

Prosodically-driven morpheme non-realization in the Minorcan Catalan DP as evidence for left-edge Strong Start

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1. INTRODUCTION

- This paper describes and analyzes a case of prosodically-driven morpheme non-realization found in the Minorcan Catalan DP which has not been documented nor accounted for in the previous literature.
- We show how the cases under scrutiny, which cannot be accounted allomorphically, shed new light on the nature and the typology of morphoprosodic alignment and morpheme realization constraints, on the phonology-morphosyntax interface and, hence, on the architecture of grammar.
- Kinship restrictive appositive phrases in Minorcan Catalan:

(1)

a. *Es conco en Toni*

[əs.kòŋ.ku.n.tó.ni]

the-DEF.ART.M uncle **the-PERS.ART.M** Toni
'uncle Toni'

b. *Es conco Àngel*

[əs.kòŋ.ku.án.ʒəl]

the-DEF.ART.M uncle Àngel
'uncle Àngel'

→ Unexpected behavior from a strictly syllabic point of view (“antimarkedness”)

Preconsonantal coda: [əs.kòŋ.ku.n.tó.ni]

An onset-less syllable and a hiatus: [əs.kòŋ.ku.án.ʒəl]

- Distribution of the suffixal determiner allomorphs *-la* and *-a* in Haitian (Klein 2003, Bonet *et al.* 2007)

→ Classic example of “antimarkedness”

(2) Consonant and glide final stems

a. /malad/	'sick'	[malad+la]	'the sick (person)'	* ma.la.d+a
b. /liv/	'book'	[liv+la]	'the book'	* li.v+a
c. /bagaj/	'thing'	[bagaj+la]	'the thing'	
d. /kaw/	'crow'	[kaw+la]	'the crow'	

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(3) Vowel final stems

a. /papa/	‘father’	[papa+a]	‘the father’	* pa.pa.+la
b. /bujwa/	‘kettle’	[bujwa+a]	‘the kettle’	* buj.wa.+la
c. /papje/	‘paper’	[papje+ja]	‘the paper’	
d. /lapli/	‘rain’	[lapli+ja]	‘the rain’	
e. /bato/	‘boat’	[bato+wa]	‘the boat’	
f. /tu/	‘hole’	[tu+wa]	‘the hole’	

Why not *ma.la.d+a, *li.v+a?

Why not *pa.pa.+la, *buj.wa.+la?

Answers:

- Right alignment between the edge of the stem and the edge of the syllable (Klein 2002)
- Lexical priority: $\{-a_1, -la_2\}$ (Bonet *et al.* 2007: 912)
- R-ALIGN >> PRIORITY (Bonet *et al.* 2007: 912)

(4a) Selection of the allomorph with priority: $-a$ (PRIORITY >> ONSET)

/papa- $\{a>la\}$ /	R-ALIGN	*C.V	PRIOR	ONS	DEP
a. papa.la			*!		
☞ b. papa.a				*	

(4b) Selection of the allomorph with no priority: $-la$ (*C.V >> PRIORITY)

/liv- $\{a>la\}$ /	R-ALIGN	*C.V	PRIOR	ONS	DEP
☞ a. liv.la			*		
b. liv.a		*!		*	
c. li.va	*!				

→ Unexpected behavior from a prosodic point of view?

Why not [əs.kòŋ.ku.nán.ʒəl]?

Answer:

- **StrongStart** (Selkirk 2011: 470): “beginnings of prosodic units are strong”
- Cross-linguistic evidence (see Itô & Mester 2019):

- A. Postposing of initial weak elements:
- Clitics are often banned from first position and appear in peninitial second position (Wackernagel 1892)
 - Clitics are moved to a position later in the sentence, as in Bulgarian (Harizanov 2014) and Irish (Bennett, Elfner and McCloskey 2016: 171).
- B. Deletion of initial weak elements:
- Initial weak syllables can be deleted in English: ~~Have you~~ got milk? or ~~It's a nice~~ day today (Weir 2012).
 - Initial weak syllables can be deleted in German: ~~Ich~~ hab das schon gelesen '(I) have already read it' or ~~Das~~ hab ich schon gelesen. '(that) have I already read'.

(5) Infixation of *-rn-* ('instrument') in Kamhmu? (Anderson 2005)

hrniip	'spoon'	cf. hiip 'eat with spoon'
crnok	'gouging instrument'	cf. cok 'to gouge'

2. GOALS, CLAIM AND SUMMARY OF THE PROPOSAL

- The specific purpose of this paper is to identify the factors explaining the asymmetry between morpheme realization and morpheme non-realization in these kinship appositive phrases of the Minorcan Catalan DP, which we believe are **essentially prosodic**, and to show that they can be formalized straightforwardly within a parallel and global OT framework through the interaction of an unprecedented refined version of alignment between prosodic and lexical categories (McCarthy & Prince 1993, Selkirk 1996/2004; Prince & Smolensky 1993/2004) with morpheme realization constraints (see Kurisu 2001, Selkirk 2001, Wolf 2008, among others).
- Our analytical proposal, largely inspired by Selkirk's (1996, 2001, 2011) works, is sustained by three interrelated formal mechanisms.
 - A particular interpretation of the alignment constraints proposed within the Generalized Alignment theory (McCarthy & Prince 1993), which, following Selkirk's work (1996), discards any reference to functional categories in the formulation of the alignment constraints.
 - An unprecedented refinement of the alignment constraints which crucially relaxes their formulation by targeting just the edge of one of the categories to be aligned.
 - The interaction of these alignment constraints with morpheme realization constraints, relativized according to the syntactic hierarchical position of the involved morphemes (Kurusu 2001, Selkirk 2001, Wolf 2008).
- Our approach to alignment is not only crucial to explain the data under consideration, but also independent data drawn from other languages with similar effects, and can be understood as a **formal alternative** to existing proposals aimed at capturing the tendency of beginnings of prosodic units to be strong (Selkirk 2011, Bennett *et al.* 2016, Itô & Mester 2019).

