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Fake palatalizations

(1) Somali: Bendjaballah (1999)
{g,q} --> j (=t͡ʃ) / __$i_{causative}$
/joog/ + /i/ $_{infinitive}$ --> [joogi] waan joogi doonaa "I will be present"
/joog/ + /i/ $_{causative}$ --> [jooji] waan joojiyay "I stopped (it)"

(2) roadmap
the proceeses that are usually referred to as "palatalizations" in fact fall into three categories: real, fake and mixed.

a. real: exchange of primes, syllable structure irrelevant.
ex.: German /χ/ --> [ç] / V_{front}__
Weiche (V__V), ich (V__#), wichtig (V__C) etc.

b. fake: no exchange of primes, entirely driven by syllable structure.
Lat rab**i**a > ra**ʒ**, cf. below

c. mixed: exchange of primes triggered by syllable structure.
Prediction: in this case, the exchange of primes is always a secondary consequence of syllable structure. The reverse situation does not occur.
vi**ne**a > vi**ɲ**ə vigne

1. loss of [n] in Coda
2. gemination of j
} syllabic processes

3. N docks on jj — segmental process/ exchange of primes

d. Phonology is called to properly differenciate between the two kinds of processes involved.

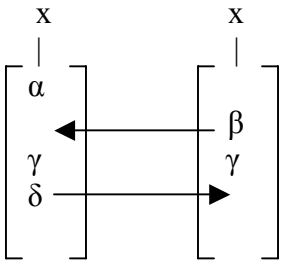
e. in the case of the evolution of latin Ci/e > Cj in Gallo-Romance, the Maximal Cluster approach to syllable structure makes the wrong prediction of homosyllabicity, while CVCV derives heterosyllabic clusters.

(3) UP vs. DOWN e.g. Schein & Steriade (1986), Scheer (2000)

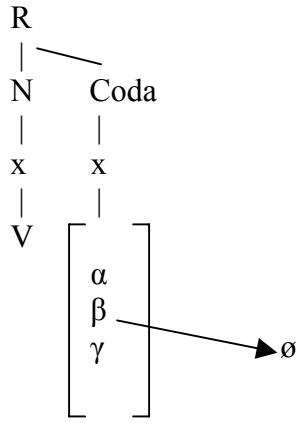
a. DOWN = processes due to adcaceny whereby phonological primes are delinked/ spread/ merge with other primes.
==> trigger below the skeleton

b. UP = processes driven by syllable structure. Consequences of syntagmatic relations between syllabic constituents (e.g. lenition).
==> trigger above the skeleton

c. DOWN



UP



(4) Vulgar Latin [VL]: consonification of short (non-low) vowel in hiatus[1]

a. {i, e} -> j / __ V

fi**i**l**i**a	>	fi**l**j**a**	*fille*
vi**i**n**e**a	>	wi**n**j**a**	*vigne*

b. {u, o} -> w / __ V

vi**d**u**a**	>	we**d**w**a**	*veuve*
c**o**agulaare	>	k**w**aglare	*cailler*

(5) a. Lat. filia = 3 syll.,VL. filja = 2 syll.
b. Cw/j clusters
c. no original Cj/w preserved: Cj = « palatalizations »
> mod. French [j], [z], [s], [ʒ], [ʃ], [ñ], ([L])
(+j metathesis / fusion with the preceding vowel ratjoone > [ʁɛzõ]

(6) evolution of Cj:
a. classical view: all processes depend on segmental characteristics of C
b. our claim:
- there is just one (fundamentally) *syllabic* process
- segmental properties are secondary and *never* the cause of the process

(7) Labials {p, b, m, v}+ yod

bj > **d͡ʒ** (>ʒ)		**vj** > **d͡ʒ** (>ʒ)		**mj** > **nd͡ʒ** (> ~ʒ)		**pç** > **t͡ʃ** (>ʃ)	
rabia	*rage*	cavea	*cage*	vindeemia	*vendange*	apiu	*ache*
rubeu	*rouge*	leviu	*liège*	siimiu	*singe*	sapiam	*sache*
goobioone	*goujon*	abbreviaare	*abréger*	*blasteemia	OFr. *blastenge*	seepia	*seiche*

