Segmental and Prosodic Influences on Bolognese Epenthesis

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Introduction

- Bolognese (Gallo-Italic; Bologna): illicit coda clusters are subject to vowel epenthesis.
- Two properties we'll focus on:
 - As in Donceto (Cardinaletti & Repetti 2008), prosodic structure influences whether an epenthetic vowel is required.
 - Two epenthetic vowels: [u] before [v, m], [e] elsewhere.
- We extend the analysis of Cardinaletti & Repetti (2008) to account for these facts.

- Normally, [Cs] and [Ct] are allowed word-finally (1).
- But epenthesis occurs when [s] or [t] is a clitic (2).

```
(1)
                                    (2)
         a-'pæns
                       'I think'
                                              'skerre-s
                                                            'to dry us'
                                                            'to admire us'
         a-tra'vers
                      'L cross'
                                             ami're:re-s
         skerrs
                       'rare'
                                             li'verre-s
                                                            'to get up' 1plur
                       'lost'
                                             li've:re-t
                                                            'to get up' 2sing
         peirs
         't-se:lt
                       'you jump'
                                             tru'verre-s
                                                            'to find us'
                      '(a) jump'
         seilt
                                             tru've:re-t
                                                            'to find you'
                      'you invent'
                                             ˈsɛːle-t
                                                            'do you salt (st.)?'
         t-in'vænt
                       'I spoil'
                                                            'do you snore?'
         a-g'waxst
                                             'ranfe-t
```

• Evidence that [e] is epenthetic: [e] is regularly inserted to break up illicit root-internal word-final clusters.

(3)				
(0)	'texvla	'table'	ˈtɛːv <u>e</u> l	'tables'
	laŋˈteːrna	'lantern'	laŋˈteːreŋ	'lanterns'
	'li:vra	'hare'	ˈliːver	'hares'
	sfit'le:r	'to slice'	a-ˈsfat <u>e</u> l	'I slice'
	urd'ne : r	'to order'	a-ˈɑʊrd <u>e</u> ŋ	'I order'
	lus'tre:r	'to polish'	a -'lost \underline{e} r	'I polish'
	'dabla	'weak.FS'	'dab <u>e</u> l	'weak.MS'
	'ðαυvna	'young.FS'	'ðαυv <u>e</u> ŋ	'young.MS'
	'naigra	'black.FS'	'na <u>ige</u> r	'black. _{MS} '

 A clear sonority sequencing effect (e.g. Selkirk 1984); we'll return to this.



Elsewhere, the clitics in question do not surface with [e]:

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(4) i-s-'sakeŋ 'they dry us'
al-s-a'mira 'he admires us'
a-s-iŋdurmiŋ'tæŋ 'we fall asleep'
a-t-'trorv 'I find you'
't-sɛːl 'you salt (something).'
't-raŋf 'you snore.'
```

- These clitics also have a VC allomorph, but with [a], not [e]:
- (5) t-at-indur'mænt 'you fall asleep' t-as-'tro:v 'you find us'
 - Rather than positing allomorphs [-es], [-et] that appear only word-finally, we claim that the [-s], [-t] allomorphs trigger epenthesis. (One paradigm, like Cardinaletti & Repetti 2008)



- Analysis:
 - Clitics are outside the PWd but within the PP (Cardinaletti & Repetti 2008).
 - Therefore, [Cs]/[Ct] is permitted only PWd-internally.
 - CONTIGUITY(PWd) ≫ *COMPLEX ≫ CONTIGUITY(PP)



(6)

/ˈt-sɛːlt/	Contig(PWd)	*Complex	CONTIG(PP)
r a. 'tsɛːlt		*	
b. 'tsɛːlet	*!		*

(7)

/ˈsɛːl-t/	Contig(PWd)	*Complex	CONTIG(PP)
a. ˈsɛːlt		*!	
r b. 'sɛ:let			*

Illicit Clusters in Bolognese: Sonorants

• PWd-internal epenthesis driven by sonority requirements:

(8)

ˈtɛːvla	'table'	'tɛːv <u>e</u> l	'tables'
laŋˈteːrna	'lantern'	laŋˈteːreŋ	'lanterns'
'li:vra	'hare'	ˈliːver	'hares'
sfit'ler	'to slice'	a-ˈsfat <u>e</u> l	'I slice'
urd'ne : r	'to order'	a-ˈɑʊrd <u>e</u> ŋ	'I order'
lus'tre:r	'to polish'	a -'lost \underline{e} r	'I polish'
'dabla	'weak.FS'	'dab <u>e</u> l	'weak.MS'
'ðauvna	'young.FS'	'ðαυv <u>e</u> ŋ	'young.MS'
'naigra	'black.FS'	'na <u>ige</u> r	'black.MS'

(9)

/ˈliːvr/	SonSeq	Contig(PWd)	*Complex	CONTIG(PP)
a. ˈliːvr	*!		*	
r b. ˈliːver		*		*

• [m] triggers epenthesis as expected, but [u] appears, not [e]:

(10)

anma	'soul'	'aːn <u>u</u> m	'souls'
'faurma	'form'	'favr <u>u</u> m	'forms'
kal'mer	'to calm'	a-ˈkɛːl <u>u</u> m	'I calm'
lagar'me : r	'to weep'	a-ˈlɛːgr <u>u</u> m	'I weep'
'u:ltma	'last.FS'	ˈuːlt <u>u</u> m	'last.MS'
'sextma	'seventh.FS'	ˈsɛːtum	'seventh.MS'

[e] vs. [u]

- A TETU effect (McCarthy & Prince 1994):
 - Generally, vowel quality before [m] is not restricted (11).
 - FAITH preserves underlying vowel quality but doesn't protect epenthetic vowels.
 - AGREE(lab)-rime (e.g. Lombardi 1999) motivates a round epenthetic vowel (12).
- (11) θim'zɛ:ra 'bedbug infestation'
 dzem'leŋ 'gem.DIM'
 prem 'first'
 krizaŋ'teːm 'chrysanthemum'
 'ambra 'shadow'
 e'kɔnom 'treasurer'
 'omd 'humid'
- (12) AGREE(lab)-rime: within a rime, adjacent segments must match for [labial].

(13)

/'a:nm/	SonSeq	IDENT (lab)	$\mathop{\rm Agr}(\mathop{\rm lab})\text{-} \atop \mathop{\rm rime}$	CONTIG(PWd)	*[V, +rnd]	*[V, +hi]
a. ˈaɪnm	*!	 		 		1
b. 'arnem		 	*!	*		
rs c. 'ainum		l I		*	*	*

- Why [u], not [o], [ø], which would be more similar to the default [e]?
- *RoLo and *RoFro (Archangeli & Pulleyblank 1994, Kaun 2004).
- (14) a. *RoLo: non-high round vowels are disallowed.
 - b. *RoFro: front round vowels are disallowed.

(15)

/ˈaːnm/	SonSeq	IDENT (lab)	Agr(lab)- rime	*RoLo	*RoFro	*[V, +rnd]	*[V, +hi]
a. ˈaɪnm	*!	1		I I			I I
b. 'arnem			*!				
c. 'arnom				*!		*	
d. ˈaːnøm		 			*!	*	
rs e. 'ainum		 		 	 	*	*

ullet CONTIG(PWD), CONTIG(PP), and *COMPLEX omitted for space. All are outranked by SONSEQ.

- Interestingly, [v] behaves with sonorants here:
- (16) Most common example types:

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'seːrva'servant.S''seːruv'servant.P''vadva'widow''vaduv'widower'kur'vɛːr'to bend'a-'kuːruv'I bend'user'vɛːr'to observe't-u'seːruv'you observe'
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• Other obstruents don't trigger epenthesis in these contexts:

(17)