3. DATA

3.1. The behavior of the personal article outside kinship appositive phrases

(6) Personal article paradigm

a. Masculine personal name starting with a consonant

en Toni [ə**n**.tó.ni]

the-PERS.ART.M Toni ‘Toni’

b. Masculine personal name starting with a vowel

n’ Ignasi [n**i**n.ná.zi]

the-PERS.ART.M Ignasi ‘Ignasi’

c. Feminine personal name starting with a consonant

na Catalina [nə.kə.tə.lí.nə]

the-PERS.ART.F Catalina ‘Catalina’

d. Feminine personal name starting with a vowel

n’ Àngela [nán.ʒə.lə]

the-PERS.ART.F Àngela ‘Àngela’

- The personal article precedes the personal name in almost all functions developed by the noun phrase (Brucart 2002: 1477):
 - Subject, as in **En** Joan *ha dinat a casa*, ‘Joan has had lunch at home’.
 - Direct object, as in *M’ha dit que no havia vist en* Joan, ‘S/he told me s/he had not seen John’.
 - Attribute, as in *Aquest noi que ha vingut és en* Joan, ‘This boy that came is John’.
 - Etc.
- The **only exceptions** in which the personal article does not precede the personal name are (Brucart 2002: 1477):
 - Vocatives, which in present Catalan varieties are incompatible with the occurrence of the personal article: Joan, *vine!*, ***En** Joan, *vine!*, ‘Joan, come!’; *Què vols*, Joan?, **Què vols*, **en** Joan?, ‘What do you want, Joan?’
 - Forms of address, which do not allow either the occurrence of the personal article before the personal name in most Catalan varieties: L’oncle Joan *s’ha jubilat*, *L’oncle **en** Joan *s’ha jubilat*, ‘Uncle Joan has retired’; L’avi Pasqual *ha sortit a passejar*, *L’avi **en** Pasqual *ha sortit a passejar*, ‘Grandfather Pasqual went out for a walk’; El president Martí *ha dimitit*, *El president **en** Martí *ha dimitit*, ‘President Martí has resigned’
 - Postadjectival position: *Pobre Joan!*, **Pobre en* Joan!, Poor Joan! (Brucart 2002: 1477).

3.2. The behavior of the personal article in kinship restrictive appositive phrases

(7) *Constructions with conco ‘uncle’ followed by a masculine personal name*

a. *Consonant-initial masculine personal name*

es	conco	en	Toni	[əs.kòŋ.ku n .tó.ni]
es	conco	en	Rafel	[əs.kòŋ.ku n .rə.fél]
es	conco	en	Pere	[əs.kòŋ.ku m .pé.rə]
the-DEF.ART.M	uncle	the-PERS.ART.M	Toni, Rafel, Pere	
‘uncle Toni’, ‘uncle Rafel’, ‘uncle Pere’				

b. *Vowel-initial masculine personal name*

es	conco		Àngel	[əs.kòŋ.ku.án.ʒəl]
es	conco		Ernest	[əs.kòŋ.kur.nést]
es	conco		Ignasi	[əs.kòŋ.kujn.ná.zi]
the-DEF.ART.M	uncle		Àngel, Ernest, Ignasi	
‘uncle Toni’, ‘uncle Rafel’, ‘uncle Pere’				

(8) *Constructions with avi ‘grandfather’ followed by a masculine personal name*

a. *Consonant-initial masculine personal name*

l’	avi	en	Toni	[là.vi n .tó.ni]
l’	avi	en	Rafel	[là.vi n .rə.fél]
l’	avi	en	Pere	[là.vi m .pé.rə]
the-DEF.ART.M	grandfather	the-PERS.ART.M	Toni, Rafel, Pere	
‘grandfather Toni’, ‘grandfather Rafel’, ‘grandfather Pere’				

b. *Vowel-initial masculine personal name*

l’	avi		Àngel	[là.vi.án.ʒəl]
l’	avi		Ernest	[là.vir.nést]
l’	avi		Ignasi	[là.vin.ná.zi]
the-DEF.ART.M	uncle		Àngel, Ernest, Ignasi	
‘grandfather Àngel’, ‘grandfather Ernest’, ‘grandfather Ignasi’				

(9) *Constructions with amo ‘owner’ followed by a masculine personal name*

a. *Consonant-initial masculine personal name*

l’	amo	en	Toni	[là.mu n .tó.ni]
l’	amo	en	Rafel	[là.mu n .rə.fél]
l’	amo	en	Pere	[là.mu m .pé.rə]
the-DEF.ART.M	owner	the-PERS.ART.M	Toni, Rafel, Pere	
‘owner Toni’, ‘owner Rafel’, ‘owner Pere’				

b. *Vowel-initial masculine personal name*

l’	amo		Àngel	[là.mu.án.ʒəl]
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l'	amo	Ernest	[là.mur.nést]
l'	amo	Ignasi	[là.muɣn.ná.zi]
the-DEF.ART.M	owner	Àngel, Ernest, Ignasi	
'owner Àngel', 'owner Ernest', 'owner Ignasi'			

(10) Constructions with personal names borrowed from Spanish

a. <i>Consonant initial masculine personal name</i>	b. <i>Vowel initial masculine personal name</i>
es conco en Pedro [əs.kòŋ.kum.pé.ðro]	es conco Ilario [əs.kòŋ.kuj.la.rjo]
es conco en Julio [əs.kòŋ.kuɣ.ú.ljo]	es conco Eduardo [əs.kòŋ.ku.ðwar.ðo]
es conco en Paco [əs.kòŋ.kum.pá.ko]	es conco Andrés [əs.kòŋ.kun.drés]

