$$
\mathrm{X}_{\mathrm{V}} \mathrm{Y}_{\mathrm{V}} \rightarrow[\mathrm{XYn}] / .[=\mathrm{V}
$$

The allomorphy-like process rests on the intuition that stem-final $/ \mathrm{r} / \mathrm{and} / \mathrm{s} /$ change to [1] when extending the stem using a vowel-initial clitic. I suggest to think of this phenomenon in a similar way to mutation in Celtic languages. There, certain environments see a segmental change to the stem edge coincide with affixation. For example, in Breton stem-initial /b/ might "lenite" to [ v ] in some contexts and "provect" to [p] in others, while stem-initial /t/ "lenites" to [d] and "spirantizes" to [z]. See Breit $(2019)$ or Iosad $(2017,2023)$ for recent overviews. This process has been argued to be the result of a "floating" phonological subsegmental or autosegmental element docking onto the mutating segment, which can overwrite some existing values (for example voicing; see also vowel overwriting in Hebrew in Kastner 2019).

Drawing on this body of work, we can think of -O/-LO as containing a floating subsegmental representation, in addition to the segemental clitic itself. Suppose, then, that we are dealing with the following representations:

$$
\left.\left. \begin{array}{c}
\text { DEF/OBJ }  \tag{24}\\
+ \text { cons } \\
+ \text { son } \\
- \text { lat } \\
- \text { nasal } \\
+ \text { cor } \\
\ldots
\end{array}\right] \quad\left[\begin{array}{l}
+ \text { cons } \\
+ \text { son } \\
+ \text { lat } \\
- \text { nasal }
\end{array}\right] o \begin{array}{l}
+ \text { cons } \\
+ \text { son } \\
+ \text { lat } \\
- \text { nasal } \\
+ \text { cor } \\
\ldots
\end{array}\right]
$$

[^5]The third column reconceives of DEF as a floating subsegmental bundle concatenated with the segmental clitic. When this floating bundle docks onto $/ \mathrm{s} / \mathrm{or} / \mathrm{r} /$, it will have the effect of overwriting their [sonorant] and [lateral] values, turning them both into [1]. The other two possible codas in the language are $/ \mathrm{n} /$ and vowels. For $/ \mathrm{n} /$, we can assume that the [-nasal] specification of -o cannot override [+nasal], so nothing happens; similarly for vowels, we can assume that [+cons] cannot override [-cons]. And if there is no host at all, there is also nothing for the feature bundle to dock onto and nothing happens.

Putting everything together as Vocabulary Items (Halle \& Marantz 1993), the definite article is a clitic which does not have to cliticize, composed of floating features and -o:
a. $\quad$ DEF $\leftrightarrow\left[\begin{array}{c}+ \text { cons } \\ + \text { son } \\ + \text { lat } \\ - \text { nasal }\end{array}\right]_{O}$
b. Wants to cliticize onto a host, but is heavy enough to be a host: $(\sigma=) \mathrm{DEF}]_{\mathrm{PWd}}$

The direct object article clitic must cliticize, and is composed of the same floating features and - O :
a. $\quad$ OBJ $\leftrightarrow\left[\begin{array}{c}+\begin{array}{c}\text { cons } \\ + \text { son } \\ + \text { lat } \\ - \text { nasal }\end{array}\end{array}{ }_{\mathrm{O}}\right.$
b. Has to cliticize:
$\sigma=\mathrm{OBJ}]_{\mathrm{PWd}}$

What this formalization does is to allow Def/obs to be neither -o nor -Lo underlyingly, but to have properties of both, owing to the relative similarity of $/ \mathrm{s} /$ and $/ \mathrm{r} /$ to $/ 1 /$. This conceptualization is different from an allomorphic treatment, as we will see next. However, it should be acknowledged that the floating features analysis is tailor-made, relying on little additional evidence and making no further predictions that I can name, given the limited inventory of codas in the language. Its origin is more likely to be diachronic than based on any inherent relative markedness of features such as [nasal] and [lateral]; compare the similar phenomena in closely related European Portuguese (Bermúdez-Otero \& Luís 2009).

