

Phonétique

Cours 3 :

Les consonnes de l'API (suite)

3. Les occlusives

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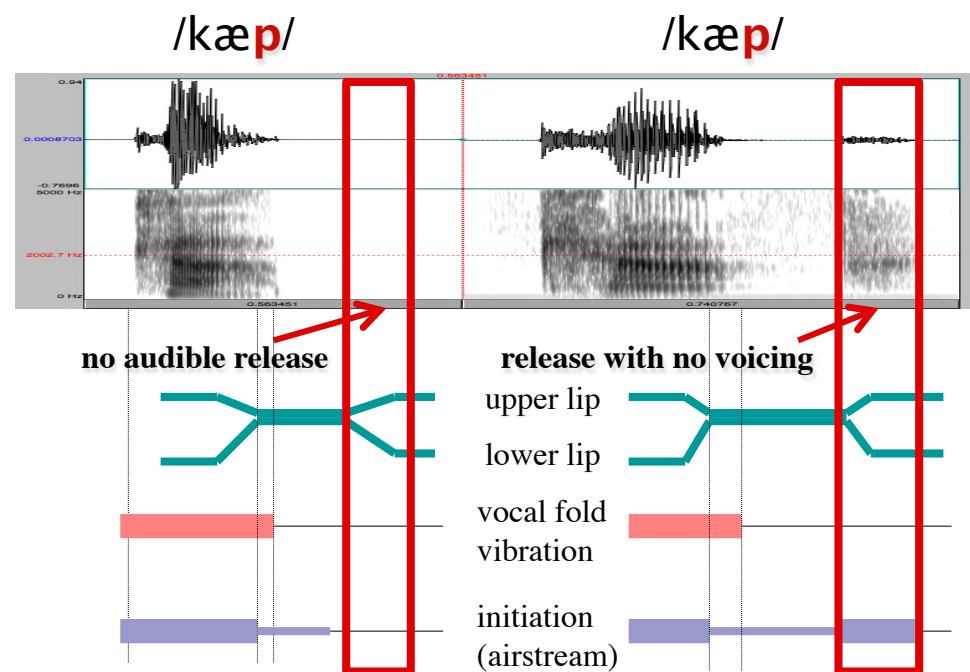
Relâchement non audible

Diacritics may be placed above a symbol with a descender, e.g. $\underset{\text{̰}}{\text{ŋ}}$

$\underset{\text{̰}}{\text{n}}$ $\underset{\text{̰}}{\text{d}}$..	Breathy voiced	$\underset{\text{̰}}{\text{b}}$ $\underset{\text{̰}}{\text{a}}$	$\underset{\text{̰}}{\text{ɲ}}$	Dental	$\underset{\text{̰}}{\text{t}}$ $\underset{\text{̰}}{\text{d}}$
$\underset{\text{̰}}{\text{s}}$ $\underset{\text{̰}}{\text{t}}$	~	Creaky voiced	$\underset{\text{̰}}{\text{b}}$ $\underset{\text{̰}}{\text{a}}$	$\underset{\text{̰}}{\text{ɲ}}$	Apical	$\underset{\text{̰}}{\text{t}}$ $\underset{\text{̰}}{\text{d}}$
t^{h} d^{h}	~	Linguolabial	$\underset{\text{̰}}{\text{t}}$ $\underset{\text{̰}}{\text{d}}$	$\underset{\text{̰}}{\text{ɲ}}$	Laminal	$\underset{\text{̰}}{\text{t}}$ $\underset{\text{̰}}{\text{d}}$
$\underset{\text{̰}}{\text{ɲ}}$	w	Labialized	t^{w} d^{w}	~	Nasalized	$\underset{\text{̰}}{\text{e}}$
$\underset{\text{̰}}{\text{ɲ}}$	j	Palatalized	t^{j} d^{j}	ɲ	Nasal release	$\text{d}^{\text{ɲ}}$
$\underset{\text{̰}}{\text{ɲ}}$	ɣ	Velarized	$\text{t}^{\text{ɣ}}$ $\text{d}^{\text{ɣ}}$	l	Lateral release	d^{l}
$\underset{\text{̰}}{\text{e}}$	ɣ	Pharyngealized	$\text{t}^{\text{ɣ}}$ $\text{d}^{\text{ɣ}}$	ɲ	No audible release	$\text{d}^{\text{ɲ}}$
$\underset{\text{̰}}{\text{e}}$	~	Velarized or pharyngealized	t			
$\underset{\text{̰}}{\text{e}}$	ɲ	Raised	$\underset{\text{̰}}{\text{e}}$ (ɲ = voiced alveolar fricative)			
$\underset{\text{̰}}{\text{n}}$	ɲ	Lowered	$\underset{\text{̰}}{\text{e}}$ (ɲ = voiced bilabial approximant)			

Voiced and voiceless plosives: Word-final position

- Observe the consonant at the **end** of the following words in English:
- /kæ**p**/
- /kæ**b**/
- Then compare them with the consonant at the beginning of the following words in French:
- /ka**p**/ (« cap »)
- /ka**b**/ (« Caba »)