(8) classical interpretation[2]: stengthening of j

a. j > d͡ʒ / # __

jaceere	*gésir*	jocu	*jeu*
jugu	*joug*	jeejuunu	*jeun*

b. initial + postconsonantal: homogeneous result and strength = 'strong' vs. 'weak' positions[3]

[1] Transcription: Latin spelling (<c> = [k], <v> = [w], <ph> = [f]). Vowel length is indicated by repeating the vocalic symbol; the stressed vowel is underscored. [ts], [dz] = coronal affricates (voiceless, voiced); [ñ], [L] = nasal and lateral palatals. Other symbols = IPA.

[2] Pope (1952: §203); La Chaussée (1974: 79); Carton (1974: 162); Zink (1986: 101); Jacobs (1993 : 149). Bourciez (1967: §171 « y consonnifié »).

[3] Bourciez, 1967: §109; Pope, 1952: §202, etc.

c. Labial > ø in Coda position:

b > ø		**v > ø**		**p > ø**		**m > ~ø**	
cub(i)tu	*coude*	naav(i)gaare	*nager*	rupta	*route*	gamba	*jambe*

d. => [Labial + yod]

i. strengthening of j in strong position (j > $\widehat{dʒ}$)

ii. weakening of the labial in Codas ({p, b, v} > ø, m > ~ø)

e. this is a correct analysis.

(9) postconsonantal C_2 in strong position iff C_1C_2 is a *heterosyllabic* cluster.

(10) C_1C_2: two cases

i. heterosyllabic

ii. homosyllabic « Branching Onset »: strengthening of C_2 never occurs.

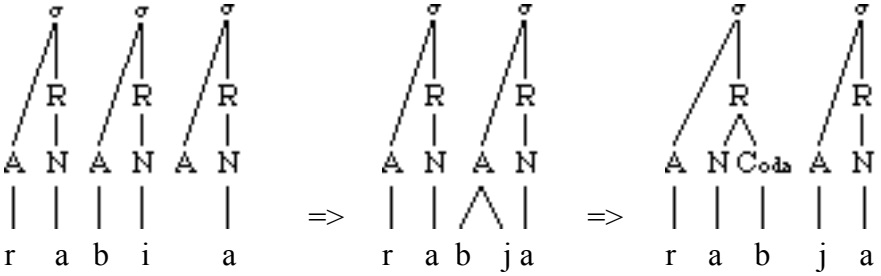
(11) Cj = *a priori* homosyllabic

a. classical

b. all algorithm-based syllabic theories involving "Onset Maximalization" (Kahn, 1976) 'Ambisyllabicity', 'Coda capture'[4]

(12) labials: classical scenario

a. b. c.



(13) that is, the processes crucially depend on the segmental nature of C:

a. C = cor. / vel.: 'palatalization' of C = fusion of C and j (different degrees thereof)

b. C = lab.: no palatalization possible[5] => re-syllabification => strengthening of j

[4] See Harris (to appear) for a ravaging critic of such a conception of syllabicity.

[5] Bourciez, 1967: §171; Pope, 1952: §305; La Chaussée, 1974: 79; Fouché, 1969: 925.