## 4. Allomorphic and syntactic alternatives

To recap, we are dealing with three variants (-o, -LO, -NO) and two puzzles (opacity and prosodic differences including $/ \mathrm{n} /$-insertion). The current analysis combines them all in one unified approach; an allomorphic analysis might target only the first two variants, or all three, or both puzzles together, though none of the extant analyses have attempted that so far. Accordingly, we will examine a number of alternative proposals, as follows:
(27) a. The definite article is underlyingly -Lo; allomorphs can be derived in the phonology (Section 4.1).
b. The definite article is underlyingly either -o or -LO; the correct form is chosen in the phonology (Section 4.2).
c. The definite article is underlyingly -o; the allomorph -Lo can be chosen in the morphology (Section 4.3).

Section 4.5 will conclude that no allomorphic analysis can provide a uniform account of our generalizations. Before that, I will also argue against a syntax-based difference in Section 4.4.

### 4.1. Derivation: Underlying -Lo

Working within Strict CV theory (Lowenstamm 1996, Scheer 2004), a variant of Government Phonology (Kaye et al. 1990), Ulfsbjorninn (2020) proposes an analysis of DEF which aims to preserve "modularity": phonological operations should not reference morphological information (following Scheer 2012). The analysis consists of the two components particular to Galician summarized in (28), in addition to some standard assumptions of Strict CV theory, including (29).
(28) a. The definite article is $\langle l\rangle o$ (-LO), where a floating $/ l /$ is not associated with skeletal structure (not linked to a C slot).
b. Consonant-final stems end in a floating consonant (not linked to a C slot).
(29) A floating consonant links to the closest suitable empty position. For -o , the floating / $1 /$ is silenced under Government by the following V slot:
(30) a nena 'the girl' (< *la nena)


For -Lo, the floating $/ \mathrm{l} /$ and the preceding $/ \mathrm{r} / \mathrm{or} / \mathrm{s} /$ end up being linked to the same C slot. Element Theory (Harris \& Lindsey 1995, Backley 2011) is implemented such that coalescence of $/ \mathrm{r} /$ and $/ 1 /$, but even of $/ \mathrm{s} /$ and $/ 1 /$, results in [1] (compare this part of the analysis with the floating features of the current proposal):
(31) polo mar 'by the sea' (< *por lo mar)


Under this view, the -o form is derived from -Lo throughout. The Derivation theory then predicts that coalescence of $/ n /$ and $/ 1 /$ results in [ $n]$, not [ n$]$ :
(32) ven a rosa 'they see the rose' (< *ven la rosa)


This account faces a couple of open challenges once the system is considered as a whole. The masculine plural indefinite article is uns, but the second V slot (which is silent) couldn't be licensed by the final V slot, since that one is silent itself, predicting *unos. This problem is not insurmountable: the article could be decomposed into two elements, for example, since otherwise a rule referring to masculine plural contexts might violate modularity, though the feminine exponent is retained in unha(s) so some fine-grained reference to allomorphy depending on feature value would be necessary. Other than that, contractions such as co neno (12) entail enriching the underlying representation of con, and such a move makes predictions that would need to be tested. For example, Shanti Ulfsbjorninn (p.c.) speculates that the UR might be $k o-\eta$ with an unfixed final C, although that might wrongly predict [ko:] instead of [ko].

Specifics aside, what's important for our overarching question is that / $\mathrm{n} /$-insertion cannot be integrated into this account starightforwardly without acknowledging that its source is different to that of "allomorphic" -NO, or more broadly, that DEF and OBJ have slightly different morphophonological profiles.

### 4.2. Competition: Priority of -o over -lo

Kikuchi (2006) takes a different approach by assuming that the allomorphs - o and - lo compete with one another. This competition takes place in the phonology, formalized using Optimality Theory (Prince \& Smolensky 1993/2004). The main components of the analysis are the constraint Priority (Bonet et al. 2007), a series of alignment constraints and a morpheme-boundary OCP[CONTINUANT] constraint, which are put to use as follows.

Under Priority, -o is preferred to -Lo. In the general case, for example phrase-initially or postvocalically, -o will be more harmonic, (33).
(33) Input: / $\{-\mathrm{O},-$ Lo $\}$ nena/ 'the girl'
a. $\quad-\mathrm{O}>-\mathrm{LO}$
b. Winning candidate: a nena
c. Losing candidate: *la nena

Now consider the -lo cases. Priority penalizes candidates (34b-c). Another set of constraints, gathered here under Align, is put in place to ensure that the edge of a morphological word (\#) aligns with the edge of a syllable (additional constraints ensure cliticization of the article onto its host). This constraint penalizes candidate (34a), in which -o is syllabified together with the preceding segment across a morpheme boundary. Lastly, the initial trigger must also be deleted by OCP[CONT], which penalizes [rl] and [sl] sequences, ruling out (34b) and leaving (34c) as the winning candidate. Since those sequences are allowed in other environments (Dubert García 2001), Kikuchi (2006) resorts to other ways of protecting them from being broken up.