(11) Constructions with a feminine personal name

a. Consonant-initial feminine personal name

sa	tia	Catalina	[sə.tì.ə.kə.tə.lí.nə]
the-DEF.ART.F	aunt	Catalina	'aunt Catalina'
s'	àvia	Catalina	[sà.vjə.kə.tə.lí.nə]
the-DEF.ART.F	grandmother	Catalina	'grandmother Catalina'

b. Vowel-initial feminine personal name

sa	tia	Amparo	[sə.tì.əm.pá.ro]
the-DEF.ART.F	aunt	Amparo	'aunt Amparo'
s'	àvia	Amparo	[sà.vjəm.pá.ro]
the-DEF.ART.F	grandmother	Amparo	'grandmother Amparo'

3. REPRESENTATIONAL ASSUMPTIONS

3.1. Prosodic representations

The prosodic representations that we assume for the reported structures are those of (12), in which the prosodization that we propose for each lexical and functional element is indicated between parenthesis and subindexed to the right, and the type of category (functional or lexical) involved in each case is subindexed to the left.

(12) Based on Peperkamp (1997), Selkirk (1996)

a. <i>es conco</i> /s+Ø#konk+u/ DEF.ART.M conco (Func _{ES} (Lex _{CONCO})PW _d)PPh (Func _{ES} .(kóŋ.ku.)PW _d)PPh	b. <i>en Jaume</i> /n+Ø#zawm/ PERS.ART.M Jaume (Func _{en} (Lex _{Jaume})PW _d)PPh (Func _{en} .(záw.mə)PW _d)PPh
c. <i>l'avi</i> /l+Ø#avi/ DEF.ART.M avi ((Func _{l'avi})PW _d)PPh ((Func _{l'á.vi})PW _d)PPh	d. <i>n'Àngel</i> /n+Ø#anzəl/ PERS.ART.M Àngel ((Func _{n'Àngel})PW _d)PPh ((Func _{nán.zəl})PW _d)PPh

<p>e. <i>Es conco en Jaume</i> /s+Ø#konk+u##n+Ø#zawm/ DEF.ART.M conco PERS.ART.M Jaume (FuncES (LexCONCO en)_{PWd} (LexJaume)_{PWd})_{PPh} (əs.(kòŋ.kun.)_{PWd} (zǎw.mə)_{PWd})_{PPh}</p>
<p>f. <i>L'avi en Jaume</i> /l+Ø#avi##n+Ø#zawm/ DEF.ART.M avi PERS.ART.M Jaume ((FuncI'avi en)_{PWd} (LexJaume)_{PWd})_{PPh} ((là.vin.)_{PWd} (zǎw.mə)_{PWd})_{PPh}</p>
<p>g. <i>Es conco Àngel</i> /s+Ø#konk+u##n+Ø#anzəl/ M.DEF.ART conco M.PERS.ART Àngel (FuncES (CONCO)_{PWd} (Àngel)_{PWd})_{PPh} (əs.(kòŋ.ku.)_{PWd} (án.zəl)_{PWd})_{PPh}</p>
<p>h. <i>L'avi n'Àngel</i> /l+Ø#avi##n+Ø#anzəl/ M.DEF.ART avi M.PERS.ART Àngel ((FuncI'avi)_{PWd} (Àngel)_{PWd})_{PPh} ((là.vi.)_{PWd} (án.zəl)_{PWd})_{PPh}</p>

3.2. Syntactic representations

- From a morphosyntactic and semantic point of view, the kinship appositive phrases under study in this paper can be categorized as **polydefinite DP constructions**, similar to those found in Greek:

(13) Polydefinites in Greek (Alexiadou 2014, Alexiadou & Wilder 1998)

to ksilino to trapezi
 the-DEF.ART wooden the-DEF.ART table
 'the wooden table'

Tsiakmakis *et al.* (2021):

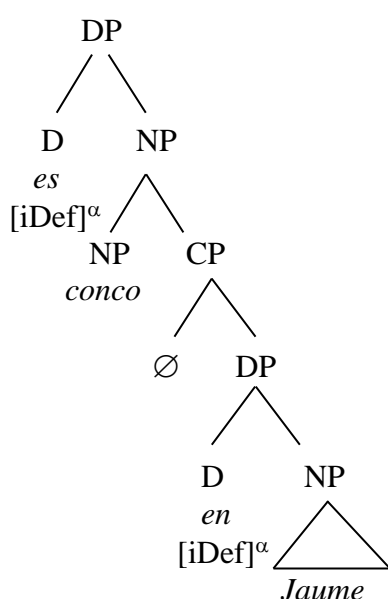
- Greek polydefinite constructions differ from monodefinitive constructions in displaying **doubling of the definite determiner**, and show the following core properties:
 - The whole polydefinite DP makes reference to a **single entity** (Lekakou & Szendrői 2012), so they contain definite determiners that do not independently introduce iota functions.
 - A **predicative** source is generally identified in the adjectives that arise as the articulated modifiers (Alexiadou & Wilder 1998), although they are **ambiguous between a predicate modifying and a nominal modifying interpretation** (Larson, 1995, 1998)
 - The adjectives generally function as a **restrictive modifier** (Kolliakou 1995, 2004), and they have a colloquial status.

All these properties are, in fact, found in the constructions under study, the only difference being the doubling of definiteness in a definite article and a personal article, instead in two definite articles, and the presence of two nouns, instead of a noun and an adjective.

Previous generative proposals differ in the syntactic representation for these type of structures (Tsiakmakis *et al.* 2021):

- Some propose a bi-DP flat structure (Lekakou & Szendrői 2007, 2012; Velegrakis, 2011).
- Some others propose a structure involving a predication relation (Campos & Stavrou 2004, Ioannidou & den Dikken 2006, Panagiotidis & Marinis 2011, Guardiano & Stavrou 2019).
- Some others argue for a structure involving a **restrictive relative clause substructure** (Alexiadou & Wilder 1998; Cinque 2010; Alexiadou 2014; Giusti 2015; Tsiakmakis *et al.* 2021).

