

Spanish diminutives: Stratification, allomorphy, prosody*

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1 Motivation

§1 Providing a comprehensive account of diminutive formation in Peninsular Spanish is challenging because diminutives exhibit:

- morphosyntactically-induced, *cyclic misapplication*: overapplication in the selection of diphthongal stems;
- an intricate pattern of *allomorph selection* of the diminutive suffix {-it-o/a, -cit-o/a} conditioned by multiple interacting factors:
 - * morphology-prosody alignment (optimizing PCSA, Bonet and Harbour 2012);
 - * faithfulness to the underlying prosodic specification of -cit-o/a;
 - * a ban on successive identical piece-final vowels within a grammatical word (my take);
 - * a ban on extended lapses (my take).

§2 Main goal: to assess the data on Spanish diminutives against an articulated theory of nominal classes in Spanish (Bermúdez-Otero 2013) within Stratal Phonology (Bermúdez-Otero 2011, 2018, 2025; Bermúdez-Otero and Torres-Tamarit accepted; Kiparsky 2000, 2015; Trommer 2025).

§3 Claims:

- overapplication in the selection of the diphthongal stem in diminutives is accounted for straightforwardly by level selection in Stratal Phonology (as in Bermúdez-Otero 2013);

- a nuanced understanding of nominal classes in Spanish better captures the pattern of allomorph selection of the diminutive suffix and especially the distribution of [e] preceding the -cit-o/a allomorph, which is either a theme vowel or an epenthetic vowel.

2 Nominal classes in Spanish

(1) Nominal classes in Spanish (Bermúdez-Otero 2013:10)

Class	Theme	SG	PL	Gloss	Gender
o-stem	/-o/	[lí-o]	[lí-o-s]	‘muddle’	M
		[mán-o]	[mán-o-s]	‘hand’	F
a-stem	/-a/	[dí-a]	[dí-a-s]	‘day’	M
		[kán-a]	[kán-a-s]	‘grey hair’	F
e-stem	ordinary e-stem	[lápiθ-Ø]	[lápiθ-e-s]	‘pencil’	M
		[lúθ-Ø]	[lúθ-e-s]	‘light’	F
		[páðr-e]	[páðr-e-s]	‘father’	M
		[máðr-e]	[máðr-e-s]	‘mather’	F
	e-only stem	[krúθ-e]	[krúθ-e-s]	‘crossing’	M
		[éliθ-e]	[éliθ-e-s]	‘propeller’	F
athematic	/-Ø/	[roβót-Ø]	[roβót-Ø-s]	‘robot’	M
		[triβu-Ø]	[triβu-Ø-s]	‘tribe’	F

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3 Data and descriptive generalizations

- (2) Peninsular Spanish diminutives (Colina 2003, Smith 2011, *NGLE* 2009-2011:§9.4, 9.5, the author's own linguistic introspection)

a. *o*-stem

Base	Diminutive	
<i>libr-o</i>	<i>libr-it-o</i>	'book.M'
<i>zapat-o</i>	<i>zapat-it-o</i>	'shoe.M'
<i>vient-o</i>	<i>vient-e-cit-o</i>	'wind.M'
<i>sabi-o</i>	<i>sabi-e-cit-o</i>	'wise man.M'
<i>armari-o</i>	<i>armar-it-o</i>	'wardrobe.M'

b. *a*-stem

Base	Diminutive	
<i>cas-a</i>	<i>cas-it-a</i>	'house.F'
<i>pregunt-a</i>	<i>pregunt-it-a</i>	'question.F'
<i>piedr-a</i>	<i>piedr-e-cit-a</i>	'stone.F'
<i>momi-a</i>	<i>momi-e-cit-a</i>	'mummy.M'
<i>iglesi-a</i>	<i>igles-it-a</i>	'church.M'

c. ordinary *e*-stem

Base	Diminutive	
<i>canción</i>	<i>cancion-cit-a</i>	'song.F'
<i>escritor</i>	<i>escritor-cit-o</i>	'writer.M'
<i>flor</i>	<i>flor-e-cit-a</i>	'flower.F'
<i>pan</i>	<i>pan-e-cit-o</i>	'bread.M'
<i>madr-e</i>	<i>madr-e-cit-a</i>	'mother.F'
<i>padr-e</i>	<i>padr-e-cit-o</i>	'father.M'
<i>estuch-e</i>	<i>estuch-it-o</i>	'case.M'
<i>chocolat-e</i>	<i>chocolat-it-o</i>	'chocolate.M'