(14) Consonants from Latin to French: Scheer & Ségéral 2001, to appear

a. examples

	STRONG positions				WEAK positions					
	initial		postconsonantal		Coda				intervocalic	
	a. # __		b. C. __		c. __ .C		d. __ #		e. V __ V	
p	**p**orta	***p**orte*	tal**p**a	*tau**p**e*	ru**p**ta	*rou**t**e*	lu**p**(u)	*leu*	*sa**p**uutu	*su*
							*ca**p**(u)	*che**f***	rii**p**a	*ri**v**e*
b	**b**ene	***b**ien*	her**b**a	*her**b**e*	cu**b**(i)tu	*cou**d**e*	u**b**(i)	*où*	*nuu**b**a	*nue*
							bi**b**(o)	OFr.*boi**f***	fa**b**a	*fè**v**e*
t	**t**eela	***t**oile*	can**t**are	*chan**t**er*	pla**t**(a)nu	OFr.*plane*	mari**t**(u)	*mari*	vii**t**a	*vie*
d	**d**ente	***d**ent*	ar**d**oore	*ar**d**eur*	a**d**veniire	*avenir*	nuu**d**(u)	*nu*	co**d**a	*queue*
k	**c**or	***c**œur*	ran**c**oore	*ran**c**œur*	fa**c**ta	*fai**t**e*	ami**c**(u)	*ami*	lactuu**c**a	*lai**t**ue*
	ceera	***c**ire*	mer**c**eede	*mer**c**i*					li**c**eere	*loi**s**ir*
	***c**apu	***ch**ef*	ar**c**a	*ar**ch**e*					paa**c**aare	*pa**y**er*
g	**g**ula	***g**ueule*	an**g**ustia	*an**g**oisse*	ri**g**(i)da	*roi**d**e*			*a**g**ustu	*aoû**t***
	gente	***g**ent*	ar**g**entu	*ar**g**ent*	sa**g**ma	*somme*			fla**g**ellu	OFr.*flaiel*
	gamba	***j**ambe*	vir**g**a	*ver**g**e*					paa**g**aanu	*païen*
f	**f**ame	***f**aim*	in**f**ernu	*en**f**er*	ste**ph**(a)nu	*Etienne*			dee**f**oriis	*dehors*
s	**s**orte	***s**ort*	vers**s**aare	*ver**s**er*	mu**s**ca	*mouche*	noo**s**	*nous*	ca**s**a	*cho**s**e*
r	**r**eege	***r**oi*	ter**r**a	*ter**r**e*	ba**r**ba	*bar**b**e*	co**r**	*cœu**r***	pi**r**a	*poi**r**e*
			cam(e)**r**a	*cham**br**e*			amaa**r**(e)	*aimer*		
l	**l**uuna	***l**une*	me**r**(u)**l**a	*mer**l**e*	a**l**ba	*aube*	sa**l**	*se**l***	ve**l**a	*voi**l**e*
			cum(u)**l**u	*com**bl**e*			cuu**l**(u)	*cul*		
m	**m**are	***m**er*	ar**m**a	*ar**m**e*	ga**m**ba	*jambe*	fa**m**(e)	*faim*	a**m**aare	*ai**m**er*
n	**n**aasu	***n**ez*	cor**n**u	*cor**n**e*	can**t**aare	*chanter*	noo**n**	*non*	luu**n**a	*lu**n**e*
v	**v**iinu	***v**in*	ma**l**va	*mau**v**e*	naa**v**(i)gaare	*nager*	bo**v**(e)	*bœuf*	la**v**aare	*la**v**er*
									paa**v**oone	*paon*
w	**w**erra	***gu**erre*	*skar**w**ahta	*échau**g**uette*					*ca**w**a	OFr.*choue*
j	**j**ocu	***j**eu*	ra**bj**a	*ra**g**e*			maa**j**(u)	*mai*	ra**j**a	*rai**e***

b. summary (in bold, integrity or strengthening; in light, weakening)

	strong positions		weak positions		
	a. # __	b. C. __	c. __ .C	d. __ #	e. V __ V
p	**p**	**p**	ø	ø / f	ø / v
b	**b**	**b**	ø	ø / f	ø / v
t	**t**	**t**	ø	ø	ø
d	**d**	**d**	ø	ø	ø
k	**k / s / ʃ**	**k / s / ʃ**	I	I	ø / ˡz / j
g	**g / ʒ**	**g / ʒ**	I / U		ø / j
f	**f**	**f**	ø		ø
s	**s**	**s**	ø	ø	z
r	**r**	**r** **EPENTH.**	**r**	**r** / ø	**r**
l	**l**	**l** **EPENTH.**	U	**l** / ø	**l**
m	**m**	**m**	~ ø	~ ø	**m**
n	**n**	**n**	~ ø	~ ø	**n**
v	**v**	**v**	ø	f	ø / **v**
w	**g**	**g**			U
y	**ʒ**	**ʒ**		I	I

