

Epenthesis and Morphology in Romance

Lori Repetti, Sedigheh Moradi, Mark Aronoff
Stony Brook University (SUNY)

Classical epenthesis

Spanish: *stop* [estop]

Classical epenthesis

Spanish: *stop* [estop]

‘Classical epenthesis’ is the insertion of phonological material whose appearance is motivated by phonology (to repair an illegal structure), and whose quality is usually unmarked in the language (Kitto & de Lacy 1999).

two epenthetic segments

two epenthetic segments

... depending on the position of the epenthetic segment

Bengali borrowings from English (Broselow 2015)

school > [iskul] ([i] in initial position)

glass > [gelaʃ] ([e] in internal position)

two epenthetic segments

... depending on the phonetic environment (“contextual coloring”)

Afrikaans loanwords in Sotho

blik > [buleke] ‘tin can’ ([u] adjacent to labials)

truwn > [tironi] ‘throne’ ([i] adjacent to non-labials)

two epenthetic segments

... copy of preceding vowel

English borrowings in American varieties of Italian

washtub [veʃʃetúbbbu]

cocktail [kɔkkɔtɛlla]

trouble [truúbbulu]

popcorn [pappakɔrno]

In all of these cases, the
choice of the inserted
segment is determined
phonologically.

Non-canonical epenthesis

San Marino utilizes two epenthetic vowels to satisfy constraints on word-final clusters: [i]/[e]

/lɛt/ > [lɛ:t] ‘bed’

/viv/ > [vi:v] ‘s/he lives’

/vintʃ/ > [vi:ntʃ] ‘s/he wins’

/ojm/ > [ojmi] ‘elm’

/dɔrm/ > [dɔ:rmɛ] ‘s/he sleeps’

Beyond classical epenthesis

The factors conditioning epenthesis are richer than previously noted, and go beyond phonological factors to morphological and morpho-syntactic information.

In particular, we will argue that, in some cases, the choice between epenthetic segments is based on morphology.

This talk...

Epenthesis patterns in Romance languages deviate from the classical type (Moradi 2017)

1. more than one epenthetic segment
2. arguments against an allomorphic approach
3. our proposal
4. other types of non-canonical insertions:
syllables, linking elements, etc.

Non-canonical epenthesis

San Marino utilizes two epenthetic vowels to satisfy constraints on word-final clusters:

[i]: /ojm/ > [ojmi̯] ‘elm’

/i/ default

[e]: /dɔrm/ > [dɔrmɛ̯] ‘s/he sleeps’

/e/ is used in 3sg
verb-final position

Non-canonical epenthesis

San Marino utilizes two epenthetic vowels to satisfy constraints on word-final clusters:

[i]: /ojm/ > [ojmi̯] ‘elm’

/i/ default

[e]: /dɔrm/ > [dɔrmɛ̯] ‘s/he sleeps’

/e/ is used in 3sg
verb-final position

The choice between them is made based on morpho-syntactic considerations.

Non-canonical epenthesis

Italian utilizes two epenthetic segments to repair an onset cluster violation:

[i]: [p_isikologo] ‘psychologist’
/l kane/ > [i_l kane] ‘the dog’

/i/ is the default

[o]: /l spekkjo/ > [l_o spekkjo] ‘the mirror’

/o/ is used
morpheme-finally

Non-canonical epenthesis

Italian utilizes two epenthetic segments to repair an onset cluster violation:

[i]: [p_isikologo] ‘psychologist’
/l kane/ > [i_l kane] ‘the dog’

/i/ is the default

[o]: /l spekkjo/ > [l_o spekkjo] ‘the mirror’

/o/ is used
morpheme-finally

The choice between them is made based on morphological considerations.

Non-canonical epenthesis

Veneto utilizes two epenthetic segments to satisfy a syllable constraints:

[e]: /l maɲa/ > [el maɲa] ‘he eats’

/e/ is the default

[o]: /maɲa l/ > [maɲe lo] ‘does he eat?’