Voiced and voiceless plosives: Word-final position

The release phase of voiceless plosives

- /kæp/
- [k^hæ̃p] [k^hæ̃p̚] (no audible release)

The release phase of voiced plosives

- /kæb/
- [k^hæ̃b̚] but rarely [k^hæ̃b̚ə]

Voiced and voiceless plosives: Word-final position

- In English, word-final **voiceless** plosives can be pronounced with **no audible release** : /kæp/ [k^hæ̃p] or [k^hæ̃p̚].
- Word-final **voiced** plosives are partially devoiced, and the voicing almost never lasts after release: /kæb/ [k^hæ̃b̚] but rarely [k^hæ̃b̚ə].

Relâchement non audible

• Cantonais

[hip^{˧˥}] 'to assist' 協 [hyt^{˧˥}] 'blood' 血

[hɛk^{˧˥}] 'to eat' 吃

• Coréen

[pap̚] 'cooked rice, meal' 밥

[u:mɕik̚] 'food' 음식 [su:bak̚] 'watermelon' 수박

Les occlusives / plosives (stops)

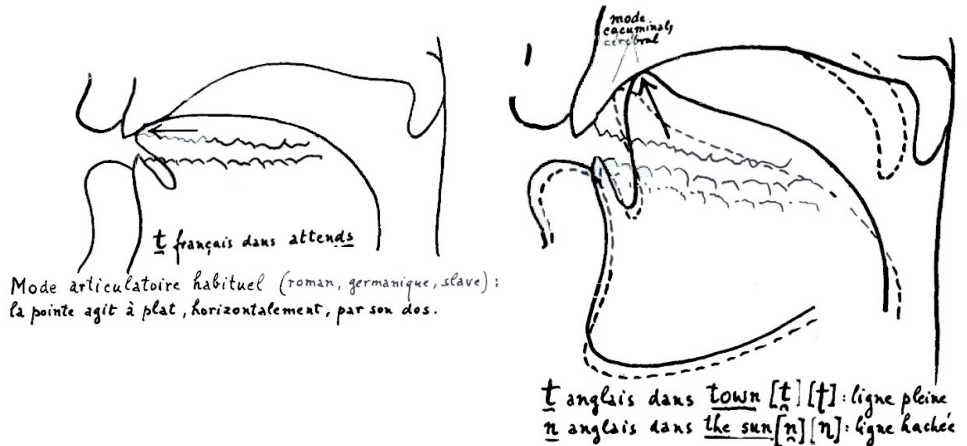
Consonnes (pulmonaires)

CONSONANTS (PULMONIC)

Dental / alvéolaire / postalvéolaire

		Bilabial	Labiodental	Dental	Alveolar	Postalveolar	R
sive (orale)	Plosive(stop)	p b		t d			
ive) Nasale	Nasal	m	ɱ		n		
Vibrante	Trill	ʙ			r		
Battue	Tap or Flap		ɸ		ɾ		
Fricative	Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	
ve latérale	Lateral fricative				ɬ ɮ		
roximante	Approximant		ʋ		ɹ		
roximante latérale	Lateral approximant				l		

/t/ français et /t/ anglais : lieu d'articulation et forme de la langue



• Straka, Georges (1965) *Album phonétique*

(occlusives) dentale / apicale / laminaire

Diacritics may be placed above a symbol with a descender, e.g. ᵀ

ᵀ ᵀ	..	Breathy voiced	ᵇ ᵇ	ᵇ	Dental	ᵀ ᵀ
ᶆ ᶆ	~	Creaky voiced	ᵇ ᵇ	ᵇ	Apical	ᵀ ᵀ
ᵀᵀ ᵀᵀ	~	Linguolabial	ᵀ ᵀ	ᵀ	Laminal	ᵀ ᵀ
ᵀᵂ	ᵂ	Labialized	ᵀᵂ ᵀᵂ	ᵀᵂ	Nasalized	ᵀᵂ
ᵀᵀ	ᵀ	Palatalized	ᵀᵀ ᵀᵀ	ᵀᵀ	Nasal release	ᵀᵀ
ᵀᵂ	ᵂ	Velarized	ᵀᵂ ᵀᵂ	ᵀᵂ	Lateral release	ᵀᵂ
ᵀᵀ	ᵀ	Pharyngealized	ᵀᵀ ᵀᵀ	ᵀᵀ	No audible release	ᵀᵀ
ᵀᵂ	~	Velarized or pharyngealized	ᵀᵂ	ᵀᵂ		
ᵀᵂ	ᵀ	Raised	ᵀᵂ (ᵀ = voiced alveolar fricative)			
ᵀᵂ		Lowered	ᵀᵂ (ᵀ = voiced bilabial approximant)			