c. syllabic process + phonetic effects: same pattern, *e. g.* {k, g}/ __ {i, e}

i. strong position > (k, g, s, ʃ, ʒ)

ii. weak position > (ø, I, U, j, ˡz)

d. => i. the fate of a C crucially depends on its position in the syllabic structure

ii. = no phonetic process can modify the syllabic structure

(15) => the strong position of j in [labial + yod] clusters cannot be due to the 'impalatalizability' of labials; the theory of the « shift of the syllabic boundary » is unacceptable.

(16) general claim: in any Cj cluster created by the consonification of short i/e in hiatus, j is in (heterosyllabic) postconsonantal position (= *any* Cj cluster is like a [labial + yod] cluster).

(17) strict CVCV syllable structure (Government Phonology)[6]

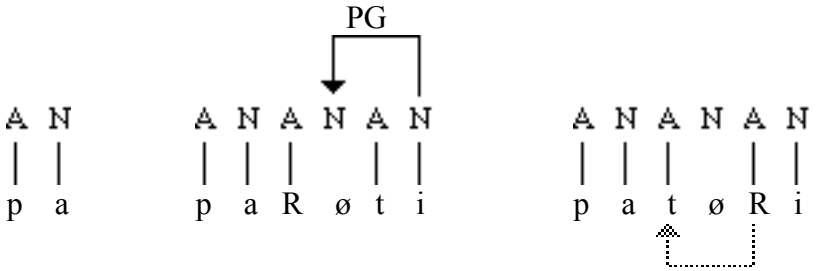
a. syllabic level : monotonous alternation of Onsets (O) and Nuclei (N), both simple (*i. e.* non-branching) : ONON... (or 'CVCV...')

b. 'Proper Government' (*infra* PG) : leftward syntagmatic relation holding between nuclear positions. A Nucleus which is properly governed by the Nucleus on its righthand side may remain empty. Only filled Nuclei are governors (18)b.

c. a consonant C_1 may govern another consonant C_2 iff C_1 is more complex than C_2 and licenced by its Nucleus. This relation is responsible for 'TR clusters', typically [obstruent + liquid]: tr, br, pl, kl, etc., i.e. "branching Onsets" (Scheer, 1999).
Nota : the empty Nucleus which is straddled by the consonants in thoses clusters is <u>not</u> properly governed.

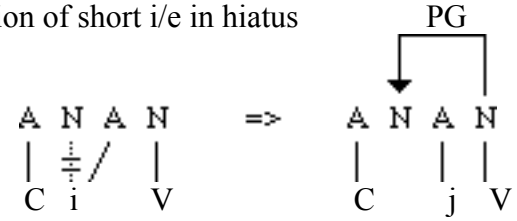
d. ECP: empty Nuclei that are either struck by PG or enclosed within a domain of consonantal interaction may remain phonetically unexpressed.

(18)



Nota : C in Coda = C preceding a properly governed empty Nucleus (18)b.

(19) VL consonification of short i/e in hiatus



=> in a 'CVCV' framework the result is *a priori* heterosyllabic (as opposed to (11)a,b)

(20) if all Cj clusters are heterosyllabic (*cf.* (16)), then
a. j is in <u>strong</u> position
b. we expect <u>strengthening</u>, as observed in cases of initial j and j after labial

[6] For details, see Lowenstamm, 1996; Scheer, 1996, 1999; Scheer & Ségéral, to appear.