|  | /ver | \{-O,-LO\}/ | OCP | Align | Priority | Max |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | a. | ve.r\#a |  | *! |  |  |
|  | b. | ver.\#la | *! |  | * |  |
| $1{ }^{\text {a }}$ | c. | ve.\#la |  |  | * | * |

This competition account makes two incorrect predictions. Kikuchi (2006) does not discuss the candidate $v e . \# a$, which would have been the most harmonic candidate in (34). To rescue the analysis, we could assume that this candidate violates some Hiatus constraint
against/ea/, yet such a diphthong is not necessarily degraded in the language (Freixeiro Mato 2000a: 198-199).

The other incorrect prediction was noted by Kikuchi (2006) himself: the interaction with stem-final - $n$ is unexpected. For an input like/vin $\{-\mathrm{o},-\mathrm{LO}\}$ rosa/, the same constraints should kick in (save for OCP), leading to *vin.\#la rosa rather than the correct vi.n\#a rosa 'I saw the rose' - though perhaps some nasal faithfulness constraint could be invoked.

### 4.3. Competition: Vocabulary Items

The third allomorphic alternative makes the decision between -o and -lo earlier, in the lexicon (in lexicalist terms) or at Vocabulary Insertion (in Late Insertion terms). Here, the choice of allomorph is made before the phonological computation begins. ${ }^{6}$ Under this view, lo is chosen in the relevant cases, with -o being the Elsewhere case. This step is then followed in the phonology by an OCP constraint like that of Kikuchi (2006).

To implement this idea, we could list allomorphs according to phonological environment for insertion:

DEF/OBJ $\leftrightarrow$
a. $-\mathrm{LO} /\{\mathrm{r}, \mathrm{s}\}$
b. -O

The problem with this analysis is that it involves outward-looking phonologically conditioned allomorphy: the allomorph depends on the phonological form of an element higher up in the structure. Under standard assumptions, such sensitivity should not exist (Carstairs 1990, Bobaljik 2000, Gouskova \& Bobaljik To appear); cases where it has been argued to exist are often amenable to alternative explanations (Deal \& Wolf 2017, Kalin 2020, Kiparsky 2021, Dolatian 2022). Galician could’ve presented a new argument for the existence of outward-looking phonological allomorphy, if that hadn't been inconsistent with the prosodic considerations presented earlier.

### 4.4. Syntax

An entirely different way of explaining the difference between DEF and obj would have it that they are syntactically distinct: perhaps the object clitic moves somewhere or adjoins somewhere that a full DP does not, rendering it "closer" to the verb somehow? I see two arguments against this analysis and one argument against it counting as an alternative.

First, the explanation for/n/-insertion cannot be syntactic: this $/ \mathrm{n} /$ appears only in order to fix syllabification. When the clitic cluster is preverbal, $/ \mathrm{n}$ /-insertion again depends on the phonological environment: fed in (18b) but not in (36); assuming that movement happens before phonological computation, we have evidence for a phonological repair.

' $\mathrm{He} /$ she ate it already.'

[^6]Second, obs patterns with DEF and unlike other nominal phrases for choice of variant ("allomorphy"). We can compare a DP headed by def with a DP or PP which has the preposition or Differential Object Marker $a$ 'to'. As shown for example by Dubert García (2014: 3), a DOM complement does not trigger -Lo/-nO, (37) - this makes sense if the complement is a separate prosodic domain. So the explanation cannot be that DEF is part of a full DP while obs isn't, unless we find an independent reason for a DOM DP to act even more differently. Furthermore, indirect object clitics should be more similar to obj than to DEF syntactically, but they pattern differently from both in not triggering alternations.
a. $[$ ven $[\mathrm{PP} / \mathrm{DP} a \operatorname{Rosa}]] \rightarrow(\mathrm{vey})\left(a_{\mathrm{DOM}} \text { rosa) }\right)^{*} v^{v e n} a_{\mathrm{DOM}}$ see.3pl dom Rosa
'They see Rosa.'
b. $\left[\right.$ ver $[\mathrm{PP} / \mathrm{DP}$ a Rosa] $] \rightarrow$ (ver) ( $a_{\mathrm{DOM}}$ rosa), *vela DOM see.inf dom Rosa
'to see Rosa'

Finally, even if we were to think that obj adjoins to the verb in a way that def doesn't, this reasoning does not count as an alternative. It just restates the idea that the object clitic cannot host other clitics on its own (Section 2.1), and that the clitic is closer to the verbal stem than the article even though both OBJ and DEF appear in similar positions based on linear order, without providing independent reasoning.

