

## Prosodically-driven morpheme non-realization in the Minorcan Catalan DP<sup>1</sup>

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*To the memory of l'avi en Toni*

### I. BASIC FACTS

Minorcan Catalan has an intriguing case of morpheme non-realization that is prosodically-driven and that cannot be accounted for allomorphically. Kinship appositional phrases are generally realized with the structure *Es* the-M.DEF.ART *conco* uncle *en* the-M.PERS.ART *Jaume* James ('uncle James') when the personal name starts with a consonant (1), but with the structure *Es* the-M.DEF.ART *conco* uncle  $\emptyset$  *Àngel* ('uncle Àngel') when the personal name starts with a vowel (2). That is, the personal article *en* fails to surface when the personal name starts with a vowel. The same path, with non-realization of the personal article, is detected before feminine personal names (3).

*Kinship appositional phrases in the Minorcan Catalan DP*

- (1) *Masculine personal name starting with a consonant*  
**es conco en** [əskòŋku $\underline{n}$ ] Toni / Jaume / Rafel / Pedro  
the-M.DEF.ART uncle the-M.PERS.ART Tony, etc.  
(‘uncle Tony’, ‘uncle James’, ‘uncle Raphael’, ‘uncle Peter’)  
**l’avi en** [l’àvi $\underline{n}$ ] Toni / Jaume / Rafel / Pedro  
the-M.DEF.ART grandfather the-M.PERS.ART Toni, etc.  
(‘grandfather Tony’, ‘grandfather James’, ‘grandfather Raphael’, ‘grandfather Peter’) [The PERS. ART appears underlined.]
- (2) *Masculine personal name starting with a vowel*  
**es conco**  $\emptyset$  [əskòŋku $\emptyset$ ] Àngel / Ignasi / Enric

the-M.DEF.ART uncle  $\emptyset$  James, etc.  
(‘uncle Angel’, ‘uncle Ignasi’, ‘uncle Henry’)

**l’avi**  $\emptyset$  [l’àvi $\emptyset$ ] Àngel / Ignasi / Enric  
the-M.DEF.ART grandfather  $\emptyset$  Àngel, etc.  
(‘grandfather Àngel’, ‘grandfather Ignasi’, ‘grandfather Henry’)

- (3) *Feminine personal name*  
**sa tia**  $\emptyset$  [sətiə $\emptyset$ ] Catalina / Margarita / Amparo  
the-F.DEF.ART aunt  $\emptyset$  Catalina, etc.  
(‘aunt Catalina’, ‘aunt Margarita’, ‘aunt Amparo’)  
**s’àvia**  $\emptyset$  [sàvja $\emptyset$ ] Catalina / Margarita / Amparo  
the-F.DEF.ART grandmother  $\emptyset$  Catalina, etc.  
(‘grandmother Catalina’, ‘grandmother Margarita’, ‘grandmother Amparo’)
- (4) *Personal article paradigm*  
Masculine personal name starting with a consonant  
[ə $n$ ] **en** Toni  
the-M.PERS.ART Tony (‘Tony’)  
Masculine personal name starting with a vowel  
[n] **n’**Ignasi  
the-M.PERS.ART Ignasi (‘Ignasi’)  
Feminine personal name starting with a consonant  
[nə] **na** Catalina (‘Catalina’)  
the-F.PERS.ART Catalina  
Feminine personal name starting with a vowel  
[n] **n’**Àngela  
the-F.PERS.ART Angela (‘Angela’)

### II. GOALS

- To identify the factors explaining the asymmetries between morpheme realization and morpheme non-realization in kinship appositional phrases in the Minorcan Catalan DP.
- To show that these asymmetries can be formalized straightforwardly within a parallel and global OT framework through the interaction of standard (morpho)prosodic constraints (McCarthy & Prince 1993, Selkirk 1996 / 2003; Prince & Smolensky 1993 / 2004) with morpheme realization constraints (see Selkirk 2001, Kurisu 2001, among others).
- To explore the nature and the typology of morpheme realization constraints, on the basis of Selkirk’s (2001) original proposal and the data taken into consideration.

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- To explore the consequences of our analysis for the phonology-morphosyntax interface and for the architecture of grammar.