d. *e*-only stem

Base	Diminutive	
<i>fas-e</i>	<i>fas-e-cit-a</i>	'phase.F'
<i>pas-e</i>	<i>pas-e-cit-o</i>	'pass.M'
<i>pirámid-e</i>	<i>piramid-it-a</i>	'pyramid.F'
<i>envas-e</i>	<i>envas-it-o</i>	'container.M'

e. athematic

Base	Diminutive	
<i>café</i>	<i>cafe-cit-o</i>	'coffee.M'
<i>sofá</i>	<i>sofa-cit-o</i>	'sofa.M'
<i>yoyó</i>	<i>yoyo-cit-o</i>	'yoyo.M'
<i>taxi</i>	<i>taxi-cit-o</i>	'taxi.M'
<i>tribu</i>	<i>tribu-cit-a</i>	'tribe.F'
<i>caqui</i>	<i>caqui-cit-o</i>	'persimmon.M'
<i>haiku</i>	<i>haiku-cit-o</i>	'haiku.M'
<i>sticker</i>	<i>sticker-cit-o</i>	'sticker.M'
<i>fan</i>	<i>fan-cit-o</i>	'fan.M'
<i>bol</i>	<i>bol-cit-o</i>	'bowl.M'
<i>clip</i>	<i>clip-it-o</i>	'clip.M'
<i>robot</i>	<i>robot-it-o</i>	'robot.M'
<i>anorak</i>	<i>anorak-it-o</i>	'anorak.M'
<i>brindis</i>	<i>brindis-it-o</i>	'toast.M'
<i>virus</i>	<i>virus-it-o</i>	'virus.M'

§4 *o*- and *a*-stems take *-it-o/a* regardless of syllable count, except in disyllabic bases with a glide, which select *-cit-o/a* and insert an *-e-* vowel between the root and the diminutive suffix—an element that cannot be interpreted as a theme vowel because these stems belong to the *o*- and *a*-stem classes (2a,b), but rather as an epenthetic vowel.

§5 Ordinary *e*-stems take the null theme and select *-cit-o/a*, except when the singular base is monosyllabic, in which case the theme *-e* surfaces. When the singular base already ends in the theme vowel *-e*—a strategy used when certain root-final consonants are disfavoured word-finally—the theme likewise appears in the diminutive formed with *-cit-o/a*, unless the singular base exceeds two syllables; in that case, the theme *-e* does not surface and *-it-o/a* is selected (2c).

§6 *e*-only stems retain the theme vowel *-e* and select *-cit-o/a*, except when the singular base exceeds two syllables; in that case, the theme *-e* does not surface and *-it-o/a* is selected (2d).

§7 Athematic stems take *-cit-o/a*, except when they end in /s/ or in a consonant that is illicit in preconsonantal position word-medially; such stems instead select *-it-o/a* (2e).

(3) Summary chart

Class	Diminutive allomorph	Example	Base
a. <i>o/-a</i> -stem	-it-o/a	zapat- <u>it-o</u> pregunt- <u>it-a</u>	zapat-o pregunt-a
base with [j]	-e-cit-o/a	vient- <u>e-cit-o</u> momi- <u>e-cit-a</u>	v[j]ent-o mom[j]-a
$> 2\sigma$	-it-o/a	igles- <u>it-a</u>	igles[j]-a
b. <i>e</i> -stem	-cit-o/a	escritor- <u>cit-o</u> fas- <u>e-cit-a</u>	escritor fas-e
mono σ			
base	e-cit-o/a	flor- <u>e-cit-a</u>	flor
$> 2\sigma$	-it-o/a	piramid- <u>it-a</u>	pirámid-e
c. athematic	-cit-o/a	cafe- <u>cit-o</u>	café
$\neg n, l, r$	-it-o/a	robot- <u>it-o</u> virus- <u>it-o</u>	robot virus

4 Stratal analysis

§8 In Stratal phonology, phonology applies iteratively over increasingly larger morphosyntactically defined domains: stems (which show intrastratal cyclicity), words, and phrases (Bermúdez-Otero 2011, 2018). Each stratum may be associated with a distinct constraint hierarchy.