An anonymous reviewer asks about cases such as (38), in which we would wrongly predict $/ \mathrm{n}$ /-insertion, and (39), where the -lo variant is correctly predicted. I hesitate to comment on these cases since neither is triggered by a canonical syntactic context for preverbal clitics. In the first, the subject pronoun might be focused, setting it in a separate prosodic domain (hence also tame[new], rather than tame[no]). The second is a fixed phrase with particular information-structural properties (Álvarez Blanco et al. 2020: 206). ${ }^{7}$
(38) tamén eu o овл dixen
also 1 sg obj said.1sG
'I also said so.'
(39) $d i o=l o o_{\text {овJ }}$ pague
$\operatorname{dios} \mathrm{o}_{\text {obj }}$ pague
God obj pay.subj.3sG
'Thank you', 'God will return the favor.' (lit. 'God would pay for it')

### 4.5. Summary

All three allomorphic analyses attempt to formalize the following intuitions, given here using pseudo-Vocabulary-Items:

DEF $\leftrightarrow$
a. $-\mathrm{NO} / \mathrm{n}$ $\qquad$ and delete the first $/ \mathrm{n} /$

[^7]b. $-\mathrm{LO} /\{\mathrm{r}, \mathrm{s}\} \ldots$, and delete the first $/ \mathrm{r} / \mathrm{or} / \mathrm{s} /$
c. -O

OBJ $\leftrightarrow$
a. $-\mathrm{NO} / \mathrm{VV}$
b. $-\mathrm{LO} /\{\mathrm{r}, \mathrm{s}\} \ldots \ldots$, and delete the first $/ \mathrm{r} /$ or /s/
c. -O

But these are inadequate. Any other issues aside, the prosodic generalization-the differences between DEF and OBJ-simply does not feature here. I have also argued that it does not follow from a syntactic difference between the two elements.

In the current proposal, the $/ \mathrm{n} /$ of -NO and the $/ \mathrm{n} / \mathrm{of} / \mathrm{n} /$-insertion are separate elements synchronically. One could imagine a unifying allomorphic proposal, in which the two are derived from the same base. Concretely, the underlying form of def and obj would be -no, with the other forms derived from it. Perhaps such an account could be made to work, but that would come at the expense of crucial assumptions such as -o being the underlying form (as in the Competition account) or -Lo being the underlying form (as in the Derivation account). In other words, it's not possible to assume that across the board, -o, -NO and -LO are all allomorphs of DEF/OBJ.

## 5. Discussion

The Galician definite article DEF and direct object clitic OBJ show three different surface forms (supposed "allomorphs"), but are also differentiated by their prosodic behavior. The forms are conditioned by many factors, all of which make reference to prosodic constituency. Our discussion showed that allomorphic views of these patterns are paradoxical: why is it that -o will lean on its host for purposes of "allomorphy", but not if syllabification would be jeopardized?

I have suggested a mutation-style analysis for the -o/-LO alternation, alongside a nuanced difference in prosodic weight for the differences between DEF and OBJ, including a phonological repair after resyllabification. Resyllabification upon affixation or cliticization has been implicated in various morphophonological alternations. The current account might be reminiscent of the choice between allomorphs in K'ichee' according to the prosodic status of the stem (Henderson 2012), a proposal recently challenged by Royer (2021). In Mbat, V-initial suffixes trigger glide reduction in some stems upon resyllabification (Green 2021). Some coda nasals in Greek have been argued to undergo coalescence based on their low "activity" levels (Revithiadou \& Markopoulos 2021). And the forms of clitics in Catalan depend on how they syllabify with their hosts (Bonet \& Lloret 2005). More generally, recent work suggests that the morphology-prosody interface needs to be more powerful than what is often assumed (Dawson 2017, Tyler \& Kastner 2023, Tyler To appear). This squib casts light on an additional difference between clitics that are otherwise of similar phonological status: close enough to the host for some alternations but too far for others.