/o/ is used
morpheme-finally

Non-canonical epenthesis

Veneto utilizes two epenthetic segments to satisfy a syllable constraints:

[e]: /l maɲa/ > [el maɲa] ‘he eats’

/e/ is the default

[o]: /maɲa l/ > [maɲe lo] ‘does he eat?’

/o/ is used
morpheme-finally

The choice between them is made based on morphological considerations.

Non-canonical epenthesis

Algueres utilizes two epenthetic vowels to satisfy syllable constraints:

[i]: /amik meu/ > [amik i meu]

/i/ is used
between words

[u]: /fresk + s/ > [freskus]

/u/ is used before
mas. pl. /s/

cf. /mɔlt + s/ > [mɔlts] 'dead (m.pl.)'

/kutʃu + s/ > [kutʃus] 'dogs'

(Loporcaro 1997)

Non-canonical epenthesis

Algueres utilizes two epenthetic vowels to satisfy syllable constraints:

[i]: /amik meu/ > [amik i meu]

/i/ is used
between words

[u]: /fresk + s/ > [freskus]

/u/ is used before
mas. pl. /s/

The choice between them is made based on morphological considerations.

Non-canonical epenthesis

Pallarese Catalan utilizes two epenthetic vowels to satisfy syllable constraints:

[ə]: simpl[ə] ‘simple’

/ə/ is default

[u]: gos + s > [gosus] ‘dogs’

/u/ is used before
mas. pl. /s/

cf. gat + s > *gats*

lloro + s > *lloros*

Non-canonical epenthesis

Pallarese Catalan utilizes two epenthetic vowels to satisfy syllable constraints:

[ə]: simpl[ə] ‘simple’

/ə/ is default

[u]: gos + s > [gosus] ‘dogs’

/u/ is used before
mas. pl. /s/

The choice between them is made based on morphological considerations.

Evidence from other languages

Hungarian (*CC)

[o]: used with nouns

/o/ nouns

család + k > családok

family nom.pl

[a]: used with adjectives

/a/ adjectives

vidám + k > vidámak

merry nom.pl

As well as Persian, Mohawk, Arabic, etc.

more than one epenthetic segment: previous accounts

- ~ Artes (2016) inflectional vowels used to repair syllable structure (Lloret and Viaplana 1992)
- ~ Cardinaletti and Repetti (2004); Repetti (2012) “morphological epenthesis”
- ~ Kager (1999: 130) “morphologically governed”
- ~ Steriade (1995: 138) “lexically derived”
- ~ Loporcaro (1997) historical explanation
- ~ Michelotti (2008) allomorphy

Allomorphy?

San Marino (Michelotti 2008)

3sg allomorphs (certain conjugation classes):

Ø [ri:d] 'laugh.3sg'

/e/ [i:rve] 'open.3sg'

Allomorphy?

San Marino (Michelotti 2008)

3sg allomorphs (certain conjugation classes):

Ø [ri:d] 'laugh.3sg'

/e/ [i:rve] 'open.3sg'

NB. 1sg/2sg has Ø morph

Ø [ri:d] 'laugh.1sg/2sg'

Ø [i:rvi] 'open.1sg/2sg'

Allomorphy?

Michelotti's (2008) claim that /e/ ([i:rve] 's/he opens) is an allomorph of Ø ([ri:d] 's/he laughs') misses a more general point: the quality of the inserted vowel (/e/) happens to be that of the most frequent vowel used in final position with 3rd person singular verbs: [durmi:ve] 's/he was sleeping', [mɔ:re] 's/he may die', [ba:le] 's/he dances'.

Our proposal

We take a novel approach: we identify the vowel [e] as the “default” final vowel for 3rd person singular verbs in San Marino. It is the epenthetic vowel used when needed in final position with 3rd person singular verbs.

We are not arguing that allomorphy doesn't exist!

- English indefinite article: *a/an*

a book

an apple

- English definite article: *ðə/ði*

the book

the apple

- English BE (suppletion)

am, is, are, was, were ...

