Mutation, allomorphy and Galician clitics[1]

ITAMAR KASTNER

University of Edinburgh

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.

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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).[2]

(1) ***o***$_{\text{DEF}}$ *pan* [**o** paŋ]
'the bread'

(2) a. *como* ***o***$_{\text{DEF}}$ *pan* [komo **o** paŋ] / [komo**o** paŋ]
'I eat the bread'

b. *como****o***$_{\text{OBJ}}$ [komo**o**]
'I eat it'

Codas are fairly restricted in Galician: only /l/, /n/, /r/ and /s/ are possible; /n/ velarizes to [ŋ] in a number of environments, the most relevant of which is word-final.[3] When DEF/OBJ follows a preposition or verb with these codas it cliticizes onto them, whereby /n/-final hosts do not undergo the regular word-final

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2. Galician contrasts /e/~/ɛ/ and /o/~/ɔ/, 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.

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

velarization, (3), and /r/- or /s/-final hosts change to /l/, (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* [ˈkɔmeŋ]
'they eat'
b. *comen* o_{DEF} *pan* [ˈkɔme**no** paŋ]
'they eat the bread'
c. *cómeno*$_{\text{OBJ}}$ [ˈkɔme**no**]
'they eat it'

(4) a. *comer* [koˈme**r**]
'eat.INF'
b. *(por) comelo*$_{\text{DEF}}$ *pan* [koˈme**lo** paŋ] (*%comero pan*)
'to eat the bread'
c. *(por) comelo*$_{\text{OBJ}}$ [koˈme**lo**] (*%comero*)
'to eat it'

(5) a. *comes* [ˈkɔme**s**]
'you eat'
b. *(ti) cómelo*$_{\text{DEF}}$ *pan* [ˈkɔme**lo** paŋ] (*%cómeso pan*)
'you eat the bread'
c. *(ti) cómelo*$_{\text{OBJ}}$ [ˈkɔme**lo**] (*%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).

(6) a. queres ver o_{OBJ} → queres + o_{OBJ} + ver → *quere**l**o*$_{\text{OBJ}}$ *ver*
want.2SG see.INF OBJ.SG.M
'you want to see it'
b. non toque o_{OBJ} → non + o + toque → *no*[n]=[o] *toque*
NEG touch.SBJ OBJ.SG.M
'don't touch that'

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 -O, -LO and -NO, abstracting away from gender and number.[4] These alternations are

4. The indefinite singular masculine article, for example, is *un* /uŋ/ (feminine *unha* /uŋa/), not **uno*.

discussed at length in the Galician philological literature (Álvarez Blanco 1983, Freixeiro Mato 2000a, b, 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)

	MASC	FEM
Singular	*o/lo/no*	*a/la/na*
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 /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 (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, OBJ is too weak

prosodically to host other elements and *must* cliticize onto a host.

2.1. DEF *hosts light P,* OBJ *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 *de* 'from' and *en* 'in', (8)–(9). They attach to all vowel-initial D hosts except OBJ and retain only their first consonant upon cliticization.

(8) a. *de Alba* 'of Alba' (*%dalba*)[5]
b. *de* + *aquel* 'of that' → *daquel*
c. *de* + *ela* 'of her' → *dela*

(9) a. *en Escocia* 'in Scotland' (**nescocia*)
b. *en* + DEF 'in the' → *no/na/nos/nas*
c. *en* + *este* 'in this' → *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*$_{\text{DEF}}$ *nenas* 'than the girls'
c. *ca este* 'than this' (**caste*)

(11) *a* 'to'

a. *a o*$_{\text{DEF}}$ *neno* [a o neno] 'to the boy' → *ó*$_{\text{DEF}}$ *neno* [ɔ neno] (Instituto da Lingua Galega 2020: 40382,40386)
b. *a as*$_{\text{DEF}}$ *nenas* [a as nenas] 'to the girls' → *ás*$_{\text{DEF}}$ *nenas* [aːs 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' → *co* [ko] *neno* (Instituto da Lingua Galega 2020: 12985)
b. *con a*$_{\text{DEF}}$ *nena* → *coa* [koa] (Instituto da Lingua Galega 2020: 12987)
c. *con este* 'with this' (*%coeste*)

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*, *ca*, *de*, *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

5. 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/

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_{DEF} + *futuro* → *pensar* no_{DEF} *futuro* 'to think about the future'
b. *pensar* + *en* + *iso* → *pensar niso* 'thinking about that'
c. **pensar en* o_{OBJ} 'thinking about it'
d. **pensar* no_{OBJ} 'thinking about it'

(14) a. *ca* + os_{OBJ} 'than the' ≠ *cos_{OBJ}
b. *a* + o_{OBJ} 'to the' ≠ *$ó_{\text{OBJ}}$

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 *me*/*che*/*lle* cliticize onto the verb. The definite article can stand on its own, or it can contract with the dative clitic, especially in rapid speech (see also Dubert García 2014: 2):

(15) a. *ela díxo= che algo* → *ela díxo**che** algo*
she told to.you something
'She told you something.'
b. *ela díxo**che*** $\boldsymbol{o}_{\text{DEF}}$ *seu nome*
'She told you her name.'
c. *ela díxo**cho***$_{\text{DEF}}$ *seu nome*
'She told you her name.'