(21) survey

		a. metathesis	b. ?			c. strengthening		
pj	V_		**j**	sapio	OFr. *sai*	**t͡ʃ**	seepia	*seiche*
	C_					**t͡ʃ**	*krippja	*crèche*
bj	V_		**j**	habeo	*ai*	**d͡ʒ**	rubeu	*rouge*
	C_					**d͡ʒ**	*lumbea	*longe*
mj	V_					**~d͡ʒ**	siimiu	*singe*
	C_					**~d͡ʒ**	commeaatu	*congé*
vj	V_		**j**	*aviolu	*aïeul*	**d͡ʒ**	leviu	*liège*
	C_					**d͡ʒ**	servi<u>e</u>nte	*sergent*
tj	V_	ᴵ**dz** ratioone *raison*						
	C_		**ts**	cantioone	*chanson*	**t͡ʃ**	porti(c)u	*porche*
dj	V_		**j**	modiolu	OFr *moiel*	**d͡ʒ**	*wadiu	*gage*
	C_		**d͡ʒ**	hordeu	*orge*			
kj	V_		**ts**	glacia	*glace*			
	C_		**ts**	arcioone	*arçon*	**t͡ʃ**	*ankja	*anche*
gj	V_		**j**	regioone	OFr *roion*			
	C_		**d͡ʒ**	Georgiu	*Georges*			
sj	V_	ᴵ**z** baasiaare *baiser*						
	C_	ᴵ**s** *bassiaare *baisser*						
nj	V_		**ñ**	viinea	*vigne*	**~d͡ʒ**	liineu	*linge*
	C_		**ñ**	hernia	OFr*hergne*			
rj	V_	ᴵ**r** paria *paire*				**d͡ʒ**	*sturione	*esturgeon*
	C_					**d͡ʒ**	*burrione	*bourgeon*
lj	V_		**L**	palea	*paille*			

(22) strengthening (21)c:
a. uniform result: d͡ʒ / t͡ʃ
b. not only after labials[7]

	dj > **d͡ʒ**		**nj** > **d͡ʒ**		**rj** > **d͡ʒ**	
i.	*wadiu	*gage*	liineu	*linge*	*sturione	*esturgeon*
			extraaneu	*étrange*	ceereu	OFr.*cerge*
			laaneu	*lange*	sorooriu	OFr.*serorge*
			*fanja	*fange*	*camoria	OFr.*chamorge*
			*mentioonia	*mensonge*		
ii.	*sedi(c)u	*siège*	Catalauni(c)u	*Chalonge*	baleaari(c)u	OFr.*baillarge*
	*pedi(c)u	*piège*	Santoni(c)u	*Saintonge*	cleeri(c)u	OFr.*clerge*
	medi(c)u	OFr.*miege*	mani(c)u	OFr.*mange*		
iii.	herbaati(c)u	*herbage*				
	ultraati(c)u	*outrage*				
	villaati(c)u	*village*				
	haereti(c)u	OFr.*eriege*				

[7] For g, perhaps *Gages* < *gahagja, *Vaiges* < *wagja, *Bruges* < *brugja / bruggja (Fouché,1969: 936).

c. $C_1C_2j > C_1j$ =>

i. **rj** > **d͡ʒ**

r[r]j	*bur[r]ioone	*bourgeon*
r[b/v]j	ser[v]iente	*sergent*
	*cer[v]ia	OFr.*cerge*
	*conser[v]iu	OFr.*concerge*
	super[b]ia	OFr.*soverge*
r[d]j	hor[d]eu	*orge*
	vir(i)[d]iaariu	*verger*
r[t]j	por[t]i(c)u	*porche*
	Per[t]i(c)u	*Perche*

ii. **lj** > **d͡ʒ**

l[v]j	al[v]eu	*auge*
	sal[v]ia	*sauge*

iii. **mj** > **d͡ʒ**

m[n]j	som[n]iaare	*songer*
	som[n]iu	*songe*
	*dom(i)[n]ioone	*donjon*
	*dom(i)[n]iaariu	*danger*
m[b]j	*lum[b]ea	*longe*
	cam[b]iaare	*changer*

iv. **nj** > **d͡ʒ** / **t͡ʃ**

n[t]j	Aven[t]i(c)u	*Avenche*
n[d]j	in[d]eusque	OFr.*enjosque*
n[k]j	*an[k]ja	*anche*
n[g]j	spon[g]ia	*éponge*

v. **sj** > **t͡ʃ**

s[t]j	foras[t]i(c)u	OFr.*forasche*
	domes[t]i(c)u	OFr.*domesche*

(23) Cdj > Cj

a.