Allomorphy?

Italian mas.sg definite article: [l], [il], [lo]

[l]	<i>l'amico</i>	'the friend'
[il]	<i>il bambino</i>	'the baby'
[lo]	<i>lo specchio</i>	'the mirror'

Allomorphy?

Italian mas.sg definite article: [l], [il], [lo]

1. /il, lo, l/ are allomorphs of the mas. sg. def. art.

Allomorphy?

Italian mas.sg definite article: [l], [il], [lo]

1. /il, lo, l/ are allomorphs of the mas. sg. def. art.
2. /l/ > [l, il, lo] with epenthetic [i] or [o]

Allomorphy?

Italian mas.sg definite article: [l], [il], [lo]

1. /il, lo, l/ are allomorphs of the mas. sg. def. art.
2. /l/ > [l, il, lo] with epenthetic [i] or [o]

~ [i] is the default epenthetic vowel, and its position is predictable in these contexts:

[il.bam.bi.no]

~ [o] is the morphologically neutral final vowel in nominals (Ferrari 2005), and its position is predictable in this context: [los.pɛk.kjo]

Our proposal

We propose that [i] is the default epenthetic vowel in Italian, and [o] is the epenthetic vowel used when needed in final position of nominals.

Our proposal

Calling these cases allomorphy misses a broad generalization: specific segments predictably repair an illegal structure within specific morphological or morpho-syntactic contexts.

The position and quality of the inserted segments are predictable!

Interim summary

Inserted Elements	classical epenthesis	non-canonical epenthesis		
<u>semantic function</u>	-		-	
<u>presence</u> is phonologically motivated	+		+	
<u>distribution</u> is influenced by morphology (or morpho-syntax)	-		+	
<u>quality</u> is influenced by morphology	-		+	

This approach can be extended
to other types of insertion:

~ syllable insertion

~ linking vowels

syllable insertion

insertion of semantically vacuous material
whose presence is phonologically driven,
whose distribution and quality are
influenced by morphology

Syllable insertion:

Formentera Catalan stem extenders

pɛrt / pərðələ

‘lose’ / ‘lose it (fem.sg)’

əprən / əprənɔgələ

‘learn’ / ‘learn it (fem.sg)’

bɯ / bɯlixələ

‘boil!’ / ‘boil it (fem)!’

(Bonet & Torres-Tamarit 2009)

Syllable insertion:

Formentera Catalan stem extenders

pert / pərð <u>é</u> lə	‘lose’ / ‘lose it (fem.sg)’
əprən / əprən <u>g</u> é <u>l</u> ə	‘learn’ / ‘learn it (fem.sg)’
bɯ / bɯli <u>x</u> é <u>l</u> ə	‘boil!’ / ‘boil it (fem)!’

- *prosodic requirement for moraic trochees at the right edge of verb + enclitic units*
- *distribution of the extenders is paradigmatically determined: different conjugation classes use different accretions*

Syllable insertion:

Italian and Maltese an <isc> ~ <ixx>

Italian: sugger-í / sugger-ísc-o

‘s/he suggested’ / ‘I suggest’

Maltese: i-ssuġġer-íet / ni-ssuġġer-íxx-i

‘she suggested’ / ‘I suggest’

(DiFabio 1990; Hoberman & Aronoff 2003)

Syllable insertion:

Italian and Maltese an <isc> ~ <ixx>

Italian: sugger-í / sugger-ísc-o

's/he suggested' / 'I suggest'

Maltese: i-ssugġer-íet / ni-ssugġer-íxx-i

'she suggested' / 'I suggest'

- *augment is used to avoid stressing the verb stem*
- *used only with verbs of a certain category*

linking elements

insertion of semantically vacuous material
whose presence and distribution are
morphologically driven (i.e., with
compounds)

Linking Elements

Italian: [i]:	cap <u>i</u> nera	‘blackcap’
	pett <u>i</u> rosso	‘robin’
Spanish: [i]:	pel <u>i</u> rojo	‘red-haired’
	pat <u>i</u> tuerto	‘bow-legged’
German: [s]:	Arbeits <u>s</u> zimmer	‘workroom’