As a final comment on variation, and as pointed out by a reviewer, Galician speakers in some regions who have -NO in come[n] o o pef pan might say \%comeuo obs rather than сотеипо $_{\text {овы }}$ (García et al. 1995). These patterns are to be expected if "allomorphic" -Nо is not the same as the $/ \mathrm{n} /$ inserted to repair obj diphtongs. Similarly, speakers in some regions who retain -o in $\%$ come $[\eta] o_{\text {DeF }}$ pan do say comeuno obs. This double dissociation of -NO and
/n/-insertion again makes sense if the processes are separate, but these are only promissory remarks; dialectal variation within the language would need to be examined in more depth, relying for example on resources such as García et al. (1995), but now ideally paying renewed attention to the morphophonological reflexes of syllabification, and to specific differences between DEF and obJ.

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## References

Álvarez Blanco, Rosario. 1983. O artigo en galego. Morfoloxía. Verba: Anuario Galego de Filoloxía 10. 169-182.
Álvarez Blanco, Rosario, Francisco Dubert García \& Xulio César Sousa Fernández (eds.). 2020. Atlas lingüístico galego, vol. 7: Léxico. O ser humano (II) (ALGa7). Santiago de Compostela: Fundación Barrié.
Álvarez Blanco Rosario \& Xosé Xove. 2002. Gramática da lingua galega. Vigo: Galaxia.
Anderson, Stephen R. 2005. Aspects of the theory of clitics. Oxford: Oxford University Press.
Backley, Phillip. 2011. An introduction to element theory. Edinburgh: University of Edinburgh Press.
Bennett, Ryan \& Emily Elfner. 2019. The syntax-prosody interface. Annual Review of Linguistics 5(1). 151-171. https://doi.org/10.1146/annurev-linguistics-011718-012503.
Bermúdez-Otero, Ricardo \& Ana R. Luís. 2009. Cyclic domains and prosodic spans in the phonology of European Portuguese functional morphs. In Old world conference in phonology 6.
Bobaljik, Jonathan David. 2000. The ins and outs of contextual allomorphy. In Kleanthes Grohmann \& Caro Struijke (eds.), University of Maryland working papers in linguistics, vol. 10, 35-71.
Bonet, Eulália \& Maria-Rosa Lloret. 2005. More on alignment as an alternative to domains: The syllabification of Catalan clitics. Probus 17(1). 37-78. https://doi.org/10.1515/prbs.2005.17.1.37.
Bonet, Eulàlia, Maria-Rosa Lloret \& Joan Mascaró. 2007. Allomorph selection and lexical preferences: Two case studies. Lingua 117(6). 903-927. https://doi.org/10.1016/j.lingua.2006.04.009.
Breit, Florian. 2019. Welsh mutation and strict modularity. London: University College London dissertation.
Carstairs, Andrew. 1990. Phonologically conditioned suppletion. In Wolfgang Dressler, Hans Luschützky, Oskar Pfeiffer \& John Rennison (eds.), Contemporary morphology, New York, NY: Mouton de Gruyter.
Colina, Sonia \& Manuel Díaz-Campos. 2006. The phonetics and phonology of intervocalic velar nasals in Galician. Lingua 116(8). 1245-1273. doi:10.1016/j.lingua.2005.05.001.
Dawson, Virginia. 2017. Optimal clitic placement in Tiwa. In Proceedings of the Forty-Seventh Annual Meeting of the North East Linguistic Society, vol. 1, 243-256.
De Belder, Marijke. 2020. A split approach to the selection of allomorphs: Vowel length alternating allomorphy in Dutch. Glossa: a journal of general linguistics 5(1). https://doi.org/10.5334/gjgl.899.
Deal, Amy Rose \& Matthew Wolf. 2017. Outward-sensitive phonologically conditioned allomorphy in Nez Perce. In Vera Gribanova \& Stephanie S. Shih (eds.), The morphosyntax-phonology connection: Locality and directionality at the interface, 29-60. Oxford University Press. https://doi.org/10.1093/acprof:oso/ 9780190210304.003.0002.