But dative clitics must contract with OBJ (Dubert García 2001):

(16) a. *ela* + *díxo* + *che* + o_{OBJ} → *ela díxo**cho***$_{\text{OBJ}}$ 'She told you that.'
b. **ela díxoche* $\boldsymbol{o}_{\text{OBJ}}$

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_{DEF} *pan* 'he/she ate the bread' → *comeu* ***o***$_{\text{DEF}}$ *pan*
b. OBJ: *comeu* + o_{OBJ} 'he/she ate it' → *comeu****no***$_{\text{OBJ}}$

What seems to matter here is not the string of vowels or hiatus as such, but syllabification. This inserted /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 /j/ in (19) are not legal onsets.

(18) Two vowels in one syllable, illicit /w/ onset, /n/:

a. Preterite, *comeu* + OBJ → [ko.mew]=OBJ → [ko.m**ew.n**o$_{\text{OBJ}}$] 'ate.3SG=it' (✗ [ko.me.wo$_{\text{OBJ}}$])
b. Present, *estou* + OBJ *escribindo* → *es.t**ou.n**o*$_{\text{OBJ}}$ 'am.1SG=it writing' (✗ [es.to.wo$_{\text{OBJ}}$])

(19) Two vowels in one syllable, illicit /j/ onset, /n/: Present or imperative singular, *fai*=***no***$_{\text{OBJ}}$ 'do=it' (✗ [fa.jo])

(20) Three vowels across two syllables, licit onset, no /n/: Imperfect, *comía* + OBJ → [ko.mi.a]=o$_{\text{OBJ}}$ → [ko.m**i.ao**$_{\text{OBJ}}$] 'ate.3SG=it'

This phenomenon is a kind of derived environment effect (e.g. Inkelas 2014) in that /n/-insertion only happens upon cliticization. These onsets are licit within roots (*faio* 'attic') and suffixed non-cliticized verbs (*cae* + $o_{1\text{SG}}$ → *caio* 'I fall'). I am not aware of other cases in which /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 1SG 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 /n/ as a phonological repair.

Taking together the data seen so far, a number of contrasts between DEF and OBJ can be traced to their prosodic size: OBJ 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	✓	✓	N/A
Host for P→D contraction	✗	✓	✓
Clitic cluster feeding contraction	✓	✓/✗	✗
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 [ŋ] is simply not created; there is no need for a separate -no allomorph of DEF (Fernández Rei 2012).

(22) /n/ → [ŋ] / ___#

Now let us address /n/-insertion. This happens when VV=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.[6]

(23) $X_V Y_V \rightarrow [XYn] / .\_\_\_=V$

The allomorphy-like process rests on the intuition that stem-final /r/ and /s/ change to [l] 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, To appear) 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:

(24)

/s/	/r/	DEF/OBJ	/l/
+ cons	+ cons	+ cons	+ cons
− son	+ son	+ son	+ son
− lat	− lat	+ lat	+ lat
− nasal	− nasal	− nasal	− nasal
+ cor	+ cor	] o	+ cor
+ strident	...		...
...			

6. 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* [*o amigo*]] 'nor the friend' → *ni*[ŋ]=o *amigo*, where the negation originates higher in the clause. This interaction of syntactic and prosodic domains must await future work.

The third column reconceives of DEF as a floating subsegmental bundle concatenated with the segmental clitic. When this floating bundle docks onto /s/ or /r/, it will have the effect of overwriting their [sonorant] and [lateral] values, turning them both into [l]. The other two possible codas in the language are /n/ and vowels. For /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:

(25) a. DEF $\leftrightarrow \begin{bmatrix} + & \text{cons} \\ + & \text{son} \\ + & \text{lat} \\ - & \text{nasal} \end{bmatrix}_{\text{O}}$

b. Wants to cliticize onto a host, but is heavy enough to be a host:
$(\sigma=)\text{DEF}]_{\text{PWd}}$

The direct object article clitic must cliticize, and is composed of the same floating features and -o:

(26) a. OBJ $\leftrightarrow \begin{bmatrix} + & \text{cons} \\ + & \text{son} \\ + & \text{lat} \\ - & \text{nasal} \end{bmatrix}_{\text{O}}$

b. Has to cliticize:
$\sigma=\text{OBJ}]_{\text{PWd}}$

What this formalization does is to allow DEF/OBJ to be neither -o nor -LO underlyingly, but to have properties of both, owing to the relative similarity of /s/ and /r/ to /l/. 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 /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

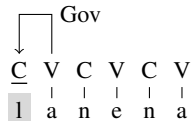
Working within Strict CV theory (Lowenstamm 1996, Scheer 2004), a variant of Government Phonology (Kaye et al. 1990), Ulfsbjorninn (2020) proposes an analysis of DEF which aims to preserve "modularity": phonological operations should not reference morphological information (following Scheer 2012). The 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 ⟨*l*⟩*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.

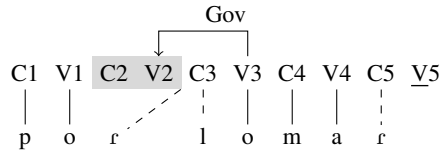
For -O, the floating /l/ is silenced under Government by the following V slot:

(30) *a nena* 'the girl' (< **la nena*)



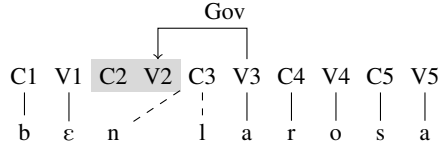
For -LO, the floating /l/ and the preceding /r/ or /s/ end up being linked to the same C slot. Element Theory (Harris & Lindsey 1995, Backley 2011) is implemented such that coalescence of /r/ and /l/, but even of /s/ and /l/, results in [l] (compare this part of the analysis with the floating features 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 /l/ results in [n], not [ŋ]:

(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 *ko*-ŋ with an unfixed final C, although that might wrongly predict [koː] instead of [ko].

Specifics aside, what's important for our overarching question is that /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: /{-o,-lo} nena/ 'the girl'

a. -O > -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.

(34)

	/ver {-o,-LO}/	OCP	ALIGN	PRIORITY	MAX
	a. ve.r#a		*!		
	b. ver.#la	*!		*	
☞	c. ve.#la			*	*

This *competition* account makes two incorrect predictions. Kikuchi (2006) does not discuss the candidate *ve.#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 {-o,-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.[7] 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:

(35) DEF/OBJ ↔

a. -LO / {r,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 submitted); 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.

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7. 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.

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 /n/ appears only in order to fix syllabification. When the clitic cluster is preverbal, /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.

(36) *Xa* {✓o_{OBJ} / ✗*no*$_{\text{OBJ}}$} *comeu*
'He/she ate it already.'

Second, OBJ 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 OBJ 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.

(37) a. [*ven* [$_{PP/DP}$ *a* *Rosa*] → *(ve*ŋ*) (a*$_{\text{DOM}}$ *rosa), *vena*$_{\text{DOM}}$
see.3PL DOM Rosa
'They see Rosa.'

b. [*ver* [$_{PP/DP}$ *a* *Rosa*] → *(ver) (a*$_{\text{DOM}}$ *rosa), *vela*$_{\text{DOM}}$
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 /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*[ŋ ew], rather than *tame*[no]). The second is a fixed phrase with particular information-structural properties (Álvarez Blanco et al. 2020: 206).[8]

8. Some dialects do allow other contractions: *non o vin* → *%no vin* 'I didn't see him', *non as comín*

(38) *tamén eu o_{OBJ} dixen*
also 1SG OBJ said.1SG
'I also said so.'

(39) *dio=lo_{OBJ} pague*
dios o_{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:

(40) DEF ↔

a. -NO / n ___, and delete the first /n/
b. -LO / {r,s} ___, and delete the first /r/ or /s/
c. -O

(41) OBJ ↔

a. -NO / VV ___
b. -LO / {r,s} ___, and delete the first /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 /n/ of -NO and the /n/ of /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?

→ *%nas/noas comín* 'I didn't eat them.F'. Thanks to Francisco Dubert García (p.c.) for discussion.

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_{DEF} *pan* might say *%comeuo*$_{\text{OBJ}}$ rather than *comeuno*$_{\text{OBJ}}$ (García et al. 1995). These patterns are to be expected if "allomorphic" -NO is not the same as the /n/ inserted to repair OBJ diphtongs. Similarly, speakers in some regions who retain -o in *%come*[ŋ] o_{DEF} *pan* do say *comeuno*$_{\text{OBJ}}$. 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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