(13) Polydefinites as reduced restrictive relative clauses (adapted from Tsiakmakis *et al.* 2021)



Crucial for our analysis:

- The definite article and the personal article have the same referent, represented in (13) by [iDef]^α.
- The first determiner, *i.e.* the definite article, occupies a higher position in the DP than the second determiner, *i.e.* the personal article, so that the former C-commands the second.

4. ANALYSIS

(14) *Relevant basic constraints*

a. *Morphoprosodic constraint*

- ALIGN(PWd, L; Lex): Assign one violation mark for every left edge of a prosodic word that is not aligned with a lexical category. (This penalizes the presence of a functional category at the left edge of the prosodic word.) (See McCarthy & Prince 1993, Selkirk 1996/2004.)

b. *Syllable structure constraints*

- ONSET: Assign one violation mark for every onset-less syllable (see Prince & Smolensky 1993).
- *C.V: Assign one violation mark for every consonant syllabified in the coda followed by a vowel (see Prince & Smolensky 1993, Klein 2003, Bonet *et al.* 2007).

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c. Constraints on morph(eme) realization

- MAX-Det(high): For every determinant at the morpheme level associated to a high (prominent) syntactic position in the DP, assign a violation mark if there is not a realization of such determinant at the morph level (adapted from Wolf 2008).
- MAX-Det: For every determinant at the morpheme level, assign a violation mark if there is not a realization of such determinant at the morph level (adapted from Wolf 2008).

(15) Effects of the constraints

	MAX-Det (high)	ALIGN (PWd, L; Lex)	*C.V
a. <i>Es conco en Jaume</i> (Func \emptyset S.(Lexkòŋ.kun.)PWd (Lexzàw.mə)PWd)PPh	✓	✓	✓
b. * <i>Es conco n'Àngel</i> (Func \emptyset S.(Lexkòŋ.kun.)PWd (Lexán.zəl)PWd)PPh	✓	✓	✗
c. * <i>Es conco n'Àngel</i> (Func \emptyset S.(Lexkòŋ.ku.)PWd (Funcnán.zəl)PWd)PPh	✓	✗	✓
d. <i>Es conco Àngel</i> (Func \emptyset S.(Lexkòŋ.ku.)PWd (Lexán.zəl)PWd)PPh	✓	✓	✓
e. ((Funclá.vi)PWd)PPh	✓	✗	
f. ((Funcnán.zəl)PWd)PPh	✓	✗	
g. *((Lexá.vi)PWd)PPh	✗	✓	
h. *((Lexán.zəl)PWd)PPh	✗	✓	

(16) Constraint sub-hierarchy for isolated constructions in Minorcan Catalan

MAX-Det(high) >> ALIGN(PWd, L; Lex) >> MAX-Det >> ALIGN(PPh, L; Lex)

(17) Isolated constructions of personal article + personal name: *en Jaume, n'Àngel, na Catalina*

	MAX-Det (high)	ALIGN (PWd, L; Lex)	MAX-Det	ALIGN (PPh, L; Lex)
<i>i. /n+Ø#zawm/ PERS.ART.M Jaume</i>				
☞ a. ((ən.(zàw.mə)PWd)PPh				*
b. ((zàw.mə)PWd)PPh	*!		*	
<i>ii. /n+Ø#anzəl/ PERS.ART.M Àngel</i>				
☞ a. ((nán.zəl)PWd)PPh		*		*
b. ((án.zəl)PWd)PPh	*!		*	
<i>iii. /n+ə#kətəlin+ə/ PERS.ART.F Catalina</i>				
☞ a. ((nə.kə.tə.lí.nə)PWd)PPh				*
b. ((kə.tə.lí.nə)PWd)PPh	*!		*	

(18) Constraint hierarchy for kinship appositive phrases in Minorcan Catalan

MAX-Det(high) >> ALIGN(PWd, L; Lex), *CV >> MAX-Det, ONSET >> ALIGN(PPh, L; Lex)

(19) Kinship appositive phrases with a C-initial personal name: *es conco en Jaume*

/s+Ø#konk+u##n+Ø#zawm/ DEF.ART.M conco PERS.ART.M Jaume	MAX-Det (high)	ALIGN (PWd, L; Lex)	MAX-Det	ONSET	ALIGN (PPh, L; Lex)
☞ a. (əs.(kòŋ.kun.) _{PWD} (záw.mə) _{PWD}) _{PPH}					*
b. (əs.(kòŋ.ku.) _{PWD} (záw.mə) _{PWD}) _{PPH}			*!		*
c. (əs.(kòŋ.ku.) _{PWD} ən.(záw.mə) _{PWD}) _{PPH}				*!	*
d. ((əs.kòŋ.ku.) _{PWD} (ən.záw.mə) _{PWD}) _{PPH}		**!		*	
e. ((kòŋ.kun.) _{PWD} (záw.mə) _{PWD}) _{PPH}	*!		*		

(20) Kinship appositive phrases with a C-initial personal name: *l'avi en Jaume*

/l+Ø#avi##n+Ø#zawm/ DEF.ART.M avi PERS.ART.M Jaume	MAX-Det (high)	ALIGN (PWd, L; Lex)	MAX-Det	ONSET	ALIGN (PPh, L; Lex)
☞ a. ((làvin.) _{PWD}) _{PPH} ((záw.mə) _{PWD}) _{PPH}		*			*
b. ((làvi.) _{PWD}) _{PPH} ((záw.mə) _{PWD}) _{PPH}		*	*!		*
c. ((àvi.) _{PWD}) _{PPH} (ən.(záw.mə) _{PWD}) _{PPH}	*!		*		*
d. ((àvin.) _{PWD}) _{PPH} ((záw.mə) _{PWD}) _{PPH}	*!		*		
e. ((àvi.) _{PWD}) _{PPH} ((záw.mə) _{PWD}) _{PPH}	*!		*		