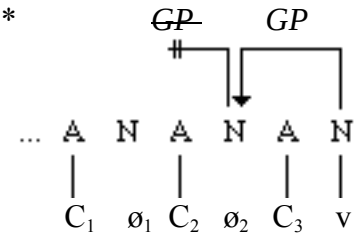
vereecun[d]ia	*vergogne*
*retun[d]iaare	*rogner*
Burgun[d]ia	*Bourgogne*
Compen[d]ia	*Compiègne*

b.

som[n]iaare	*songer*
som[n]iu	*songe*
*dom(i)[n]ioone	*donjon*

(24) internal *CCC

a. prediction



b. Gallo-Romance: regular[8]

-lbn-	gal[b](i)nu	*jaune*	-lkt-	cul[c](i)ta	OFr.*coute*
-mpt-	com[p](u)taare	*conter*	-ndt-	ven[d](i)ta	*vente*
-rbt-	der[b](i)ta	OFr.*dert[r]e*	-rmt-	dor[m](i)tooriu	*dortoir*
-stm-	test(i)mooniu	*témoin*	-rkb-	arc(u)ballista	*arbalète*
-rpm-	*carp(i)mu	*charme*	-rtk-	excort(i)cat	*écorche*

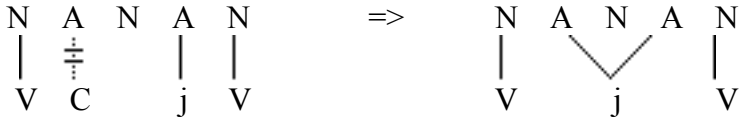
(25) 'intervocalic' Cj

a.	**pj**	>	**j**	sapio	OFr.*sai*	d.	**dj**	>	**j**	modiolu	OFr.*moiel*
b.	**bj**	>	**j**	habeo	*ai*					gaudia	*joie*
				deebeo	OFr.*dei*					inoodiaare	*ennuyer*
c.	**vj**	>	**j**	*aviolu	*aïeul*	e.	**gj**	>	**j**	regioone	OFr.*roion*
				*gaveola	OFr.*jaiole*					exagiu	*essai*
				*plovia	*pluie*					corrigia	*courroie*

[8] Unless the last two consonants can constitute a TR cluster: perd(e)re > *perdre*, ung(u)la > *ongle*. But in such a configuration, there is no illicit ungoverned empty Nucleus (see (17)b). This confirms that Cj clusters cannot be homosyllabic: if they were, the medial obstruent is expected to be preserved as is the case when a TR cluster can be constructed.

(26) in our view:
a. C in Coda is in a weak position: it is weakened to ø (regularly: see [11])
b. postconsonantal (heterosyllabic) j is in strong a position: it is preserved.

(27) moreover: j is geminated[9]



(28) strengthening:
a. *fortition* (affrication)
b. *gemination*

(29) nj, lj, kj:
a. examples

nj		**lj**		**kj**	
vi<u>i</u>nea	*vigne*	pa<u>l</u>ea	*paille*	*gla<u>c</u>ia	*glace*
uuni<u>oo</u>ne	*oignon*	taali<u>aa</u>re	*tailler*	suspici<u>oo</u>ne	*soupçon*
Burgu<u>n</u>[d]ia	*Bourgogne*	meli<u>oo</u>re	*meilleur*	*glooci<u>aa</u>re	*glousser*

b. the results of nj, lj, kj are 'heavy'
i. preceding tonic vowel = checked (for a, *e.g.* see Bourciez, 1967: §40)
ii. for kj, moreover: 1. no voicing, 2. no metathesis, 3. ts < kj = ts < ttj
(*matte<u>uu</u>ca > *massue* like gla<u>c</u>ia > *glace*)
c. => general gemination: nj, lj, kj > ññ, LL,tts.