Dolatian, Hossep. 2022. An apparent case of outwardly-sensitive allomorphy in the Armenian definite. Glossa: A Journal of General Linguistics 7(1). https://doi.org/10.16995/glossa.6406.
Dubert García, Francisco. 1998. A fala de santiago de compostela. estudio xeolingüístico. Santiago de Compostela: Universidade de Santiago de Compostela.
Dubert García, Francisco. 1999. Aspectos do galego de santiago de compostela. Santiago de Compostela: Universidade de Santiago de Compostela.
Dubert García, Francisco. 2001. A alomorfia do artigo definido galego á luz da fonoloxía prosódica. In Regueira Fernández, Xosé Luis \& Alexandre Veiga (eds.), Da gramáticaó diccionario. Estudios de lingüística galega, 91-105. Santiago de Compostela: Universidade de Santiago de Compostela.

Dubert García, Francisco. 2014. Syntax and word-specific phonetics: the origins of the allomorphs of the Galician definite article. Loquens 1(2). e013. https://doi.org/10.3989/loquens.2014.013.
Dubert García, Francisco. 2016. Variación e cambio na morfoloxía do artigo definido galego. Verba: Anuario Galego de Filoloxía 73.
Embick, David. 2010. Localism versus globalism in morphology and phonology (Linguistic Inquiry Monographs 60). Cambridge, MA: MIT Press.

Fernández Rei, Elisa. 2005. A dirección de clitización fonolóxica no galego actual. In Ana Isabel Boullón, Xosé Luís Couceiro \& Francisco Fernández (eds.), As tebras alumeadas. estudos filolóxicos ofrecidos ao profesor ramón lorenzo, 335-345. Santiago de Compostela: Universidade de Santiago de Compostela.
Fernández Rei, Elisa. 2012. A clitización fonolóxica en galego e en portugués brasileiro. In Xoán Carlos Lagares \& Henrique Monteagudo (eds.), Galego e português brasileiro: História, variação e mudança, 105-127. Niterói, Rio de Janeiro: Universidade Federal Fluminense.
Freixeiro Mato, Xosé Ramón. 2000a. Gramática da lingua galega, I: Fonética e fonoloxiía. Vigo: A Nosa Terra.
Freixeiro Mato, Xosé Ramón. 2000b. Gramática da lingua galega, II: Morfosintaxe. Vigo: A Nosa Terra.
Freixeiro Mato, Xosé Ramón. 2001. Manual de gramática galega. Vigo: A Nosa Terra.
García, Constantino, Antón Santamarina, Rosario Álvarez Blanco, Francisco Fernández Rei \& Manuel González (eds.). 1995. Atlas lingüístico galego, vol. 2: Morfología non verbal (ALGa2). A Coruña: Fundación Pedro Barrié de la Maza.
Martí i Girbau, Núria. 1999. En preceding direct objects in Galician: An indefiniteness marker? Catalan Working Papers in Linguistics 7. 141-158.
Gouskova, Maria \& Jonathan D. Bobaljik. To appear. Allomorphy and vocabulary insertion. In Artemis Alexiadou, Ruth Kramer, Alec Marantz \& Isabel Oltra Massuet (eds.), The Cambridge handbook of Distributed Morphology, Cambridge: Cambridge University Press.
Green, Christopher R. 2021. On the link between onset clusters and codas in Mbat (Jarawan Bantu). Natural Language \& Linguistic Theory 39(1). 97-122. https://doi.org/10.1007/s11049-020-09469-9.
Halle, Morris \& Alec Marantz. 1993. Distributed Morphology and the pieces of inflection. In Ken Hale \& Samuel Jay Keyser (eds.), The view from building 20: Essays in linguistics in honor of Sylvain Bromberger, 111-176. Cambridge, MA: MIT Press.
Harris, John \& Geoff Lindsey. 1995. The elements of phonological representation. In Jacques Durand \& Francis Katamba (eds.), Frontiers of phonology: Atoms, structures, derivations, 34-79. Harlow: Longman.
Henderson, Robert. 2012. Morphological alternations at the intonational phrase edge. Natural Language and Linguistic Theory 30(3). 741-787. doi:10.1007/s11049-012-9170-8.
Inkelas, Sharon. 2014. Morphologically derived environment effects. In The interplay of morphology and phonology, 242-280. Oxford University Press. doi:10.1093/acprof:oso/9780199280476.003.0008.
Instituto da Lingua Galega. 2020. Dicionario de pronuncia da lingua galega. https://ilg.usc.es/pronuncia.
Iosad, Pavel. 2017. Celtic mutations. In Mark Aronoff (ed.), Oxford bibliographies: Linguistics, Oxford University Press. doi:10.1093/obo/9780199772810-0146.
Iosad, Pavel. 2023. Mutation in celtic. In Peter Ackema, Sabrina Bendjaballah, Eulália Bonet \& Antonio Fábregas (eds.), The wiley blackwell companion to morphology, Wiley-Blackwell.
Kalin, Laura. 2020. Morphology before phonology: A case study of Turoyo (Neo-Aramaic). Morphology 30(3). 135-184. doi:10.1007/s11525-020-09365-3.
Kalin, Laura. 2022. Infixes really are (underlyingly) prefixes/suffixes: Evidence from allomorphy on the fine timing of infixation. Language 98(4). 641-682. doi:10.1353/lan.2022.0017.
Kastner, Itamar. 2019. Templatic morphology as an emergent property: Roots and functional heads in Hebrew. Natural Language \& Linguistic Theory 37(2). 571-619. doi:10.1007/s11049-018-9419-y.
Kaye, Jonathan, Jean Lowenstamm \& Jean-Roger Vergnaud. 1990. Constituent structure and government in phonology. Phonology 7(1). 193-231. https://doi.org/10.1017/S0952675700001184.
Kikuchi, Seiichiro. 2006. On Galician definite article allomorphy. On'in Kenkyu [Phonological Studies] 9. 41-48.
Kiparsky, Paul. 2021. Phonology to the rescue: Nez Perce morphology revisited. The Linguistic Review https://doi. org/10.1515/tlr-2021-2071.
Lipski, John M. 1975. On the velarization of N in Galician. Neuphilologische Mitteilungen 76(2). 182-191.
Loporcaro, Michele. 2000. Stress stability under cliticization and the prosodic status of Romance clitics. In Lori Repetti (ed.), Phonological theory and the dialects of italy, 137-168. Amsterdam: Benjamins.
Lowenstamm, Jean. 1996. CV as the only syllable type. In Jacques Durand \& Bernard Laks (eds.), Current trends in phonology. Models and methods, 419-441. Salford: European Studies Research Institute, University of Salford Publications.