(21) Kinship appositive phrases with a V-initial personal name: *es conco Àngel*

/s+Ø#konk+u##n+Ø#anzəl/ M.DEF.ART conco M.PERS.ART Àngel	MAX-Det (high)	ALIGN (PWd, L; Lex)	MAX-Det	ONSET	ALIGN (PPh, L; Lex)
a. (əs.(kòŋ.ku.) _{PWD}) _{PPH} ((nán.zəl) _{PWD}) _{PPH}		*!			**
☞ b. (əs.(kòŋ.ku.) _{PWD}) _{PPH} ((án.zəl) _{PWD}) _{PPH}			*	*	*

(22) Kinship appositive phrases with a V-initial personal name: *es conco Àngel* (revised)

/s+Ø#konk+u##n+Ø#anzəl/ M.DEF.ART conco M.PERS.ART Àngel	MAX-Det (high)	ALIGN (PWd, L; Lex)	*C.V	MAX-Det	ONSET	ALIGN (PPh, L; Lex)
a. (əs.(kòŋ.ku.) _{PWD} (nán.zəl) _{PWD}) _{PPH}		*!				**
☞ b. (əs.(kòŋ.ku.) _{PWD} (án.zəl) _{PWD}) _{PPH}				*	*	*
c. (əs.(kòŋ.kun.) _{PWD} (án.zəl) _{PWD}) _{PPH}			*!		*	*

(23) Unstressed vowel + stressed vowel: vowel preservation

a. *es conco Àngel* /s+Ø#konk+u##n+Ø#anzəl/ [əs.kòŋ.ku.án.zəl] ‘uncle Àngel’

l'avi Àngel /l+Ø#avi##n+Ø#anzəl/ [la.vi.án.zəl] ‘grandfather Àngel’

b. *caldo àcid* /kald+u##asid/ [kàl.du.á.sit] ‘sour soup’

odi àvid /ɔdi##avid/ [ò.ði.á.vit] ‘avid hate’

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(See the tableaux in 21 and 22)

(24) High unstressed vowel ([i], [u]) + schwa: schwa deletion

a. *es conco Ernest* /s+Ø#konk+u##n+Ø#ərnest/ [əs.kòŋ.kur.nést] ‘uncle Ernest’

l’avi Ernest /l+Ø#avi##n+Ø#ərnest/ [là.vir.nést] ‘grandfather Ernest’

b. *caldo antic* /kald+u##əntig/ [kàl.dun.tík] ‘old soup’

codi antic /kòdi##əntig/ [kò.ðin.tík] ‘old code’

(25) Identical high unstressed vowels ([u] + [u]; [i] + [i]): fusion

a. *es conco Ulari* /s+Ø#konk+u##n+Ø#ulari/ [əs.kòŋ.ku.lá.ri] ‘uncle Ulari’

l’avi Ignasi /l+Ø#avi##n+Ø#innazi/ [là.vin.ná.zi] ‘grandfather Ignasi’

b. *caldo horrorós* /kald+u##urror+oz/ [kàl.du.ru.rós] ‘terrible soup’

codi intern /kòdi##intern/ [kò.ðin.térn] ‘internal code’

(26) Different unstressed high vowels ([u] + [i]; [i] + [u]): formation of a diphthong

a. *es conco Ilario* /s+Ø#konk+u##n+Ø#ilario/ [əs.kòŋ.kuj.lá.rjo] ‘uncle Ilario’

l’avi Ulari /l+Ø#avi##n+Ø#ulari/ [là.viw.lá.ri] ‘grandfather Ulari’

b. *caldo insípid* /kald+u##insipid/ [kàl.dujn.sí.pit] ‘bland soup’

codi unificat /kòdi##unifik+a+d/ [kò.ðiw.ni.fi.kát] ‘unified code’

(27) Vowel preservation constraints

- MAX-V(high): Assign one violation mark for every high vowel in the input that does not have a correspondent in the output (McCarthy & Prince 1995).
- MAX-V(schwa): Assign one violation mark for every schwa in the input that does not have a correspondent in the output (McCarthy & Prince 1995).

(28) Kinship appositive phrases with a personal name starting with an unstressed schwa: *es conco Ernest* [əs.kòŋ.kur.nést], *l’avi Ernest* [là.vir.nést]

/s+Ø#konk+u##n+Ø#ərnest/ DEF.ART.M conco PERS.ART.M Ernest	MAX-V (high)	ALIGN (PWd, L; Lex)	*C.V	MAX- Det	ONSET	MAX-V (schwa)
a. (əs.(kòŋ.ku.) _{PWD} (nər.nést) _{PWD}) _{PPH}		*!			*	
b. (əs.(kòŋ.kun.) _{PWD} (ər.nést) _{PWD}) _{PPH}			*!		*	
c. (əs.(kòŋ.ku.) _{PWD} (ər.nést) _{PWD}) _{PPH}				*	**!	
d. (əs.(kòŋ.) _{PWD} (kər.nést) _{PWD}) _{PPH}	*!			*	*	
☞ e. (əs.(kòŋ.kur) _{PWD} (nést) _{PWD}) _{PPH}				*	*	*

(29) UNIFORMITY: Assign one violation mark for every segment in the output with more than one correspondent in the input (McCarthy & Prince 1995).