### III. SOME RELEVANT EMPIRICAL FACTS

#### A. To understand *es conco* vs. *l'avi*...

##### (5) Default definite article paradigm in Minorcan Catalan (called “article salat”)

M.SG.DEF.ART + noun starting with a C		F.SG.DEF.ART + noun starting with a C	
<u>es</u> /s/	[əz] boínder ‘the bow window’ [əs] porxo ‘the porch’	<u>sa</u> /s+ə/	[sə] finestra ‘the window’ [sə] cortina ‘the courtin’
M.SG.DEF.ART + noun starting with a V		F.SG.DEF.ART + noun starting with a V	
<u>s’</u> /s/	[s] animal ‘the animal’ [s] escrí ‘the screw’	<u>s’</u> /s+ə/	[s] illa ‘the island’ [s] ala ‘the wing’
M.PL.DEF.ART + noun starting with a C		F.PL.DEF.ART + noun starting with a C	
<u>es</u> /s+z/	[əz] boínders ‘the bow windows’ [əz] mèrvils ‘the marbles’ [əs] porxos ‘the porches’	<u>ses</u> /s+ə+z/	[səs] finestres ‘the windows’ [səs] cortines ‘the courtins’ [səz] monges ‘the nuns’
M.PL.DEF.ART + noun starting with a V		F.PL.DEF.ART + noun starting with a V	
<u>es</u> /s+z/²	[əðz̄] animals ‘the animals’ [əðz̄] escríus ‘the screws’	<u>ses</u> /s+ə+z/	[səz] illes ‘the islands’ [səz] ales ‘the wings’

**From Latin:** IPSUM, IPSAM; IPSOS, IPSAS [See, among others, Colomina (2002: 545)]

##### (6) Definite article paradigm in other Catalan varieties (called “article literari”)

M.SG.DEF.ART + noun starting with a C		F.SG.DEF.ART + noun starting with a C	
<u>el</u> /l/	[əl] cotxe ‘the car’ (EC)	<u>la</u> /l+ə/	[lə] finestra ‘the window’ (EC)
<u>lo</u> /l+o/	[lo] cotxe (WC)	/l+a/	[la] finestra (WC)
M.SG.DEF.ART + noun starting with a V		F.SG.DEF.ART + noun starting with a V	
<u>l’</u> /l/	[l] animal ‘the animal’	<u>l’</u> /l+ə/	[l] illa ‘the island’
		/l+a/	
M.PL.DEF.ART + noun starting with a C		F.PL.DEF.ART + noun starting with a C	
<u>els</u> /l+z/	[əls] cotxes ‘the cars’ (EC)	<u>les</u>	[ləs] cases ‘the houses’ (EC)
<u>los</u> /l+o+z/	[los] cotxes (WC)	/l+ə+z/	[les] cases (WC)
		/l+e+z/	

(Simplified; some variation not considered)

**From Latin:** ILLUM, ILLAM; ILLOS, ILLAS [See, among others, Colomina (2002: 539; 543)]

EC = Eastern Catalan; WC: Western Catalan

#### Although...

##### (7) Mixt paradigm in Minorcan Catalan (also in Majorcan Catalan)

es, s’, sa, s’ → default forms  
el, la, els, les → specific contexts, such as...

- nouns designating unique entities:

*el sol* ‘the sun’, *la lluna* ‘the moon’, *el món* ‘the world’, *la Terra* ‘the earth’, *el bon Jesús* ‘the Good Man Jesus’, *el papa* ‘the pope’, *el Barça*, *el Madrid*, *el Manchester*, *el Paris Saint-Germain*

- lexicalized expressions and the like:

*a l’esquerra* ‘to the left’, *a la dreta* ‘to the right’, *a la fresca* ‘in the cool air’, etc.

- the expression of the hours:

*les dues* ‘two o’clock’, *les tres* ‘three o’clock’, *les quatre* ‘four o’clock’, etc.

- nouns designating traditionally respected entities:

<i>l’avi</i> ‘my grandfather’	Cf. <i>s’àvia</i>	‘my grandmother’
<i>l’amo</i> ‘the farmer masc.’	Cf. <i>sa madonna</i>	‘the farmer fem.’

[See, among others, Veny 1978 / 1982; Colomina 2002, Mascaró & Pons-Moll (ms.)]

#### B. To (partially) understand *es conco* en Jaume vs. *es conco Àngel*

##### (8) Personal article paradigm in Catalan (and Spanish)

a) Most Catalan varieties	b) Minorcan Catalan (and other Balearic varieties)	c) Valencian Catalan (and other W varieties)	d) Spanish (most varieties)
en Joan, l’Àngel la Maria, l’Àngela	en Joan, n’Àngel na Maria, n’Àngela	Ø Joan, Ø Àngel Ø Maria, Ø Àngela	Ø Juan, Ø Ángel Ø María, Ø Ángela
el Joan, l’Àngel la Maria, l’Àngela			
lo Joan, l’Àngel la Maria, l’Àngela			

Def. article = Pers. article	Def. article ≠ Pers. article
Def. article = Pers. article	Different forms Presence / Absence

[See, for instance, Mascaró 1985; Colomina 2002]

² In Minorcan Catalan (and in Majorcan Catalan), the adjacency of two sibilant segments is solved through a process of manner dissimilation, which leads to an affricate (see Pons-Moll 2004).

