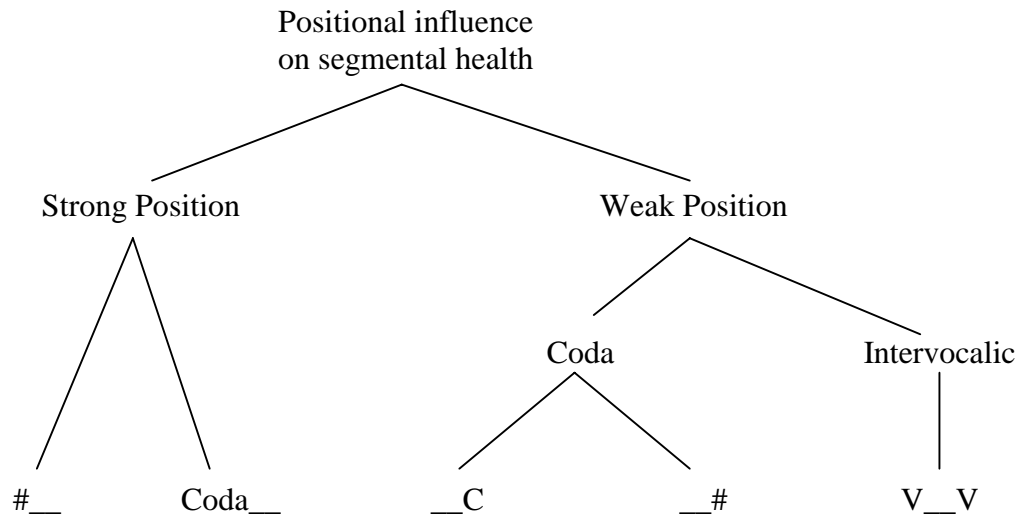


# The Coda Mirror

Lenition and Fortition: Partition of the string



## Lenition

(1) Latin obstruents > French

	a. #__		b. Coda__		c. Coda				d. V__V	
					__C		__#			
p	<b>p</b> orta	porte	tal <b>p</b> a	taupe	rupta	route	l <b>u</b> p(u)	[lu]	ripa	rive
b	<b>b</b> ene	bien	her <b>b</b> a	herbe	c <b>u</b> b(i)tu	coude	<b>u</b> b(i)	où	f <b>a</b> ba	fève
t	<b>t</b> ela	toile	cant <b>a</b> re	chanter	pl <b>a</b> t(a)nu	plane	mar <b>i</b> t(u)	mari	<b>v</b> ita	vie
d	<b>d</b> ente	dent	ard <b>o</b> re	ardeur	adven <b>i</b> re	avenir	n <b>u</b> d(u)	nu	<b>c</b> oda	queue
k	<b>c</b> or	cœur	ranc <b>o</b> re	rancœur	facta	faite	*ver <b>a</b> c(u)	vrai	lact <b>u</b> ca	laitue
g	<b>g</b> ula	gueule	ang <b>u</b> stia	angoisse	rig <b>i</b> (d)u	raide			*ag <b>u</b> stu	août
f	<b>f</b> ame	faim	infer <b>n</b> u	enfer	step <b>h</b> (a)nu	Etienne			def <b>o</b> ris	dehors
s	serpente	serpent	vers <b>a</b> re	verser	mus <b>a</b>	mouche	no <b>s</b>	[nu]	ca <b>u</b> sa	chose [z]

(2) Latin sonorants > Ibero-Romance

	a. #__		b. Coda__		c. Coda				d. V__V	
					__C		__#			
n	nocte	nojtə	cornu	kornu	ten(e)ru	tē <sup>m</sup> ru	pan(e)	pēw̃	luna	luə
			as(i)nu	aʒnu	unda	ũ <sup>m</sup> Cə	non	nēw̃		
			annu	ɛnu			ration(e)	rəzēw̃		
l	luna	luə	gallu	galu	cal(i)du	kaɫdu	mel	mɛɫ	volare	voar
					salvare	saɫvar	tal(e)	taɫ		
r	rota	rɔða	ten(e)ru	tē <sup>m</sup> ru	porta	pɔrta	mar(e)	mar	caru	karu
			israel	izraeɫ						
			carru	karu						