(30) Kinship appositive phrases with a personal name starting with an unstressed high vowel identical to the previous one: *es conco Ulari* [əs.kòŋ.ku.lá.ri], *l'avi Ignasi* [là.vin.ná.zi]

/s+Ø#konk+u ₁ ##n+Ø#u ₂ lari/ DEF.ART.M conco PERS.ART.M Ulari	MAX-V (high)	ALIGN (PWd, L; Lex)	*C.V	MAX-Det	ONSET	UNIF
a. (əs.(kòŋ.ku.) _{PWD} (nu.lá.ri) _{PWD}) _{PPH}		*!			*	
b. (əs.(kòŋ.kun.) _{PWD} (u.lá.ri) _{PWD}) _{PPH}			*!		*	
c. (əs.(kòŋ.ku.) _{PWD} (u.lá.ri) _{PWD}) _{PPH}				*	**!	
☞ d. (əs.(kòŋ.ku _{1,2} .) _{PWD} (lá.ri) _{PWD}) _{PPH}				*	*	*
e. (əs.(kòŋ.ku ₁ .) _{PWD} (lá.ri) _{PWD}) _{PPH}	*!			*	*	
f. (əs.(kòŋ.ku ₂ .) _{PWD} (lá.ri) _{PWD}) _{PPH}	*!			*	*	

(31) IDENT(F): Assign one violation mark for every segment in the output with a different featural specification than the input (McCarthy & Prince 1995).

(35) Kinship appositive phrases with a personal name starting with an unstressed high vowel different to the previous one: *es conco Ilario* [əs.kòŋ.kuj.lá.rjo], *l'avi Ulari* [là.viw.lá.ri]

/s+Ø#konk+u##n+Ø#ilarjo/ DEF.ART.M conco PERS.ART.M Ilario	MAX-V (high)	IDENT (F)	ALIGN (PWd, L; Lex)	*C.V	MAX-Det	ONSET	UNIF
a. (əs.(kòŋ.ku.) _{PWD}) _{PPH} ((ni.lá.rjo) _{PWD}) _{PPH}			*!			*	
b. (əs.(kòŋ.kun.) _{PWD}) _{PPH} ((i.lá.rjo) _{PWD}) _{PPH}				*!		**	
c. (əs.(kòŋ.ku.) _{PWD}) _{PPH} ((i.lá.rjo) _{PWD}) _{PPH}					*	**!	
d. (əs.(kòŋ.ki _{1,2} .) _{PWD}) _{PPH} ((lá.rjo) _{PWD}) _{PPH}		*!			*	*	*
e. (əs.(kòŋ.ku _{1,2} .) _{PWD}) _{PPH} ((lá.rjo) _{PWD}) _{PPH}		*!			*	*	*
f. (əs.(kòŋ.ku ₁ .) _{PWD}) _{PPH} ((lá.rjo) _{PWD}) _{PPH}	*!				*	*	
g. (əs.(kòŋ.ki ₁ .) _{PWD}) _{PPH} ((lá.rjo) _{PWD}) _{PPH}	*!				*	*	
☞ h. (əs.(kòŋ.ku _{1j2} .) _{PWD}) _{PPH} ((lá.rjo) _{PWD}) _{PPH}					*	*	

5. ALTERNATIVE ANALYSES AND FURTHER ISSUES

5.1 External allomorphy. An external allomorphic account based on the double lexical representation /konku/ ~ /konkun/ (after a conceivable diachronic process of agglutination of *conco* + *en*) is not feasible: it is not possible to derive the selection of /konku/ before a word starting with a vowel, given the constraint ONSET. Indeed, one would expect the selection of the alternative allomorph (*i.e.* /konkun/), which would entail the satisfaction of ONSET, through the resyllabification of the final consonant of the allomorph as the onset of the following syllable *i.e.* *(əs.(kòŋ.ku.)_{PWD} ([nán.ʒəl])_{PWD})_{PPH}. One could of course give lexical priority to the allomorph /konku/ (*i.e.* /konku/ > /konkun/), and rank the constraint PRIORITY (according to which the lexical ordering of allomorphs has to be respected) above ONSET (see, for instance, Mascaró 2007, Bonet *et al.* 2007 for this kind of approach applied to other Catalan data), but in this way it would be impossible to derive ((əs.(kòŋ.kun.)_{PWD} ([ʒáw.mə])_{PWD})_{PPH}, with the selection of the non-prioritized allomorph, when the personal name starts with a consonant. Note, additionally, that the selection of the allomorph without

the final consonant would always be more harmonic than the selection of the allomorph with the final consonant, due to the activity of the low-ranked constraint *CODA. Alternatively, one could consider that it is the personal article that is subject to allomorphy (/n~/∅/), but the same reasons adduced above would prevent the selection of /∅/ before a personal name starting with a vowel: the selection of /n/ before a personal name starting with a vowel would always be better, given the constraint ONSET, which would reject ((əs.(kòŋ.ku.))_{PWD} ([∅án.ʒəl])_{PWD})_{PPH} and select *((əs.(kòŋ.ku.))_{PWD} (nán.ʒəl))_{PWD})_{PPH}. Note that, in this case, establishing the lexical order {/∅/ > n₂}, would have undesired consequences, since /∅₁/ would always be favored in isolated constructions and in appositions with the personal name starting with a consonant (*i.e.* *(∅₁ʒáw.mə)_{PWD}; *(əs.(kòŋ.ku)_{PWD} (∅₁ʒáw.mə)_{PWD}). Finally, the ranking ALIGN(PWd, L; Lex) >> PRIORITY and the lexical order {/n/ > /∅/}, although it would lead to the selection of the correct outputs in cases of apposition, would wrongly induce the selection of the second allomorph in isolated constructions.