Linking Elements

Italian: [i]:	cap <u>i</u> nera	‘blackcap’
	pett <u>i</u> rosso	‘robin’
Spanish: [i]:	pel <u>i</u> rojo	‘red-haired’
	pat <u>i</u> tuerto	‘bow-legged’
German: [s]:	Arbeits <u>s</u> zimmer	‘workroom’

- *no phonological motivation*
- *unpredictable distribution*
- *their presence is morphologically determined*

Interim summary

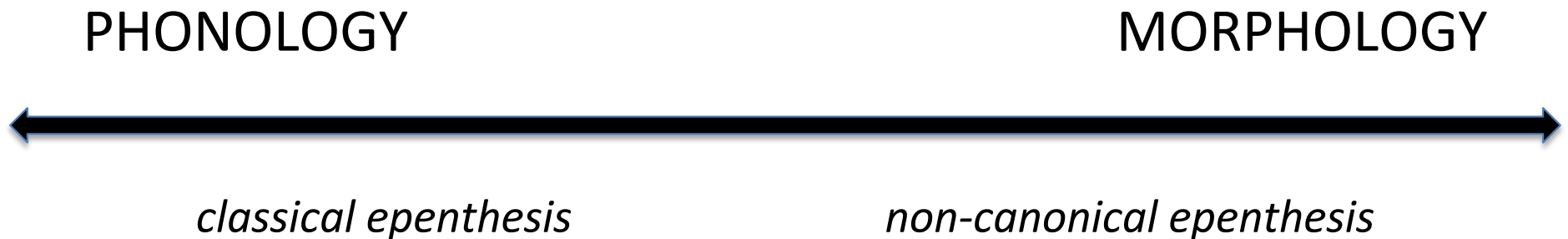
Inserted Elements	classical epenthesis	non-canonical epenthesis		
		two epen. segments	syllable insert.	linking elem.
<u>semantic function</u>	-	-	-	-
<u>presence</u> is phonologically motivated	+	+	+	-
<u>distribution</u> is influenced by morphology (or morpho-syntax)	-	+	+	+
<u>quality</u> is influenced by morphology	-	+	±	?

Conclusions

- Epenthesis - phonological repair
- Epenthetic segment quality
 - ~ default: “classical epenthesis”
 - ~ morpho-syntactically conditioned: “non-canonical”
- Insertion of semantically vacuous material (epenthesis, syllable, linking vowel) lies along a cline from phonological to morphological conditioning

Insertion of Semantically Vacuous Material

Phonology-Morphology Continuum:



Thank you!

Allomorphy?

Ptg, Catalan (Korean)

ALTERNATIONS PECULIAR TO SPECIFIC LEXEMES

Syllable insertion

- Spanish ante-suffixal interfixes, such as <ec>, require a specific phonological context (a short base), and their distribution is limited to appearing before certain suffixes only (Dressler & Merlini Barbaresi 1994)

Syllable insertion

Spanish: madr-e / madr-ec-ita
 'mother' / '(dim)'

amor/amorcito

Italian: bocconcino

consistency of exponence-no changes in the
exponence of a phonologically-specified
morpheme

Non-canonical epenthesis

Portuguese utilizes two epenthetic segments to resolve hiatus vowels:

[j]: *Correa* [koreja]

*/j/ is usually used to
resolve hiatus vowels*

[z]: /sofa + inu/ > [sofazinu]

*/z/ appears before
diminutive suffix*

(Garcia 2017, Bachrach & Wagner 2007)

Non-canonical epenthesis

Portuguese utilizes two epenthetic segments to resolve hiatus vowels:

[j]: *Correa* [koreja]

*/j/ is usually used
to resolve hiatus
vowels*

[z]: /sofa + inu/ > [sofazinu]

*/z/ appears before
diminutive suffix*

The choice between them is made based on lexical considerations.