### C. More about the distribution *en* [before C] / Ø [before V] in kinship appositional phrases

(9)

_____ +C [M. PERS. NAME]	_____ +V [M. PERS. NAME]	
a. es <b>conco en</b> [kòŋkuŋ] Toni	*es conco n'Ernest	es conco Ø [kòŋku] (E)rnest
es <b>conco en</b> [kòŋkuŋ] Rafel	*es conco n'Àngel	es conco Ø [kòŋku] Àngel
es <b>conco en</b> [kòŋkuŋ] Joan <sup>3</sup>	*es conco n'Enric	es conco Ø [kòŋku] (E)nric
es <b>conco en</b> [kòŋkum] Pedro	*es conco n'Ignasi	es conco Ø [kòŋku] Ignasi
('uncle Toni, etc.')	('uncle Ernest, etc.')	

b. l' <b>avi en</b> [àviŋ] Toni	*l'avi n'Ernest	l'avi Ø [àvi] (E)rnest
l' <b>avi en</b> [àvin] Rafel	*l'avi n'Àngel	l'avi Ø [àvi] Àngel
l' <b>avi en</b> [àviŋ] Joan	*l'avi n'Enric	l'avi Ø [àvi] (E)nric
l' <b>avi en</b> [àvim] Pedro	*l'avi n'Ignasi	l'avi Ø [àvi] Ignasi
('grandfather Toni, etc.')	('grandfather Ernest, etc.')	

c. l' <b>amo en</b> [àmun] Toni	*l'amo n'Ernest	l'amo Ø [àmun] (E)rnest
l' <b>amo en</b> [àmun] Rafel	*l'amo n'Àngel	l'amo Ø [àmun] Àngel
l' <b>amo en</b> [àmun] Joan	*l'amo n'Enric	l'amo Ø [àmun] (E)nric
l' <b>amo en</b> [àmum] Pedro	*l'amo n'Ignasi	l'amo Ø [àmun] Ignasi
('farmer Toni')	('farmer Ernest, etc.')	

### D. More about Ø [before F.PERS.NAME]

(10)

_____ +[F. PERS. NAME]	
*sa tia na Catalina	<b>sa tia</b> Ø [sətiaØ] Catalina
*sa tia na Trini	<b>sa tia</b> Ø [sətiaØ] Trini
	('aunt Catalina, Trini, etc.')
*s'àvia na Catalina	<b>s'àvia</b> Ø [sàvjəØ] Catalina
*s'àvia na Trini	<b>s'àvia</b> Ø [sàvjəØ] Trini
	('grandmother Catalina / Trini, etc.')

<sup>3</sup> In Minorcan Catalan, nasals assimilate in place of articulation to the following consonant when the intersyllabic sonority is decreasing or the same; otherwise, they undergo total assimilation (see Pons-Moll 2011).

### E. Other analogous cases

(11)

<b>cala en</b> [kàlɐm] Bosch	*cala na Blanca	cala Ø [kàlɐ] Blanca
<b>cala en</b> [kàlɐm] Blanes	*cala na Mitjana	cala Ø [kàlɐ] Mitjana
<b>cala en</b> [kàlɐm] Brut	*cala na Rotja	cala Ø [kàlɐ] Rotja
('Bosch/Blanes/Brut cove')	('Blanca/Mitjana/Rotja cove')	

### IV. THEORETICAL BACKGROUND

(12) *Constraints on prosodic structure* (Selkirk 1986, 1996 / 2003):→ a. *Constraints on prosodic domination*

- LAYEREDNESS (non-violable): No C<sup>i</sup> dominates a C<sup>j</sup>, j > i (e.g. No σ dominates a Ft.)
  - HEADEDNESS (non-violable): Any C<sup>i</sup> must dominate a C<sup>i-1</sup> (except if C<sup>i</sup> = σ) (e.g. A PWD must dominate a Ft.)
  - EXHAUSTIVITY (violable): No C<sup>i</sup> immediately dominates a constituent C<sup>j</sup>, j < i-1 (e.g. No PWD immediately dominates a σ.)
  - NONRECURSIVITY (violable): No C<sup>i</sup> dominates C<sup>j</sup>, j = i (e.g. No Ft dominates a Ft.)
- [*Informal definitions; C<sup>n</sup> = prosodic category*]

→ b. *Constraints on alignment of constituent edges* (McCarthy & Prince 1993)

ALIGN(GCat, E; PCat, E)

**ALIGN(PCat, E; GCat, E)**

ALIGN(PCat, E; PCat, E)

[*GCat stands for morphological and syntactic categories; PCat stands for the prosodic categories; E = Right or Left.*] (For a recent reformulation and improvement of Alignment constraints, see Hyde 2012)

According to Selkirk's (1996 / 2003: page 10 [ms.]) proposal, the "set of constraints governing the interface between morphosyntactic and prosodic structure makes no reference to functional categories at all. Rather, it is only lexical categories and their phrasal projections which would figure in the statement of morphosyntactic constraints on prosodic structure." (See also Selkirk 1984.)

(13) *Prosodically-driven morpheme non-realization* (Selkirk 2001)

a. → *Circumstances in which phonology may influence the morphosyntax of the sentence*

- Those where the phonological constraint ranking may force the non-realization (interpreted as deletion) of a function word, and which are only possible if that deletion is recoverable (see Pesetsky 1998).
- Those in which the phonological constraint ranking may force the non-realization of the whole sentence containing the function word, leading to a late “crashing” of the derivation, and which are triggered when the deletion of the word is not recoverable.

b. → *Involved principle (external to the constraint hierarchy)*

→ “The principle of RECOVERABILITY checks the output of EVAL” (Selkirk 2001: 261).