5.2 Specific morphoprosodic alignment constraint. Another possible analysis would consist of the interaction of the constraint ALIGN(EN, R, PWd, R) (which states “Assign one violation mark for every instance of *en* that is not right-aligned with the Prosodic Word”) with the rest of constraints proposed in this paper: the ranking MAX-DET(high) >> ALIGN(EN, R, PWd, R), *C.V >> ONSET, MAX-Pers.Art. would ensure the realization of the personal article before a personal name starting with a consonant, and its non-realization when the personal name starts with a vowel. In fact, an account along these lines, within a different framework, is found in Zec & Inkelas (1990) for Hausa: the focus particle *fa* in Hausa can only appear at the right edge of the phonological phrase ([Verb *fa*]_{PPH}; [Verb *fa*]_{PPH} [A N]_{PPH}) but not in other positions (*[Verb *fa* N]_{PPH}), a circumstance which is understood by the authors as a case of lexical prosodic subcategorization (*i.e.* [PPh__]). In our view, a constraint like ALIGN(EN, R, PWd, R) is *ad hoc*, in that it would account only for these data, as opposed to the one we propose (*i.e.* ALIGN(PWd, L; Lex), which is drawn from Generalized Alignment, which does not allow explicit reference to functional elements (see Selkirk 1996/2004, and above), and which expresses the need to have the left edge of the prosodic word associated with lexical material, that is, aligned with a category free of clitic material. Note, on the other hand, that a constraint such as ALIGN(EN, R, PWd, R) is counterintuitive in that, for proclisis, one would expect, except for some exceptional cases, alignment of the clitic with the left edge of the prosodic category.

5.3 Morphological haplology. Yet another analysis would be to consider that the non-realization of the personal article is an instance of morphological haplology, by which “an affix or clitic is absent when the adjacent part of the stem is homophonous to it” (Stemberger 1981: 791). An interpretation of this kind would make sense when the personal name starts with a sequence which is identical or quasi-identical to the personal article (*i.e.* *Àngel* [án.ʒəl], *Enric* [ən.rík]), but, as seen, it is not always the case that vowel-initial personal names start with a segmental sequence which is homophonous to the personal article (*i.e.* *Ignasi* [in.ná.zi], *Ernest* [ər.nést], etc.). Alternatively, it might be interpreted that the identity avoidance applies at the morphological level, in the sense that definiteness in these appositional restrictive phrases is expressed by two different elements: the definite article that precedes the kinship noun and the personal article that precedes the personal name. This type of interpretation is not possible either, since nothing explains why the identity avoidance is active before a personal name starting with a vowel, but not before a personal name starting with a consonant.

6. FINAL REMARKS

In this paper, we have focused on a case of prosodically-driven morpheme non-realization found in Minorcan Catalan kinship restrictive appositional phrases, in which the personal article *en* is realized

before masculine personal names starting with a consonant, but not before masculine personal names starting with a vowel. As seen, from a strictly syllabic point of view this pattern is unexpected, since a preconsonantal coda is generated when the personal article precedes a consonant-initial masculine personal name, and an onset-less syllable and a hiatus are generated when it precedes a vowel-initial masculine personal name. According to our proposal, this asymmetric behavior is mainly driven by the constraint ALIGN(PWd, L; Lex), according to which the left edge of the prosodic word must be aligned with a lexical category; that is, a clitic cannot intervene between the left edge of a prosodic word and the lexical category. We have shown that, whereas it is possible to satisfy this constraint without challenging basic syllabification constraints (*i.e.* *C.V, ONSET) when the personal name starts with a consonant, this is not possible when the personal name starts with a vowel. The effects of the alignment constraint, on the other hand, are inhibited by the need to realize phonologically the morph corresponding to a morpheme associated to a category occupying a prominent syntactic position, and this explains the realization of the personal article in isolated constructions.

Selected references and bibliography

- Alexiadou, Artemis. 2014. *Multiple determiners and the structure of DPs*. Amsterdam: John Benjamins.
- Alexiadou, Artemis & Chris Wilder. 1998. Adjectival modification and multiple determiners. In: *Possessors, Predicates and Movement in the DP*, ed. by Artemis Alexiadou & Chris Wilder, 303–332. Amsterdam: John Benjamins.
- Anderson, Stephen R. 2005. *Aspects of the Theory of Clitics*. Oxford: Oxford University Press.
- Bennett, Ryan; Elfner, Emily; McCloskey, James (2016) “Lightest to the Right: An Apparently Anomalous Displacement in Irish,” *Linguistic Inquiry* 47, 169–234.
- Bonet, Eulàlia. 2018. Missing inflectional features and missing exponents in DP-internal agreement asymmetries. *Glossa: A Journal of General Linguistics*, 3(1), 79.
- Bonet, Eulàlia, Lloret, Maria-Rosa. 1998. *Fonologia catalana*. Barcelona: Ariel.
- Bonet, Eulàlia, Lloret, Maria-Rosa, and Joan Mascaró. 2007. Allomorph selection and lexical preferences: Two case studies. *Lingua* 117: 903–927.
- Bonet, Eulàlia, Lloret, Maria-Rosa, and Joan Mascaró. 2015. The prenominal allomorphy syndrome. In *Understanding Allomorphy: perspectives from Optimality Theory*. *Advances in Optimality Theory*, ed Bonet, Eulàlia, Lloret, Maria-Rosa, and Joan Mascaró, 5–44, London: Equinox.
- Brucart, Josep Maria. 2002 / 2008. Els determinants. In *Gramàtica del català contemporani*, dir Joan Solà, Maria-Rosa Lloret, Joan Mascaró, Manuel Pérez-Saldanya, 1435–1516, Barcelona: Empúries.
- Cabré, Teresa & Pilar Prieto. 2009. Positional and metrical prominence effects on vowel sandhi in Catalan. In *Prosodies. With special reference to Iberian languages*, ed Frota, Sónia; Vigário, Marina & Freitas, Maria João, 123–157. Berlin: De Gruyter.
- Campmany, Elisenda. 2008. *Diferències fonològiques entre diversos estils de parla al català central septentrional*. Barcelona: Universitat de Barcelona. PhD dissertation.
- Colomina, Jordi. 2002 / 2008. Paradigmes flexius de les altres classes nominals. In *Gramàtica del català contemporani*, dir Joan Solà, Maria-Rosa Lloret, Joan Mascaró, Manuel Pérez-Saldanya, 535–580, Barcelona: Empúries.
- Halle, Morris, and Alec Marantz. 1993. Distributed Morphology and the pieces of inflection. In *The View From Building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, ed Kenneth Hale and Samuel Jay Keyser, 111-176. Cambridge, MA: MIT Press.
- Hyde, Brett. 2012. Alignment constraints. *Natural Language and Linguistic Theory* 30: 789–836.
- Ito, Junko; Mester, Armin. 2019. Match as Syntax-Prosody MAX/DEP: Prosodic Enclisis in English, *English Linguistics* 36:1 (2019)