(3) Somali stops (voiced)

	a. #__		b. Coda__		c. Coda				d. V__V	
	sg indef		1° sg		__C		__#		pl	gloss
b	beer		gar <b>b</b> -o	pl	garab <sup>ʔ</sup> -ta	garab <sup>ʔ</sup>	dab <sup>ʔ</sup> -ka	dab <sup>ʔ</sup>	daβ-ab <sup>ʔ</sup>	field shoulder fire
d	dile		heb <sup>ʔ</sup> d-aj	he became tame	heβed <sup>ʔ</sup> -ka	heβed <sup>ʔ</sup>	geed <sup>ʔ</sup> -ka	geed <sup>ʔ</sup>	geeð-ad <sup>ʔ</sup>	killer tame animal tree
g	gaf		nir <b>g</b> -o	pl	nirig <sup>ʔ</sup> -ta	nirig <sup>ʔ</sup>	de <b>g</b> <sup>ʔ</sup> -ta	de <b>g</b> <sup>ʔ</sup>	de <b>ɣ</b> -o	error young fem camel ear

Somali stops (voiceless)

	a. #__		b. Coda__		c. Coda				d. V__V	
	sg indef		1° sg		__C		__#		sg def	gloss
t	tuug <sup>ʔ</sup>		gunt-aa		gunud <sup>ʔ</sup> -naa	gunud <sup>ʔ</sup> !	sumad <sup>ʔ</sup> -naa	sumad <sup>ʔ</sup> !	/mindi-ta/ = [mindi-ða]	thief knife tie a knot brand
k	kal		ark-aa		arag <sup>ʔ</sup> -naa	arag <sup>ʔ</sup> !	durug <sup>ʔ</sup> -naa	durug <sup>ʔ</sup> !	/kursi-ka/ = [kursi-ɣa]	pestle chair see move

(4) Tiberian Hebrew

		qal = simple			
		pf. 3m sg	ipf 3 m pl	imperative 2f	
root	pattern	C <sub>1</sub> aaC <sub>2</sub> aC <sub>3</sub>	yi-C <sub>1</sub> C <sub>2</sub> əC <sub>3</sub> -uu	C <sub>1</sub> iC <sub>2</sub> C <sub>3</sub> -ii	
√bSr		baaSar	yi-βSər-uu	biSr-ii	"cut off"
√ʃbr		ʃaaβar	yi-ʃbər-uu	ʃiβr-ii	"break"
√ktb		kaaθaβ	yi-βtəb-uu	kiθb-ii	"write"

(5) High German Consonant Shift

	a. #__		b. Coda__		c. Coda		d. V__V		
					__C	__#			
p	path	Pfad	carp	Karpfen		sheep	Schaf	pope	Pfaffe
t	ten	ydgm	salt	Salz		that	das	hate	hassen
k	corn	k̄χorn	thank	dank̄χe		streak	Strich	make	machen

Fortition

(6) IE [j] > Greek

- a. # \_\_<sup>1</sup> \*jug- > d̄zug-on "yoke" (Lat *iugum*, Skr *yugám*, Got *juk*)  
 \*je(s)- > d̄ze-oo "boil" (Skr *yásati*, Ohg *jesan*)
- b. C \_\_
- C<sub>lab</sub> p \*klep-joo > kleptoo "steal"  
 b [no clear example]
- C<sub>cor</sub><sup>2</sup> t \*melit-ja > melitta "bee"  
 d \*od-joo > od̄zoo "smell of"
- C<sub>vel</sub> k \*kaaruk-jo > keeruttoo "proclaim"  
 g \*stig-joo > stid̄zoo "sting"

(7) Latin [j] > French

	a. #__		b. Coda__		c. Coda		d. V__V		
					__C	__#			
j	jocu	ʒø	sapjam	saʃ		maj(u)	me	raja	ʁe
	jurare	ʒyʁe	rubju	ʁyʒø				jejunu	ʒœn

(8) Cypriot Greek

	a. #__		b. Coda__		c. Coda		d. V__V	
			underlying	surface	__C	__#		
	jatria		teri-azo	terk-azo			lojazo	
	jerakos		vari-ume	vark-ume			ajazin	
			napi-o	naʃc-o				
			e-pia-s-en	efca-s-en				
			vaθi-s (m)	vaθc-a (f)				
			plati-s (m)	plaθc-a (f)				
			not-ia	noθ-ca				

<sup>1</sup> In some cases, initial IE [j] is represented by Greek [h] as in Gr *heepar*, Lat *jecur*, Skr *yákr-t* "liver". Whether Greek shows [d̄z] or [h] in place of IE initial [j] is not predictable. This unclear situation has classically been acknowledged, see for instance Grammont (1948:93), Lejeune (1955:§152), Beekes (1995:143). However, it does not challenge the strengthening observed.

<sup>2</sup> The forms given are those of Attic. In some dialects, the same words show [-ss-], of which Lejeune (1955:§86) provides a survey. For discussion of (unexplained) [-ty-/-θy-] > [-s-] in some Attic words, see Lejeune (1955:§83).

