

## Document de travail

# Équivalents des phonèmes français dans d'autres langues

### Choix des langues :

- langues maternelles d'élèves adultes de la Commission scolaire de Montréal (2015)
- langues parlées le plus souvent à la maison, 2011, Montréal (recensement de 2011)

### Sources d'information :

- principalement Wikipédia ([en.wikipedia.org](http://en.wikipedia.org) et [fr.wikipedia.org](http://fr.wikipedia.org))
- articles en ligne sur diverses langues
- grammaires de quelques langues

### Notes :

- Cette liste est très provisoire et sera recoupée avec d'autres sources d'information.
- Certaines langues ont été exclues par manque d'information. La qualité des informations varie beaucoup.
- D'autres langues peuvent être ajoutées au besoin.
- Le fait qu'une langue a deux phonèmes proches des équivalents français ne garantit pas que la démarcation entre les deux soit identique. Par exemple, l'anglais a un [ɛ] et un [e<sup>j</sup>], mais cela n'évite pas aux anglophones des difficultés à distinguer les [ɛ] et [e] français.

Liste compilée en mai 2015 par Jonathan Paterson, enseignants, pour le Bureau de soutien de proximité III FP-FGA des Services éducatifs de la Commission scolaire de Montréal. Cette liste a fait l'objet d'une mise à jour en octobre 2020.

	Afrikaans	Albanais	Algonquin	Allemand	Amharique	Anglais	Arabe
[i] ici	✓	✓	✓	✓	✓	✓	variation
[e] ré	diphthongué	abs. sauf dial.	✓	✓	+ ouvert	diphthongué	allophonique
[ɛ] lait	✓	✓	allophone de [e]	✓	? (+ fermé)	✓	variation allophonique
[a] la	✓	distinction abs.	✓	entre [a] et [ɑ]	entre [a] et [ɑ]	+ fermé	
[ɑ] là	absent	sauf dialecte	absent			✓	
[ɔ] bol	✓	✓	absent	+ fermé	? (+ fermé)	+ ouvert	absent
[o] beau	diphthongué	abs. sauf dial.	✓	✓	+ ouvert	diphthongué	variation
[u] roue	✓	✓	absent	✓	✓	diphthongué	allophonique
[y] rue	✓	✓	absent	✓	absent	absent	absent
[ø] feu	diphthongué	absent	absent	✓	absent	absent	absent
[œ] seul	✓	absent	absent	✓	absent	absent	absent
[ə] je	✓	✓	absent	✓	✓	+ postérieur	absent
[ɛ̃] pain	absent	abs. sauf dial.	nasalisation allophonique seulement	absent	absent	absent	absent
[ɑ̃] an	absent	abs. sauf dial.		absent	absent	absent	absent
[ɔ̃] bon	absent	abs. sauf dial.		absent	absent	absent	absent
[œ̃] un	absent	absent	absent	absent	absent	absent	absent
[ʝ] lion	✓	✓	✓	✓	✓	✓	✓
[w] toi	✓	absent	✓	absent	✓	✓	✓
[ɥ] huit	absent	absent	absent	absent	absent	absent	absent
[p] pot	✓	✓	✓	aspiré	✓	aspiré	absent
[b] beau	✓	✓	✓	+ assourdi	✓	✓	✓
[m] mère	✓	✓	✓	✓	✓	✓	✓
[t] tu	✓	✓	✓	aspiré	✓	aspiré	✓
[d] dent	✓	✓	✓	+ assourdi	✓	+ postérieur	✓
[n] nez	✓	✓	✓	✓	✓	✓	✓
[k] coq	✓	✓	✓	aspiré	✓	aspiré	✓
[g] gant	✓	✓	✓	+ assourdi	✓	✓	Égypte
[ŋ] ligne	[ŋ]	✓	absent	[ŋ]	✓	[ŋ]	✓
[f] feu	✓	✓	absent	✓	✓	✓	✓
[v] vent	✓	✓	absent	✓	emprunts	✓	absent
[s] sa	✓	✓	✓	✓	✓	✓	✓
[z] zéro	emprunts	✓	✓	✓	✓	✓	✓
[ʃ] chat	✓	✓	✓	✓	✓	✓	✓
[ʒ] jus	✓	✓	✓	absent	✓	✓	sauf Égypte
[ʁ] roue	[r], dial. [ʀ], [ʁ]	[r] et [r]	absent	rég. [ʁ] ou [r]	[r]	[ɹ] ou [ɹ]	[ʁ] et [r]
[l] loi	[ʎ]~[l]	[l] et [ʎ]	absent	✓	✓	[l] ou [ʎ]	[l] ou [ʎ]
groupes cons.	oui			oui		oui	
détente cons.						peu	
finales sourdes	oui			oui		non	