→ “Types of NON-REALIZATION and RECOVERABILITY

i. **The non-realization of  $\alpha$  in a phonologically illicit configuration.**

When the optimal output candidate S' corresponding to a specific input S contains a violation of REALIZE( $\alpha$ ), and the absence of  $\alpha$  in the output S' does not incur a RECOVERABILITY violation, then  $\alpha$  is simply not realized. [Most of the cases identified in the literature correspond to this situation, see Kirusu 2001; for Catalan, see Bonet et al., who analyze a segmentally-driven case subject to prenominal and postnominal concord asymmetry in NEC.]

ii. **The non-realization of a sentence with  $\alpha$  in a phonologically illicit configuration.**

When the optimal output candidate S' corresponding to a specific input S contains a violation of REALIZE( $\alpha$ ), and the absence of  $\alpha$  in the output does incur a RECOVERABILITY violation, then neither the optimal output S' nor any other output candidate with the same input S is realized (“The derivation crashes”).” (p. 261)

## V. PROPOSAL AND ANALYSIS

- Since the morphosyntactic structure in (1) and (2) is identical, the answer to this asymmetric behavior might be in the phonology.
- According to our proposal, the asymmetric behavior depicted in (1) and (2)–(3) is mainly driven by the constraint ALIGN(PWd, L; Lex, L) (see 14a), which expresses the preference for prosodic words to be left-aligned with lexical categories and which therefore excludes intervening functional categories.
- Whereas it is possible to satisfy this constraint without challenging Catalan basic syllabification constraints (*i.e.* \*C.V) when the personal name starts with a

consonant (*i.e.* ([əs.kòŋ.kun.])<sub>PWd</sub> ([ʒáw.mə])<sub>PWd</sub>), it is not when the personal name starts with a vowel (*i.e.* \*([əs.kòŋ.kun.])<sub>PWd</sub> ([án.ʒə])<sub>PWd</sub>).

- The interaction of this constraint with right-alignment requirements between the prosodic word and the lexical category also explains the patterns found in feminine names.
- The effects of this constraint, on the other hand, are inhibited by the need to realize phonologically a morpheme when its carried information is not recoverable. This explains its realization when occurring outside the kinship appositional phrase, where no local antecedent is available (see Pesetsky 1998).
- The discrepant behavior in relation to morpheme realization, depending on its (un)recoverable carried information, advocates splitting the constraints demanding morpheme-realization into two categories (see 14b and 14c). In our proposal, both are assumed to be part of the constraint hierarchy.

(14) *Relevant basic constraints*

a. *Morphoprosodic constraint*

**ALIGN(PWd, L; Lex, L):** Assign one violation mark for every prosodic word which is not left-aligned with a lexical category (see McCarthy & Prince 1993, Selkirk 1996/2003)

[From Generalized Alignment constraints; see the appendix]

b. *Constraints on morpheme realization*

**MAX-Morpheme:** For every token  $\phi$  of the feature F, assign a violation mark if  $\phi$  is in the morphosyntactic structure and has no correspondent in the phonological structure. (Adapted from Wolf 2008) [Constraint variously termed: REALIZE-Morpheme; see Kirusu 2001, Selkirk 2001; MORPHEME EXPONENCE, etc.]

**MAX-Morpheme(unrecoverable):** For every token  $\phi$  of the feature F, assign a violation mark if  $\phi$  is in the morphosyntactic structure and has no correspondent in the phonological structure and its carried morphosyntactic information cannot be recovered (Adapted from Wolf 2008, Selkirk 2001, after Pesetsky 1998).

(15) *Basic constraint hierarchy in Minorcan Catalan*

MAX-Morpheme(Unrecoverable) >> ALIGN(PWd, L; Lex, L) >> MAX-Morpheme

## — Isolated constructions of PERSONAL ARTICLE + PERSONAL NAME

(16) *en Jaume, n'Àngel, na Catalina*

a. /n#ʒawm/ M.PERS.ART Jaume	MAX-Morph (Unrec)	ALIGN (PWd, Lex, L)	MAX-Morph
☞ a. ([ən.ʒáw.mə]) <sub>PWD</sub>		*	
b. ([ʒáw.mə]) <sub>PWD</sub>	*!		*
b. /n#anʒəl/ M.PERS.ART Àngel			
☞ a. ([nán.ʒəl]) <sub>PWD</sub>		*	
b. ([án.ʒəl]) <sub>PWD</sub>	*!		*
c. /n+ə#kətəlin+ə/ F.PERS.ART Catalina			
☞ a. ([nə.kə.tə.lí.nə]) <sub>PWD</sub>		*	
b. ([kə.tə.lí.nə]) <sub>PWD</sub>	*!		*