(9) French consonantal epenthesis

Latin		French		
c <u>a</u> m(e)ra	>	ʃ <u>ā</u> brə	chambre	"room"
sim(u) <u>l</u> are	>	s <u>ā</u> ble	sembler	"seem"
* <u>e</u> ss(e)re	>	ε(s) <u>tr</u> ə	être	"be"
cin(e)re	>	s <u>ā</u> drə	cendre	"ash"
l <u>a</u> z(a)ru	>	l <u>a</u> drə	ladre	"leprous (mod. miserly)"
sp <u>i</u> n(u)la	>	ep <u>ε</u> glə	épingle	"pin"

Vocalic Face of the Coda Mirror

(10) Sievers's Law  
Gothic

	"light" roots		vs.	"heavy" roots	
	√VC-	√VV-		√VVC-	√VCC
2sg pres	nas-j-is	stoo-j-is		sook-ij-is	sand-ij-is
3sg, 2pl pres	nas-j-iþ	stoo-j-iþ		sook-ij-iþ	sand-ij-iþ
	"save"	"keep"		"search"	"send"

Vedic

s-jaam, dvaam / ...V # \_\_

s-ijaam, duvaa /  $\left\{ \begin{array}{l} \dots VC \# \_ \\ \dots VV \# \_ \\ \text{initial in a line} \end{array} \right\}$

Generalisation

a. Sievers's Law  
= vowel-zero alternation  
after {C,#} plus C

$\left[ \begin{array}{l} \emptyset \\ i \end{array} \right] j / \left\{ \begin{array}{l} \# \\ C \end{array} \right\} C \_$

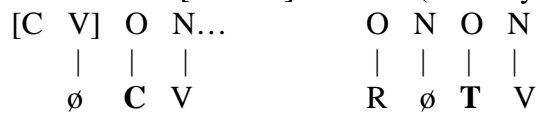
b. vowel-zero alternations  
before C plus {C,#}

$\left[ \begin{array}{l} \text{zero} \\ \text{vowel} \end{array} \right] / \_ C \left\{ \begin{array}{l} \# \\ C \end{array} \right\}$

(11) Descriptive Adequacy

a. consonants stand in the Coda Mirror iff they occur **AFTER** an empty Nucleus

word-initial: [#CV...] after a (heterosyllabic) consonant: [...RTV...]



b. consonants stand in Codas iff they occur **BEFORE** an empty Nucleus

word-final: [...C#] before a (heterosyllabic) consonant: [...RTV...]



(12) Challenge due to the Mirror-effect

	structural description	=	segmental effect	=	syllabic analysis
Coda	_ {#,C}	=	weakness	=	before empty Nuclei
	vs.		vs.		vs.
Coda Mirror	{#,C}_	=	strength	=	after empty Nuclei

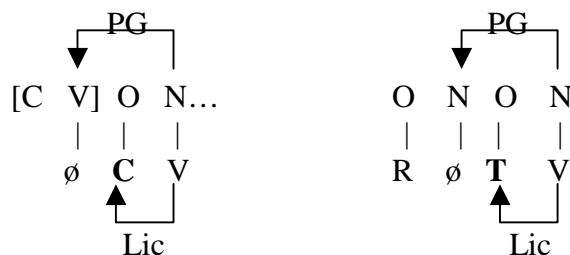
(13) Logical possibilities

Licensing	Government	gloss	segmental health according to predictions
+	-	Coda Mirror	splendid
+	+	V__V	unfavourable
-	-	Coda	unfavourable
-	+	<i>impossible</i>	---

(14) Explanatory adequacy

ungoverned but licensed: Coda Mirror

a. word-initial: [#CV...] b. after a (heterosyllabic) consonant: [...RTV...]





(16) 31 logically possible combinations of contexts

nb		#__	Coda__	Coda		V__V	name	predictions made by The Coda Mirror
				__#	__C			
1	single contexts	x	x	x	x	x	half Strong Position	ok
2							half Strong Position	ok
3							half Coda	ok
4							half Coda	ok
5							Intervocalic	ok
6	pairs	x	x	x	x	x	Strong Position	ok
7							*	
8							*	
9							*	
10							*	
11							*	
12							*	
13							Coda	ok
14							half Coda + Intervoc	ok
15							half Coda + Intervoc	ok
16	triplets	x	x	x	x	x	*	
17							*	
18							*	
19							*	
20							*	
21							*	
22							*	
23							*	
24							*	
25							Coda + V__V	ok
26	quadriplets	x	x	x	x	x	*	
27							*	
28							*	
29							*	
30							*	
31	quintuplets	x	x	x	x	x	spontaneous sound shift	

References

Ségéral, Philippe, Tobias Scheer ms. The Coda Mirror. Manuscrit Université Paris 7, Université de Nice.