§9 Allomorph selection is guided by a morphology-prosody alignment constraint requiring the right edge of the stem to align with the right edge of a syllable ($\text{ALIGN-R}(\text{stem}, \sigma)$, Prince and Smolensky 1993/2004:127). Therefore, the *-cit-o/a* allomorph is selected by ordinary *e*-stems, which end in a consonant in the singular.

(4) $\text{ALIGN-R}(\text{stem}, \sigma)$ (based on $\text{ALIGN}(\text{stem}, R; \omega, R)$ in Bermúdez-Otero 2012:46)

If *o* is the rightmost output segment standing in correspondence with some input segment *i* in a stem, then assign a violation mark if *o* is not rightmost in a syllable.

(5) *cancioncita*

canción-{ita~cita}	AL-R(st, σ)
a.  can.cion.-ci.ta	
b. can.cio.n-i.ta	*!

§10 In *e*-only stems, selecting either of the two allomorphs would satisfy $\text{ALIGN-R}(\text{stem}, \sigma)$ equally well. However, another alignment constraint, $\text{ALIGN:stem}[\text{suffix } V \rightarrow \text{onset}]$, favors *-cit-o/a* over *-it-o/a*. This constraint, which requires vowel-initial, stem-based suffixes to align to the left with an onset, is responsible for stem-final vowel deletion in Spanish (e.g., *tax-ero* ‘taxi driver’, not **taxi-ero*, Bermúdez-Otero 2013:47).

(6) $\text{ALIGN:stem}[\text{suffix } V \rightarrow \text{onset}]$ (Bermúdez-Otero 2013:46)

For every vocoid *V* in the output, such that *V* has an input correspondent that is initial in a stem-attached suffix, assign one violation mark if the left edge of *V* does not coincide with the right edge of an onset.

(7) *fasecita*

fase-{ita~cita}	AL:st[$\text{suffix } V \rightarrow \text{ons}$]	AL-R(st, σ)
a.  fa.se.-ci.ta		
b. fa.s-i.ta		*!
c. fa.se.-i.ta	*!	

§11 As opposed to *e*-only stems, *o/a*-stems select the *-it-o/a* allomorph. I interpret this as a strategy to avoid identity between the stem-final theme vowel and the affix-final theme vowel within grammatical words (cf. $[_{GW}[_{GW} \text{dieciocho}]\text{avo}]$ ‘eighteenth’ and $[_{GW}[_{GW} \text{doscientos}]\text{avo}]$ ‘two-hundredth’).

(8) OCP-ENDS

Let *x* be an output segment in correspondence with a piece-final input segment *X*, and *y* an output segment in correspondence with a piece-final input segment *Y*. Assign one violation mark if *x* and *y* are both [+back].

(9) *librito*

libro-{ito~cito}	OCP-ENDS	AL-R(st, σ)
a.  li.br-i.to		*
b. li.bro.-ci.to	*!	

§12 We have seen that consonant-final, ordinary *e*-stems select *-cit-o/a* (5). However, those that are monosyllabic select the same allomorph but surface with the theme vowel *-e*, which outside the diminutive appears only in the plural (1). I attribute this to faithfulness to the underlying prosodic

specification of *-cit-o/a*, which is preceded by an empty binary foot in its underlying representation: $/(\sigma\sigma)_{Ft}cit-o/$.

§13 When two stem allomorphs compete (e.g., *flor* and *flor-e*), the domain for selection is the cyclic domain triggered by the first syntactic operation on the stem—here, attachment of the diminutive suffix—which is associated with word-level phonology, as will be demonstrated.

(10) *florecita*

{flor~flore}~{ita~($(\sigma\sigma)_{Ft}cita$)}		ID-($(\sigma\sigma)_{Ft}$)		AL-st[$_{\text{eff}}V \rightarrow \text{ons}$]		AL-R(st, σ)	
a.	flor → flo.r-i.ta						*!
b.	flor → flor.-ci.ta	*!					
c.	flor-e → (flo.re)-ita					*!	
d.	flor-e → (flo.re)-ci.ta						

§14 Returning to *e*-only stems, which select *-cit-o/a* and surface with the theme vowel *-e*, those that are longer than two syllables instead select *-it-o/a* and surface without the theme vowel *-e*. I attribute this outcome to faithfulness to *LONGLAPSE, which disfavors unstressed syllables that are not adjacent to a stressed syllable or to a word edge (Kager 2007).