- Klein, Thomas B. 2003. Syllable structure and lexical markedness in Creole morphophonology: Determiner allomorphy in Haitian and elsewhere. In *The phonology and morphology of Creole languages*, ed Ingo Plag, 209–228. Tübingen: Max Niemeyer.
- Kurusu, Kazutaka. 2001. *The phonology of morpheme realization*. PhD dissertation, University of California Santa Cruz.
- Larson, Richard. 1995. *Olga is a Beautiful Dancer*. Paper presented at LSA Annual Meeting, New Orleans.
- Larson, Richard. 1998. Events and modification in nominals. In: *Proceedings from Semantics and Linguistic Theory (SALT) VIII*, ed. by Devon Strolovitch & Aaron Lawson, 145–168. Ithaca, NY: Cornell University Press.
- Mascaró, Joan. 1985. *Morfologia catalana*. Barcelona: Enciclopèdia Catalana.
- Mascaró, Joan. 2007. External allomorphy and lexical representation. *Linguistic Inquiry* 38, n. 4.: 715–735.
- McCarthy, John, and Alan Prince. 1993. Generalized Alignment. *Yearbook of Morphology* 1993: 79–153.
- McCarthy, John J., and Alan Prince. 1995. Faithfulness and reduplicative identity. In *University of Massachusetts Occasional Papers in Linguistics 18: Papers in Optimality Theory*, ed Jill N. Beckman, Suzanne Urbanczyk, and Laura Walsh Dickey, 249–384.
- McCarthy, John J., and Alan Prince. 1999. Faithfulness and identity in Prosodic Morphology. In *The Prosody-Morphology Interface*, ed René Kager, Harry van der Hulst, and Wim Zonneveld, 218–309. Cambridge: Cambridge University Press.
- Nevins, Andrew. 2011. Phonologically conditioned allomorph selection. In *The Blackwell Companion to Phonology*, ed Marc van Oostendorp, Colin J. Ewen, Elizabeth Hume, and Keren Rice, 2357–2382. Malden, MA: Blackwell.
- Orgun, Cemil O., and Ronald L. Sprouse. 1999. From MParse to control: Deriving ungrammaticality. *Phonology* 16: 191–220.
- Peperkamp, Sharon (1997) *Prosodic Words*, Holland Academic Graphics, The Hague.
- Pesetsky, David. 1998. Some Optimality principles of sentence pronunciation. In *Is the best good enough?*, ed Pilar Barbosa, Daniel Fox, Paul Hagstrom, Martha McGinnis, 337–384. Cambridge, MA: MIT Press.
- Prince, Alan, and Paul Smolensky. 1993/2004. *Optimality Theory: Constraint interaction in generative grammar*. Technical Report, Rutgers University and University of Colorado at Boulder. (Revised version published in *Optimality Theory in Phonology: A Reader*, ed John J. McCarthy, 464–482. Oxford: Blackwell.)
- Selkirk, Elisabeth. 1984. *Phonology and Syntax: The Relation Between Sound and Structure*. Cambridge: MIT Press.
- Selkirk, Elisabeth. 1986. On derived domains in sentence phonology. *Phonology* 3: 371–405.
- Selkirk, Elisabeth. 1996 / 2004. The prosodic structure of function words. In *Optimality Theory in Phonology: A Reader*, ed John J. McCarthy, 464–482. Oxford: Blackwell. (Originally published in *Signal to Syntax: Bootstrapping from Speech to Grammar in Early Acquisition*, ed Katherine Demuth and James L. Morgan, Lawrence Erlbaum, 1996.)
- Selkirk, Elisabeth. 2001. On the phonologically-driven nonrealization of function words. In *The Proceeding of The Berkeley Linguistic Society 29*, ed Charles Chang, Michael Houser, Yuni Kim, David Mortensen, Mischa Park-Doob, Maziar Toorsarvandani, 257–270. Berkeley: Berkeley Linguistics Society.
- Selkirk, Elisabeth. 2011. The syntax-phonology interface. In John A. Goldsmith, Jason Riggle, Alan C. L. Yu (ed), *The Handbook of Phonological Theory*, 435–484. Oxford: Blackwell.
- Stemberger, Joseph. 1981. Morphological haplology. *Language* 57, 4: 791–817.
- Struijke, Caro. 2000/2002. *Existential Faithfulness. A Study of Reduplicative TETU, Feature Movement, and Dissimilation*. PhD dissertation. (Published as Struijke, Caro. 2002. *Existential*

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faithfulness: A study of reduplicative TETU, feature movement, and dissimilation. New York: Routledge.)

Struijke, Caro; De Lacy, Paul. 2000. Explaining Overkill in dissimilation. Handout delivered in NELS 31 (Georgetown University).

Tsiakmakis, Evripidis; Borrás-Comes, Joan; Espinal, M. Teresa. 2021. Greek polydefinites revisited: Polydefiniteness as Resumed Relative Clause modification. *Journal of Greek Linguistics*

Wolf, Matthew. 2008. Optimal Interleaving: Serial Phonology-Morphology Interaction in a Constraint-Based Model. PhD dissertation, University of Massachusetts, Amherst.

Zec, Draga, and Sharon Inkelas. 1990. Prosodically Constrained Syntax. In *The Phonology-Syntax Connection*, ed Sharon Inkelas, Draga Zec, Chicago: Chicago University Press.