(occlusives) dentale / alvéolaire apicale / laminaire

• Many languages contrast dental and alveolar stops. This difference is almost always accompanied by a difference in laminality. All four of the possibilities, **apical dental**, **laminal dental**, **apical alveolar** and **laminal alveolar** occur, but languages rarely have contrasts in which one sound is apical and the other laminal with the contact being made at the same place on the roof of the mouth. In the languages we have investigated, **dental stops are usually laminal** rather than apical, with contact on both the teeth and the front part of the alveolar ridge, whereas the **alveolar stops are often apical**, with contact usually on the center of the alveolar ridge. (Ladefoged & Maddieson, 1996 *Sounds of the World's Languages*. p. 21)

Les occlusives / plosives (stops)

Consonnes (pulmonaires) CONSONANTS (PULMONIC)

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Rétroflexe	Pa
Plosive(stop)	p b			t d		ᵀ ᵀ	c
Nasal	m	ᵇ		n		ᵀ	
Trill	ʙ			r			
Tap or Flap		ᵂ		ɾ		ᵀ	
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç
Lateral fricative				ɬ ɮ			
Approximant		ʋ		ɹ		ɻ	
Lateral approximant				l		ɭ	

Where symbols appear in pairs, the one to the right represents a voiced consonant. Sha

(dentales et) rétroflexes

- Hindi

[<u>t</u> al] 'beat' (n.)	[<u>d</u> al] 'lentil'
[<u>tʰ</u> al] 'platter'	[<u>dʰ</u> ar] 'knife edge'
[t]al] 'postpone'	[d]al] 'branch'
[tʰ]al] 'lumber shop'	[dʰ]al] 'shield'

Rétroflexes apicale et sub-apicale

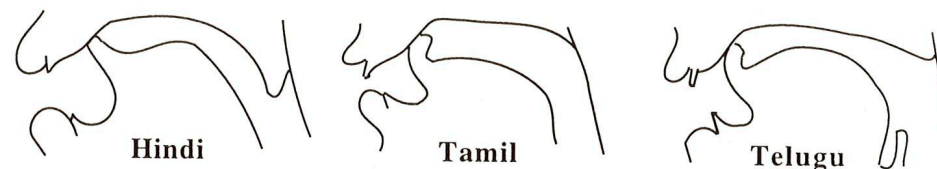


Figure 2.11 X-ray tracings of the apical retroflex ɖ in Hindi and the sub-apical retroflex ɖ in Tamil and Telugu (after Ladefoged and Bhaskararao 1983.)

- Ladefoged & Maddieson (1996: 27)

Les occlusives / plosives (stops)

occlusives (pulmonaires) PLOSIVES (PULMONIC)

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	V
stop)	p b			t d		ʈ ɖ	c ɟ	k
	m	ɱ		n		ɳ	ɲ	
	ʙ			ɾ				
lap		ɸ		ɽ		ɻ		
	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x
				ɬ ɮ				
nant		ʋ		ɹ		ɻ	ɻ	
nant				ɻ		ɻ	ɻ	

Shaded areas indicate symbols that appear in pairs, the one to the right represents a voiced consonant.

Palatales

- Tchèque

[cɛlo] 'body' tělo

[ɟɛlo] 'gun' dělo

[baca] Bat'a



Les occlusives / plosives (stops)

res)

		Vélaire / uvulaire						
iodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal
		t d		ʈ ɖ	c ɟ	k g	q ɢ	
ɱ		n		ɳ	ɲ	ŋ	ɴ	
		r					ʀ	
ʋ		ɾ		ɽ				
ɸ	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ
		ʈ ɖ						
ʋ		ɹ		ɻ	j	ɰ		
		l		ɭ	ʎ	ʟ		

air, the one to the right represents a voiced consonant. Shaded areas denote articulations judged impossible.

Les occlusives / plosives (stops)

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Glottal

olar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
ɖ		ʈ ɖ	c ɟ	k g	q ɢ		ʔ
ɱ		ɳ	ɲ	ŋ	ɴ		
ʀ					ʀ		
ɽ		ɽ					
z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
ɰ							
ɹ		ɻ	j	ɰ			
l		ɭ	ʎ	ʟ			

represents a voiced consonant. Shaded areas denote articulations judged impossible.

Vélaires / uvulaires

- Arabe

/kalb/ 'dog'

/qalb/ 'heart'

- Quéchua (UCLA)

<http://phonetics.ucla.edu/vowels/chapter12/quechua.html>

[kujui] 'to move'

[qaʎu] 'tongue'

Occlusive glottale (coup de glotte) / glottal stop

- Arabe

/saʔala/ '(he) asked' cf. /saara/ '(he) walked'

- Allemand : devant une voyelle au début de mot et de racine (sauf les mots grammaticaux inaccentués)

[ʔɛɐ'ʔaɐbaɪtn] 'achieve through work' erarbeiten

- Anglais : allophone de /t/

['bʌʔɛflaɪ] butterfly : à l'intérieur de mot en Cockney

boot boat bout : en fin de mot, et notamment de l'énoncé ; observé également dans d'autres accents.