Luís, Ana R. 2009. Patterns of clitic placement: "mixed" clitic systems. In Patience Epps \& Alexandre Arkhipov (eds.), New challenges in typology: transcending the borders and refining the distinctions, vol. 217 Trends in Linguistics: Studies and Monographs, 11-34. Berlin: Mouton de Gruyter.
McCarthy, John J. 2008. The gradual path to cluster simplification. Phonology 25. 271-319.
Nespor, Marina \& Irene Vogel. 1986/2007. Prosodic phonology. De Gruyter. https://doi.org/10.1515/ 9783110977790.

Nevins, Andrew. 2011. Phonologically conditioned allomorph selection. In Marc van Oostendorp, Colin J. Ewen, Elizabeth Hume \& Keren Rice (eds.), The Blackwell Companion to Phonology, 2357-2382. Blackwell.
Peperkamp, Sharon. 1996. On the prosodic representation of clitics. In U. Kleinhenz (ed.), Interfaces in phonology, 102-127. Berlin: Akademie Verlag.
Peperkamp, Sharon. 1997. Prosodic words. The Hague: Holland Academic Graphics.
Prince, Alan \& Paul Smolensky. 1993/2004. Optimality theory: Constraint interaction in generative grammar. Malden, MA, and Oxford: Blackwell. Revision of 1993 technical report, Rutgers University Center for Cognitive Science. ROA 537.
Regueira, Xosé Luís. 1996. Galician. Journal of the International Phonetic Association 26(2). 119-122. https://doi. org/10.1017/S0025100300006162.
Revithiadou, Anthi \& Giorgos Markopoulos. 2021. A gradient harmonic grammar account of nasals in extended phonological words. Catalan Journal of Linguistics 20. 57-75. doi:10.5565/rev/catj1.330. https://doi. org/10.5565/rev/catj1.330.
Rodríguez Guerra, Alexandre. 1997. Aspectos da transitividade galega: os complementos con 'en'. In Benigno Fernández Salgado (ed.), Actas do iv congreso internacional de estudios galegos, vol. 1, 343-352. Oxford: Centre for Galician Studies.
Rolle, Nicholas. 2019. In support of an OT-DM model: Evidence from clitic distribution in Degema serial verb constructions. Natural Language and Linguistic Theory.
Royer, Justin. 2021. Prosody as syntactic evidence. Natural Language \& Linguistic Theory https://doi.org/10.1007/ s11049-021-09506-1.
Scheer, Tobias. 2004. A lateral theory of phonology, vol. 1: What is CVCV and why should it be? Berlin/New York: De Gruyter. https://doi.org/10.1515/9783110908336.
Scheer, Tobias. 2012. A lateral theory of phonology, vol. 2: Direct interface and one-channel translation. A nondiacritic theory of the morphosyntax-phonology interface. Berlin: de Gruyter.
Selkirk, Elisabeth. 1995. The prosodic structure of function words. In Jill Beckman, L. Dickey \& Suzanne Urbanczyk (eds.), University of massachusetts occasional papers 18, 439-470.
Stanton, Juliet. 2021. Allomorph selection precedes phonology: Evidence from the Yindjibarndi locative. Natural Language \& Linguistic Theory doi:10.1007/s11049-021-09531-0.
Tyler, Matthew. To appear. The case OCP in Choctaw. Glossa: A journal of general linguistics.
Tyler, Matthew \& Itamar Kastner. 2023. Serial verb constructions and the syntax-prosody interface. Natural Language \& Linguistic Theory 40(1). 285-306. https://doi.org/10.1007/s11049-021-09507-0.
Ulfsbjorninn, Shanti. 2020. Segment-zero alternations in Galician definite article allomorphy. Acta Linguistica Academica 67(1). 155-170. https://doi.org/10.1556/2062.2020.00011.
Uriagereka, Juan. 1995. Aspects of the syntax of clitic placement in Western Romance. Linguistic Inquiry 26(1). 79-123.
Uriagereka, Juan. 1996. Determiner clitic placement. In Robert Freidin (ed.), Current issues in comparative grammar Studies in Natural Language and Linguistic Theory, 257-295. Dordrecht: Springer. https://doi. org/10.1007/978-94-009-0135-3_13.
Wolf, Matthew. 2008. Optimal Interleaving: Serial phonology-morphology interaction in a constraint-based model. Amherst, MA: University of Massachusetts dissertation.