(11) *piramidita*

pirámide-{ita~cita}		*LONGLAPSE	AL-R(st, σ)
a.	pi.ra.mi.d-i.ta	*	*
b.	pi.ra.mi.de.-ci.ta	**!	

§15 *o/a*-stems containing a diphthong select *-cit-o/a*, rather than the default *-it-o/a*, and also surface with an [e] vowel, which I interpret as epenthetic, as opposed to the [e] vowels that appear in *e*-stems, which are thematic. On the one hand, the ending *-ecit-o/a* allows diphthongs to occupy a foot-head position (e.g., (*pie.dr-e*)(*ci.t-a*)), and on the other hand, to remain faithful to the non-syllabicity of the glide in the immediate base (e.g., (*mo.m[j]e*)(*ci.t-a*)). This analysis assumes iterative foot parsing, although only the rightmost foot surfaces with an accent.

(12) *momiecita*

mom[j ₁]a-{i ₂ ta~ci ₂ ta}		ID-[j]	DEF-V
a.	mo.m[j ₁]-e-ci ₂ .ta		*
b.	mo.m[i _{1,2}].ta	*!	

(13) *piedrecita*

piedra-{ita~cita}		OCP-Ends	DIPH-Hd	AL-R(st, σ)	DEF-V
a.	(pie.dr-e)(ci.ta)			*	*
b.	pie(dr-i.ta)		*!	*	
c.	(pie.dra)(ci.ta)	*!			

§16 That the diminutive suffix is a word-level affix is clear from the overapplication in the selection of the diphthongal stem in diminutives, as in *piedr-ecit-a*. Stems like this have two listed allomorphs: {piedr-a~pedr-a}. In stem-level derivation, the allomorph with monophthong is selected because monophthongs are favored in unstressed position. However, in evaluative suffixation, which is word-level, the selection of the allomorph with diphthong “overapplies”.

(14) Diphthongal stem alternations (Bermúdez-Otero 2013:§3.2)

Stem-level		Word-level	
<i>pedr-ad-a</i>	‘stone thrown’	<i>piedr-ecit-a</i>	‘stone.DIM’
<i>a-pedr-ear</i>	‘to stone’	<i>piedr-az-a</i>	‘stone.AUG’
<i>pedr-usc-o</i>	‘unpolished rock’	<i>piedr-ot-a</i>	‘stone.PEJ’

§17 Stems that participate in the diphthongal alternation are special: their domain of selection is stem-level phonology, even when there is no stem-level affixation, in which case allomorphy is resolved in the second cycle (Bermúdez-Otero 2013:§3.3).

(15) Cyclic domain structure and phonological derivation of *piedrecita*

- $\llbracket_{WL} \llbracket_{SL} \left\{ \llbracket_{SL} \text{pedr-a} \rrbracket \llbracket_{SL} \text{piedr-a} \rrbracket \right\} \rrbracket \left\{ \llbracket_{SL} \text{it-a} \rrbracket \llbracket_{SL} \text{cit-a} \rrbracket \right\} \rrbracket$
- first cycle* (SL-P): $\left\{ \text{pedra; piedra} \right\} \mid \left\{ \text{ita; cita} \right\}$
- second cycle* (SL-P): *piedra*
- third cycle* (WL-P): *piedrecita*

§18 Finally, athematic stems select *-cit-o/a* in order to satisfy $\text{ALIGN-R}(\text{stem}, \sigma)$. This is evident in vowel-final athematic stems (e.g., *cafecito*) and in athematic stems ending in coronal consonants other than /s/ (e.g., *stickercito*). Otherwise, they select *-it-o/a* (e.g., *robot-it-o*). We attribute this to faithfulness to *CODA/obstruent (based on McCarthy 2008:228), as well as to the avoidance of [s.θ] clusters (e.g., *virus-ito*; cf. **virus-cit-o*), which are otherwise allowed in the language (e.g., *piscina* [pis.θi.na] ‘swimming pool’) but never in diminutives.

(16) *robotito*

robot-{ito~cito}		*CODA/obstr	AL-R(st,σ)
a.	ro.bo.t-i.to		*
b.	ro.bot.-ci.to	*!	