*Important interim remarks:*

- Ranking argument: MAX-Morpheme(Unrec) >> ALIGN(PWd, L; Lex, L)
- The effects of ALIGN(PWd, Lex, L) are inhibited by MAX-Morph(Unrec)
- “A syntactic unit with semantic content must be pronounced (=realized) unless it has a sufficiently local antecedent” (Pesetsky 1998, *apud* Selkirk 2011)

— Kinship appositional phrases: *es conco en Jaume vs. es conco ØÀngel / sa tia ØCatalina*(17) *es conco en Jaume*

/s#konk+u##n#ʒawm/ M.DEF.ART conco M.PERS.ART Jaume	MAX-Morph (Unrec)	ALIGN (PWd, Lex, L)	MAX-Morph
☞ a. ([əs.kòŋ.kuŋ.]) <sub>PWD</sub> ([ʒáw.mə]) <sub>PWD</sub>		*	
b. ([əs.kòŋ.ku]) <sub>PWD</sub> ([ʒáw.mə]) <sub>PWD</sub>		*	*!
c. ([əs.kòŋ.ku.]) <sub>PWD</sub> ([ən.ʒáw.mə]) <sub>PWD</sub>		**!	

(For the vocalic contact created in candidate c, see 22.)

*Important interim remarks:*

- Note that all candidates incur at least one violation of ALIGN(PWd, Lex, L), since the DEF. ART *es* ([əs]) (or *sa* [sə], see below) intervenes between the PWD and the lexical category in all cases.
- Although we do not consider candidates with non-realization of this functional morpheme, they would be discarded by MAX-Morph(Unrec). [Recall: “A syntactic unit with semantic content must be pronounced (=realized) unless it has a sufficiently local antecedent” [(Pesetsky 1998, *apud* Selkirk 2011)]

(18) *es conco Àngel*

/s#konk+u##n#anʒəl/ M.DEF.ART conco M.PERS.ART Àngel	MAX-Morph (Unrec)	ALIGN (PWd, Lex, L)	MAX-Morph
a. ([əs.kòŋ.ku.]) <sub>PWD</sub> ([nán.ʒəl]) <sub>PWD</sub>		**!	
☞ b. ([əs.kòŋ.ku]) <sub>PWD</sub> ([án.ʒəl]) <sub>PWD</sub>		*	*

(For the logical additional candidate ([əs.kòŋ.kun.])<sub>PWD</sub> ([án.ʒəl])<sub>PWD</sub>, see 20.)

*Important interim remarks:*

- Ranking argument: ALIGN(PWd, L; Lex, L) >> MAX-Morph
- Additional ranking argument: ALIGN(PWd, Lex, L) >> ONSET

(19) *sa tia Catalina*

/s+ə#ti+ə##n+ə#kətəlin+ə/ F. DEF.ART. tia F.PERS.ART Catalina	MAX-Morph (Unrec)	ALIGN (PWd, Lex, L)	MAX-Morph
a. ([sə.ti.ə]) <sub>PWD</sub> ([nə.kə.tə.lí.nə]) <sub>PWD</sub>		**!	
b. ([sə.ti.ə]) <sub>PWD</sub> ([kə.tə.lí.nə]) <sub>PWD</sub>		*	*

*Important interim remarks:*

- Ranking argument: ALIGN(PWd, L; Lex, L) >> MAX-Morph

## — Alternative prosodifications satisfying ALIGN(PWd, Lex, L)

(20) Why not: ([əs.kòŋ.kun.])<sub>PWD</sub> ([án.ʒəl])<sub>PWD</sub>, like ([əs.kòŋ.kuŋ.])<sub>PWD</sub> ([ʒáw.mə])<sub>PWD</sub>

/s#konk+u##n#anʒəl/ M.DEF.ART conco PERS.ART Àngel	Align (PWd, Lex, L)	*C.V	MAX-Morph
a. ([əs.kòŋ.ku.]) <sub>PWD</sub> ([nán.ʒəl]) <sub>PWD</sub>	**!		
☞ b. ([əs.kòŋ.ku.]) <sub>PWD</sub> ([án.ʒəl]) <sub>PWD</sub>	*		*
c. ([əs.kòŋ.kun.]) <sub>PWD</sub> ([án.ʒəl]) <sub>PWD</sub>	*	*!	

*Important interim remarks:*

- Activity of the standard markedness constraint: \*C.V: Assign one violation mark for every consonant syllabified in the coda followed by a vowel (Prince & Smolensky 1993) (Responsible for: [sò.nə.míks] *vs.* \*[sòn. ə.míks])
- Ranking argument: \*C.V >> MAX-Morph
- Additional ranking argument: \*C.V >> ONSET (In fact: stringency relation)

(NB: \*C.V = shorthand for \*CODA & ONSET)

(21) Why not: ([sə.ti.ə])<sub>PWD</sub> ([nə])<sub>PWD</sub> ([kə.tə.li.nə])<sub>PWD</sub>([sə.ti.ə.nə])<sub>PWD</sub> ([kə.tə.li.nə])<sub>PWD</sub>