[^8]
[^0]:    ${ }^{1}$ Galician contrasts $/ \mathrm{e} / \sim \varepsilon /$ and $/ \mathrm{o} / \sim / 0 /$, although this contrast is usually not obvious from the orthography (Regueira 1996, Freixeiro Mato 2000a, Álvarez Blanco \& Xove 2002). IPA transcriptions are based on grammars and pronunciation dictionaries.

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[^2]:    ${ }^{2}$ The first nasal in a cluster assimilates, otherwise it velarizes (Lipski 1975, Colina \& Díaz-Campos 2006): [n]o [ $\mathrm{\eta}]$ 'no', me[n]tres 'during', $e[\mathrm{n}][\mathrm{n}]$ obrecer 'ennoble' (Instituto da Lingua Galega 2020: 22175), ma[ $\mathrm{\eta}] g a$ 'sleeve', $e[\mathrm{~m}]$ viar 'send', $i[\mathrm{n}]$ humano 'inhuman'. Thanks to Ricardo Bermúdez-Otero and a reviewer for discussion and examples.

[^3]:    ${ }^{3}$ The indefinite singular masculine article, for example, is un /uy/ (feminine unha /uya/), not *uno.

[^4]:    ${ }^{4}$ Non-canonical contractions with de depend on prosodic and prescriptive factors that are beyond our current scope. See, for instance, the following video: https://digochoeu.gal/videos/digochoeu-non-escribas-dali/

[^5]:    ${ }^{5}$ An additional point of interest is that especially in rapid speech, a light element might end up affixed to an $n$ final element in a way that seems to counterbleed velarization: [nin $[0$ amigo $]$ ] 'nor the friend' $\rightarrow n i[\mathrm{y}]=\mathrm{o}$ amigo, where the negation originates higher in the clause. This interaction of syntactic and prosodic domains must await future work.

[^6]:    ${ }^{6}$ This part of the account is not meant to be controversial, although there are fruitful lines of work that compute phonology and morphology in parallel (McCarthy 2008, Wolf 2008, Rolle 2019). See Embick (2010), Kastner (2019), De Belder (2020), Kalin (2020, 2022), Stanton (2021) and Tyler \& Kastner (2023) for critical discussion.

[^7]:    ${ }^{7}$ Some dialects do allow other contractions: non o vin $\rightarrow$ \% no vin 'I didn't see him', non as comín $\rightarrow$ \%nas/noas comin 'I didn't eat them.F'. Thanks to Francisco Dubert García (p.c.) for discussion.

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