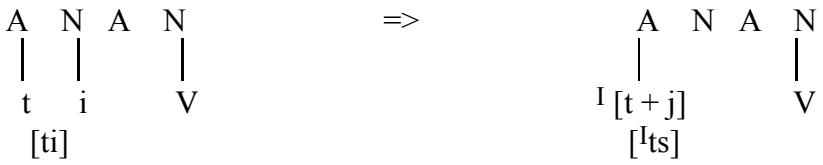
(30) phonetic events
a. lj > LL: palatalized lateral ? lateralized palatal
b. nj > ññ: nasalized palatal
c. kj: i. fronting (k --> t)
ii. assibilation

(31) 'tj'
a. **tj** > ᴵ**dz** / V __ V

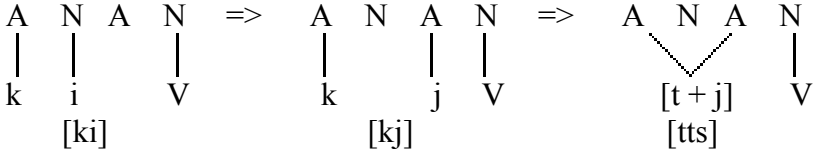
*l<u>a</u>tia	*laize*
ratio<u>o</u>ne	*raison*
*acutia<u>a</u>re	*aiguiser*

b. no strengthening of j at all
c. => if we are not mistaken, j *has never been in a strong position*

(32) a. **t**



b. **k**



=> Latin t+ short i/e in hiatus has not produced *tj

[9] La Chaussée, 1974: 67, 171; Bourciez, 1967: §49-H; Fouché, 1969: 256, 909-R1.

(33) Ancient Greek

a.	# __			*jug-	>	**dz**ug-on	*joug*	Lat. **i**ugum, Skr. **y**ugám, Got. **j**uk
				*je(s)-	>	**dz**e-oo	*bouillir*	Skr **y**ásati, VHA **j**esan)
b.	C __	$C_{[lab]}$	p	*klep-**j**oo	>	klep**t**oo	*voler*	
			b					
		$C_{[cor]}$	t	*melit-**j**a	>	melit**t**a	*abeille*	
			d	*od-**j**oo	>	o**dz**oo	*sentir*	
		$C_{[vél]}$	k	*kaaruk-**j**oo	>	keerut**t**oo	*proclamer*	
			g	*stig-**j**oo	>	sti**dz**oo	*puer*	

(34) Chronology

t ----------->

	period A [j] is NOT in strong position			period B [j] IS in strong position => **STRENGTHENING**				
				1. gemination			**2. fortition**	
mj							d͡ʒ	siimiu *lum[b]ea
pj					**jj**	sapio	t͡ʃ	seepia *krip[p]ja
bj					**jj**	habeo	d͡ʒ	rubeu
vj					**jj**	*aviolu	d͡ʒ	leviu
dj					**jj**	modiolu	d͡ʒ	*wadiu herbaa[t]i(c)u
gy					**jj**	regioone	[d͡ʒ]	[*brugja]
tj	V_ C_	**I dz** **ts**	ratioone cantioone					
sj	V_ C_	**I z** **I ss**	baasiaare *bassiaare				t͡ʃ	foras[t]i(c)u
rj		**I r**	paria				d͡ʒ	*sturione hor[d]eu
kj				V_ C_	**jj+*k*** **j+*k***	glacia lancea		
lj					**jj+*l***	palea	d͡ʒ	al[v]eu
nj				V_ C_	**jj+*n*** **j+*n***	viinea Burgun[d]ia hernia	d͡ʒ	liineu spon[g]ia

(35) => in Gallo-Romance:

a. in Cj, j is always in a *strong position*
b. in strong positions, j *always* strengthens

(36) general conclusion:

a. adjacency is not the trigger, but a condition on palatalisation.
b. if palatalizations are regarded as a single natural class, important generalisations are missed. E.g. French j in Cj behaves exactly like any other consonant in the Strong Position.

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