/s+ə#ti+ə#n+ə#kətəlin+ə/ F. DEF.ART. tia F.PERS.ART Catalina	MAX-Morph (Unrec)	ALIGN (PWd, Lex, L)	ALIGN (PWd, Lex, R) /σ	Max-Morph
a. ([sə.ti.ə]) <sub>PWD</sub> ([nə.kə.tə.li.nə]) <sub>PWD</sub>		**!		
☞ b. ([sə.ti.ə]) <sub>PWD</sub> ([kə.tə.li.nə]) <sub>PWD</sub>		*		*
c. ([sə.ti.ə.nə]) <sub>PWD</sub> ([kə.tə.li.nə]) <sub>PWD</sub>		*	*!	
d. ([sə.ti.ə]) <sub>PWD</sub> ([nə]) <sub>PWD</sub> ([kə.tə.li.nə]) <sub>PWD</sub>		**(!)	*(!)	

**Important interim remarks:**

- Activity of the constraint: ALIGN(PWd, Lex, R)/σ: Assign one violation for every syllable intervening between the right edge of the Prosodic Word and the right edge of the Lexical Category.
- ALIGN(PWd, Lex, R)/σ is violated by ([sə.ti.ə.nə])<sub>PWD</sub> ([kə.tə.li.nə])<sub>PWD</sub>, but it is not by ([əs.kòŋ.kun.])<sub>PWD</sub> ([ʒáw.mə])<sub>PWD</sub>. (While the former implies an intervening syllable, the later does not.)
- ALIGN(PWd, Lex, R), on the contrary, is violated by both prosodifications.
- The specific ranking ALIGN(PWd, Lex, R) / σ >> MAX-Morph >> ALIGN(PWd, Lex, R) (not completely illustrated in the preceding tableau) explains why ([sə.ti.ə.nə])<sub>PWD</sub> ([kə.tə.li.nə])<sub>PWD</sub> is not a possible prosodification in Minorcan Catalan, whereas it is ([əs.kòŋ.kun.])<sub>PWD</sub> ([ʒáw.mə])<sub>PWD</sub>.

**– Additional circumstances: vocalic contacts**

- Note the difference between:

<i>caldo àcid</i>	/kald+u##asid/	[kà].du.ásit]	→	vowel preservation
‘acid soup’		(= <i>conco Àngel</i> [kòŋ.ku.án.ʒəl])		
<i>caldo antic</i>	/kald+u##əntig/	[kà].duŋ.tík]	→	vowel deletion
‘old soup’		(= <i>conco Ernest</i> [kòŋ.kur.nést])		
<i>caldo horrorós</i>	/kald+u##urɔr+oz/	[kà].du.ru.rós]	→	vowel deletion
‘terrible soup’		(= <i>conco Ulari</i> [kòŋ.ku.lá.ri])		

(22)

/s#konk+u##n#ərnɛst/ M.DEF.ART CONCO M.PERS.ART Ernest	MAX-Morph (Unrec)	ALIGN (PWd, Lex, L)	*C.V	MAX-Morph	*V1V2 [-stress]
a. ([əs.kòŋ.ku.]) <sub>PWD</sub> ([nə.r.nést]) <sub>PWD</sub>		**!			
b. ([əs.kòŋ.ku.]) <sub>PWD</sub> ([ə.r.nést]) <sub>PWD</sub>		*		*	*!
c. ([əs.kòŋ.kun.]) <sub>PWD</sub> ([ə.r.nést]) <sub>PWD</sub>		*	*!		
☞ d. ([əs.kòŋ.kur.]) <sub>PWD</sub> ([nést]) <sub>PWD</sub>		*		*	

– Activity of the markedness constraint(s):

\*VV<sub>[-stress]</sub>: Assign one violation mark for every sequence of contiguous identical unstressed vowels (Prince & Smolensky 1993; for Catalan, see Campmany 2008). [This one would be relevant for cases such as *es conco Ulari* (from *Eulari*), *es conc*[u] [u]lari → *es conc* [u]lari] (*Shorthand constraint*)

\*V1V2<sub>[-stress]</sub>: Assign one violation mark for every sequence of contiguous unstressed vowels, one of them being a schwa (Prince & Smolensky 1993; for Catalan, see Campmany 2008). [1/2 = schwa] [Responsible for: *caldo antic* [kà].duŋ.tík], *porta oberta* [pòr.tu.βér.tə]] (*Shorthand constraint*)

**VI. ALTERNATIVE ANALYSES****a) 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. One would expect, indeed, the selection of the alternative allomorph (*i.e.* /konkun/), which would entail the satisfaction of ONSET, through resyllabification (cf. \*es.con.co. n’Án.gel), but this is not the case.

– One could give, of course, lexical priority to the allomorph /konku/ and rank the constraint PRIORITY above ONSET (see Mascaró 2007, Bonet et al. 2007 for this kind of approach applied to other Catalan data), but this way it would be impossible to derive ([əs.kòŋ.kun.])<sub>PWD</sub> ([ʒáw.mə])<sub>PWD</sub>, with the selection of the non-prioritized allomorph.