§19 Ordinary *e*-stems ending in *-d* usually avoid diminutives (e.g., *?pared-it-a*, **pared-cit-a* ‘wall.DIM’), and those ending in /-l/ idiosyncratically select *-it-o/a* (e.g., *cartel-it-o* ‘poster/sign.DIM’, *hotel-it-o* ‘hotel.DIM’, *papel-it-o* ‘paper.DIM’; cf. *sal-e-cit-a* ‘salt.DIM’).

5 Conclusions

§20 As opposed to many previous monostratal approaches (see Smith 2011:§2), this analysis of diminutive formation in Peninsular Spanish upholds a high standard of modularity.

§21 First, no morphological (e.g., nominal class) or syntactic property (e.g., DIM), is named in the statement of the phonological constraints, except for the broad distinction between stems and affixes in alignment constraints (*Indirect Reference Hypothesis*, Bermúdez-Otero 2012:77).

§22 Secondly, the high standard of modularity is also grounded in cyclicity: morphosyntactic structure determines the cyclic domains in which allomorphy is resolved by controlling the size and stratal affiliation of domains for phonological computation.

§23 The analysis also admits lexical prespecification for the allomorph *-cit-o/a*, which needs to be preceded by at least a disyllabic foot.

§24 Hopefully it has been demonstrated that an articulated theory of nominal classes in Spanish and a correct understanding of cyclic domain structure (Bermúdez-Otero 2013) allow for a comprehensive account of diminutive formation in Peninsular Spanish.

References

- Bermúdez-Otero, Ricardo (2011). “Cyclicity”. In: *The Blackwell Companion to Phonology*. Ed. by Marc van Oostendorp, Colin J. Ewen, Elizabeth Hume, and Keren Rice. Malden, MA: Wiley-Blackwell, pp. 2019–2048.
- (2012). “The architecture of grammar and the division of labour in exponence”. In: *The morphology and phonology of exponence*. Ed. by Jochan Trommer. Oxford: Oxford University Press, pp. 8–83.
- (2013). “The Spanish lexicon stores stems with theme vowels, not roots with inflectional class features”. In: *Probus* 25, pp. 3–103.
- (2018). “Stratal phonology”. In: *The Routledge Handbook of Phonological Theory*. Ed. by S.J. Hannahs and Anna Bosch. Abingdon: Routledge, pp. 100–134.
- (2025). “A stratal study in abstractness: Opacity and incomplete neutralization in English /aɪ/-raising, /t,d/-flapping, and prefortis clipping. Manuscript, University of Manchester”.
- Bermúdez-Otero, Ricardo and Francesc Torres-Tamarit (Accepted). “Modularity, cyclicity, and constrained non-uniformity in Spanish stress assignment”. In: *Linguistic Inquiry*.
- Bonet, Eulàlia and Daniel Harbour (2012). “Contextual allomorphy”. In: *The morphology and phonology of exponence*. Ed. by Jochan Trommer. Oxford: Oxford University Press, pp. 195–235.
- Colina, Sonia (2003). “Diminutives in Spanish: A morpho-phonological account”. In: *Southwest Journal of Linguistics* 22, pp. 45–88.
- Kager, René (2007). “Feet and metrical stress”. In: *The Cambridge Handbook of Phonology*. Ed. by Paul de Lacy. Cambridge: Cambridge University Press, pp. 195–227.
- Kiparsky, Paul (2000). “Opacity and cyclicity”. In: *The Linguistic Review* 17, pp. 351–365.
- (2015). “Stratal OT: A synopsis and FAQs”. In: *Capturing phonological shades within and across languages*. Ed. by Yuchau E. Hsiao and Lian-Hee Wee. Oxford: Oxford University Press, pp. 2–24.
- McCarthy, John (2008). *Doing Optimality Theory: Applying Theory to Data*. Malden, MA: Blackwell Publishing.
- Prince, Alan and Paul Smolensky (1993/2004). *Optimality Theory: Constraint interaction in generative grammar*. Malden, MA & Oxford: Blackwell.
- Real Academia Española, Asociación de Academias de la Lengua Española (2009–2011). *Nueva gramática de la lengua española*. Espasa Calpe España : Asociación de Academias de la Lengua Española.
- Smith, Jason Allen (2011). “Subcategorization and Optimality Theory: The case of Spanish diminutives”. PhD thesis. University of California, Davis.
- Trommer, Jochen (2025). “Stratal Phonology. Manuscript, University of Leipzig”.