```
'scissors'
rbz
      forbz
                                     r\theta
                                            \thetarrcq
                                                        'pig'
^{\rm rb}
      taurb
                   'cloudy'
                                                        'lid'
                                     rts
                                            kweirts
       au'zu:rp
                   'I usurp'
rp
                                     rð
                                            zgerð
                                                        'wool comb'
                   'deaf'
rd
      saurd
                                            a'perdg
                                                        'I walk'
                                     dg
                   'portico'
rdg
      porrdg
                                            paŋdg
                                                        'mouse'
                                     ŋdg
                   'part'
       peirt
rt
```

Obstruent-obstruent clusters are permitted despite SonSEQ;
 but not when [v] is involved.

- Padgett (2002): In Russian (and possibly other languages), [v] is a sonorant.
- We suggest this is also true in Bolognese. Thus *['se:rv] violates SonSeq:

(18)

/ˈseːrv/	SonSeq	IDENT (lab)	Agr(lab)- rime	*RoLo	*RoFro	*[V, +rnd]	*[V, +hi]
a. 'seːrv	*!	 		 	 		
b. 'serrev		i I	*!	i I	i I		
c. 'serrov		 		*!		*	
d. ˈseːrøv		 		 	*!	*	
r e. ′seːruv		 		 	 	*	*

Other Contexts

• Underlying vowels do not change:

(19) [iŋˈkɛːv] 'groove'

/iŋˈkɛːv/	SonSeq	IDENT (lab)	Agr(lab)- rime	*RoLo	*RoFro	$^{*}[V, \\ +rnd]$	*[V, +hi]
a. iŋˈkɛːv			*	i I			i I
b. iŋˈkuːv		*!				*	*

Other Contexts

• AGREE(lab) does not require [u] after [m, v]:

(20) $['li:v-\underline{e}t]$ 'Get up!'

/ˈliːv-t/	SonSeq	IDENT (lab)	Agr(lab)- rime	*RoLo	*RoFro	*[V, +rnd]	*[V, +hi]
a. 'lizv-et		1			i I		
b. ˈliːv-ut			(*!)		 	*(!)	*(!)

Other Contexts

- Enclitics that are sonorants trigger epenthesis, too, when following a root-final C:
- (21) 'liːv-el 'ls he lifting (something) up?'
 'liːv-eŋ 'lift some up!'
 'liːv-um 'lift me up!'
 liˈvɛːr-uv 'to lift you up'

(22)

/ˈliːv-l/	SonSeq	Contig(PWd)	*Complex	CONTIG(PP)
a. ˈliːvl	*!		*	
s b. ˈliːvel				*

- Evidence: [v] alternates with [w] and is sometimes transcribed as [v].
- (24) Canepari & Vitali (1995:148): "/v/ often vanishes: $[fara'(v)a\eta na]$ 'guinea fowl', $[(v)\eta o]$ 'come (past part.)' (or also $[fara'va\eta na]$); occasionally it becomes [w]: [as'wad] 'si vede/one sees'."
 - Historical evidence: Latin [w] > [v].

Beyond Word-final Codas

- Our focus has been on word-final clusters, but proclitics show similar behavior.
- E.g. [e] is epenthesized, except that [u] appears when sharing a rime with [m, v]:
- (25) al-ve-'dzdɛ:va 'He was waking you up.'
 al-me-'tsftes 'He's undressing me.'
 l-um-'da 'he gives me'
 - More work is needed to determine how well our analysis accounts for data of this sort, too.

Conclusion

- Like other Romance languages, epenthesis in Bolognese shows sensitivity to morphological and prosodic structure.
- By extending the analysis of Cardinaletti & Repetti (2008), we can account for this behavior while also providing a treatment of the variation in the quality of the epenthetic vowel.
- Treating the word-final clitic data presented here as involving epenthesis has two major benefits:
 - These clitics show extensive allomorphy. Treating some of this allomorphy as epenthesis reduces the number of allomorphs in the lexicon and/or the number of clitic-specific processes that must be posited.
 - It connects clitic allomorphy to broader epenthetic processes in the language.



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