– Note that under this perspective ALIGN(PWd, Lex, L) has nothing to say, since a prosodification such as ([əs.kòŋ.ku.])<sub>PWD</sub> ([nán.ʒəl])<sub>PWD</sub> would satisfy this constraint, in that [n] is part of a Lexical Category. (But: *es concos Jaumes*; \**es còncos Jaumes*.)

– An independent approach would be necessary, on the other hand, to account for the feminine cases, losing therefore strength in the analysis.

### b) Alternative morphoprosodic alignment constraints?

– 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 talk.

#### Remarks & problems:

- Similar account, within a different framework, is found in Zec & Inkelas (1990) for Hausa.
  - *Ad hoc* constraint to account just for these data, as opposed to the one we propose (i.e. **ALIGN(PWd, Lex, L)**), which is drawn from Generalized Alignment and which prevents from making explicit reference to functional elements; see Selkirk 1996/2003, and above).
  - Counter-intuitive explanation, in that we would expect the opposite behavior for proclisis, with alignment to the left edge of the Pwd.
- Interaction of the constraint **ALIGN(R-PWd, Noun-L)** (which states that the left edge of the personal noun must be aligned with the right edge of the preceding Prosodic Word) with the rest of constraints proposed in this paper.

#### Remarks:

- Similar effects and motivations than **ALIGN(PWd, Lex, L)**.
- What we obtain with this constraint (and also with **ALIGN(PWd, Lex, L)**) is that the personal article is prosodically grouped with the preceding material (i.e. *es conço*), constituting a monolithic prosodic word preceding the one integrated by the personal name (as in ([əs.kòŋ.kuŋ.]<sub>PWd</sub> ([ʒáw.mə])<sub>PWd</sub>), and not with the following material (as in \*([əs.kòŋ.kuŋ.]<sub>PWd</sub> ([nán.ʒəl])<sub>PWd</sub>). That is, the prosodic word constituted by the personal name is free of clitic material.

### VII. CONCLUSIONS, THEORETICAL IMPLICATIONS AND FURTHER ISSUES

- A parallel and a global OT approach is powerful enough to account for the data under consideration, without the introduction of *ad hoc* stipulations or sophisticated refinements.
- It can be claimed that phonology (expressed through a specific constraint hierarchy that places prosodic and morpheme realizational constraints at the same level) “can act as a filter of some morphosyntactic constructions, without the need to make assumptions about whether syntactic constraints must in general dominate phonological constraints (Golston 1996), or whether phonological constraints may in principle dominate syntactic constraints (Zec & Inkelas 1990)” (See Selkirk 2001: 269).

- Beyond the behavior depicted in (2), it is possible to find alternative morphosyntactic constructions: *n’Àngel, es conço; es conço, n’Àngel*, etc. The question raised, still to be explored in depth, is how the constraint **MAX-Morph(unrec)** interacts with the rest of constraints and which additional mechanism is necessary to decide between morpheme realization and a “crash” in the derivation and the subsequent generation of an alternative morphosyntactic construction. (See the discussion between *hard* and *soft* constraints in Orgun & Sprouse 1999.)

### VIII. REFERENCES AND CONSULTED LITERATURE

- BONET, Eulàlia; LLORET, Maria-Rosa; MASCARÓ, Joan (2007). “Allomorph selection and lexical preferences: Two case studies”. *Lingua* 117. pàg. 903-927.
- BONET, Eulàlia; LLORET, Maria-Rosa; MASCARÓ, Joan (2015). “The prenominal allomorphy syndrome”. In: BONET, Eulàlia et al. *Understanding Allomorphy: perspectives from Optimality Theory*. *Advances in Optimality Theory*. London: Equinox.
- CAMPANY, Elisenda (2008). *Diferències fonològiques entre diversos estils de parla al català central septentrional*. Barcelona: Universitat de Barcelona. PhD dissertation.
- COLOMINA, Joan (2002). “Paradigmes flexius de les altres classes nominals”. In: Solà, Joan et al. *Gramàtica del català contemporani*. Barcelona: Empúries.
- D’ALESSANDRO, Roberta; SCHEER, Tobias (2015). “Modular PIC”. *Linguistic Inquiry*, 46: 593-624.
- DOWNING, Laura (2010). “An edge-based approach to the alignment of syntactic phases and prosodic phrases”. *Transactions of the Philological Society*, 108: 352-369.
- GIORGI, Alessandra; LONGOBARDI, Giuseppe (1991). *The Syntax of Noun phrases. Configurations, parameters and empty categories*. Cambridge University Press: Cambridge, New Yourk; Melbourne.
- GOLSTON, Chris (1995). “Syntax outranks phonology”. *Phonology*, 12: 343-368.
- HYDE, BRETT (2012). “Alignment constraints”. *Natural Language and Linguistic Theory*, 30: 789-836.
- KURISU, Kazutaka (2001). *The phonology of morpheme realization*. PhD dissertation, University of California Santa Cruz. [Available in ROA 490-0102]
- LONGOBARDI, Giuseppe (1994). “Reference and proper names: A theory of N-movement in syntax and logical form”. *Linguistic Inquiry*, 25, n. 4: 609-665.
- MCCARTHY, John & Prince, Alan (1993). “Generalized Alignment”. *Yearbook of Morphology* (1993). p. 79-153.
- MASCARÓ, Joan (1985). *Morfologia catalana*. Barcelona: Enciclopèdia Catalana.
- MASCARÓ, Joan (2007). “External allomorphy and lexical representation”. *Linguistic Inquiry*, 38, n. 4. p. 715-735.
- MASCARÓ, Joan; Clàudia PONS-MOLL (ms.) *Estudi gramatical del català de Menorca*.

- ORGUN, Cemil O.; SPROUSE, Ronald L. (1999). "From MParse to control: Deriving ungrammaticality". *Phonology*, 16, p. 191-220.
- PESETSKY, David (1998). "Some Optimality principles of sentence pronunciation". In: P. Barbosa, D. Fox, P. Hagstrom, M. McGinnis, and D. Pesetsky (ed.) *Is the best good enough?* Cambridge, MA: MIT Press. p. 337-384.
- PONS-MOLL, Clàudia (2004). "Segmental and featural strategies to avoid adjacent sibilant segments in Catalan. An Optimality-theoretical account". In: R. Bok-Bennema, B. Hollebrandse; B. Kampers-Manhe; P. Sleeman. *Romance Languages and Linguistic Theory 2002*. Current Issues in Linguistic Theory, 256. p. 217-234. Paper also presented at the 26<sup>th</sup> GLOW Colloquium, Lund, Sweden, 2003.
- PONS-MOLL, Clàudia (2011). "It is all downhill from here: a typological study of the role of Syllable Contact in Romance languages. *Probus*, 23, 1. p. 105-173.
- PRINCE, Alan; SMOLENSKY, Paul (1993/2004). "Optimality Theory: Constraint interaction in generative grammar". Technical Report, Rutgers University and University of Colorado at Boulder. Revised version published by Blackwell, 2004.
- 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, p. 371-405.
- SELKIRK, Elisabeth (1996 / 2003). "The prosodic structure of function words". In: J. McCarthy (ed.) *Optimality Theory in Phonology: A Reader*. Oxford: Blackwell. (Originally published in K. Demuth and J. Morgan (ed.) *Signal to Syntax: Bootstrapping from Speech to Grammar in Early Acquisition*, Lawrence Erlbaum, 1996.)
- SELKIRK, Elisabet (2001). "On the phonologically-driven nonrealization of function words". In: Charles Chang, Michael Houser, Yuni Kim, David Mortensen, Mischa Park-Doob, Maziar Toorsarvandani (ed.), *The Proceeding of The Berkeley Linguistic Society* 29. Berkeley: Berkeley Linguistics Society.
- RICE, Curt; BLAHO, Sylvia (2010). *Advances in Optimality Theory: Modeling Ungrammaticality in Optimality Theory*. Bristol, CT, USA: Equinox Publishing Ltd.
- TROMMER, John (2012) (ed.), *The Phonology and Morphology of Exponence*. Oxford: Oxford University Press. (Oxford studies in theoretical linguistics, 41).
- VENY, Joan (1978 / 1982). *Els parlars catalans. Síntesi de dialectologia*. Barcelona: Dopesa. [Cited by the edition of 1982 published by Editorial Moll.]
- WOLF, Matthew (2008). Optimal Interleaving: Serial Phonology-Morphology Interaction in a Constraint-Based Model. PhD dissertation, University of Massachusetts, Amherst.
- ZEC, Draga; INKELAS, Sharon (1990). "Prosodically Constraint Syntax". In: Inkelas, Sharon; ZEC, Draga (ed.), *The Phonology-Syntax Connection*. Chicago: Chicago University Press.

## Appendix

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### The Word Alignment Constraints (WdCon)

- (i) ALIGN(Lex, L; PWd, L) (= WdConL)  
 (ii) ALIGN(Lex, R; PWd, R) (= WdConR)

### The Prosodic Word Alignment Constraints (PWdCon)

- (i) ALIGN(PWd, L; Lex, L) (= PWdConL)  
 (ii) ALIGN(PWd, R; Lex, R) (= PWdConR)

(Selkirk 1996 / 2003: 10 [ms.])

#### (4) Generalized Alignment

$$\text{Align}(\text{Cat1, Edge1, Cat2, Edge2}) =_{\text{def}} \forall \text{Cat1} \exists \text{Cat2} \text{ such that Edge1 of Cat1 and Edge2 of Cat2 coincide.}$$

Where

$$\begin{aligned} \text{Cat1, Cat2} &\in \text{PCat} \cup \text{GCat} \\ \text{Edge1, Edge2} &\in \{\text{Right, Left}\} \end{aligned}$$

McCarthy & Prince (1993: 2 [ms.])