	Arménien	Atikamekw	Bambara *	Basque	Bengali	Berbère	Biélorusse
[i] ici	✓	✓	✓	✓	✓	variation	✓
[e] ré	absent	✓	✓	entre [e] et [ɛ] ?	✓	allophonique	absent
[ɛ] lait	✓	absent	✓		entre [a] et [ɑ] ?	[æ] entre [a] et [ɛ]	variation allophonique
[a] la	absent	✓	✓	+ central			
[ɑ] là	✓	absent	absent	absent			
[ɔ] bol	✓	absent	✓	entre [ɔ] et [o]	✓	absent	✓
[o] beau	absent	✓	✓		✓	variation	absent
[u] roue	✓	absent	✓	✓	✓	allophonique	✓
[y] rue	absent	absent	absent	dial.	absent	absent	absent
[ø] feu	absent	absent	absent	absent	absent	absent	absent
[œ] seul	absent	absent	absent	absent	absent	absent	absent
[ə] je	✓	absent	absent	absent	absent	non phoném.	absent
[ɛ̃] pain	absent	absent	✓	dial.	nasalisation non phonémique?	absent	absent
[ɑ̃] an	absent	absent	✓	dial.		absent	absent
[ɔ̃] bon	absent	absent	✓	dial.		absent	absent
[œ̃] un	absent	absent	absent	absent		absent	absent
[j] lion	✓	absent	✓	dial.	variable	✓	✓
[w] toi	absent	✓	✓	absent	variable	✓	seulement final
[ɥ] huit	absent	absent	✓	absent	absent	absent	absent
[p] pot	✓	✓	✓	✓	✓	absent	✓
[b] beau	✓	absent	✓	✓	[b]~[β]	✓	✓
[m] mère	✓	✓	✓	✓	✓	✓	✓
[t] tu	✓	✓	✓	✓	✓	✓	✓
[d] dent	✓	absent	✓	✓	✓	✓	✓
[n] nez	✓	✓	✓	✓	✓	✓	✓
[k] coq	✓	✓	✓	✓	✓	[k]~[x]	✓
[g] gant	✓	absent	[g] ~ [ɣ] (ou [gw])	✓	[g]~[ɣ]	[g]~[ɣ]	[ɣ], [g] ds emprunts
[ŋ] ligne	absent	absent	✓	✓	✓	absent	absent
[f] feu	✓	absent	✓	✓	[f]~[φ]~[pʰ]	✓	✓
[v] vent	✓	absent	absent	absent	absent	absent	pas en final
[s] sa	✓	✓	[s] ~ [z] ~ [ʃ]	✓	rég. [s]=[ʃ]	✓	✓
[z] zéro	✓	absent	absent	absent	✓	✓	✓
[ʃ] chat	✓	✓	absent	✓	rég. [s]=[ʃ]	✓	[ʃ]
[ʒ] jus	✓	absent	[dʒ]	absent	absent	✓	[z]
[ʁ] roue	[r], [r] et [ʁ]~[ʁ]	[r]	[r]	[r], [r]	[r]~[r], [r]	[r], [r]	[r]
[l] loi	✓	absent	✓	✓	✓	✓	pas en final
groupes cons.					pas en final		
détente cons.							
finales sourdes							

	Birman	Bulgare	Bulu, Ewondo	Cantonais	Catalan	Cingalais	Coréen	Créole haïtien
[i] ici	✓	✓	✓	✓	✓	✓	✓	✓
[e] ré	✓	absent	✓	variation	✓	✓	✓	✓
[ɛ] lait	✓	✓	absent	allophonique	✓	absent	✓	✓
[a] la	absent	+ central	central	variation	+ central	+ fermé [æ]	absent	✓
[a] là	✓	absent		allophonique	absent	+ central	+ central	absent
[ɔ] bol	✓	✓	✓	variation	✓	absent	[ʌ]	✓
[o] beau	✓	✓	✓	allophonique	✓	✓	✓	✓
[u] roue	✓	✓	✓	✓	✓	✓	✓	✓
[y] rue	absent	absent	absent	✓	absent	absent	absent	absent
[ø] feu	absent	absent	absent	variation	absent	absent	entre [ø] et [œ]	absent
[œ] seul	absent	absent	absent	allophonique	absent	absent		absent
[ə] je	absent	absent	absent	✓	+fermé	✓	absent	absent
[ɛ] pain	absent	absent	absent	absent	absent	absent	absent	✓
[a] an	absent	absent	absent	absent	absent	absent	absent	✓
[ɔ] bon	absent	absent	absent	absent	absent	absent	absent	✓
[œ] un	absent	absent	absent	absent	absent	absent	absent	absent
[j] lion	✓	✓	✓	✓	✓	✓	✓	✓
[w] toi	✓	ds emprunts	✓	✓	✓	[v]	✓	✓
[ɥ] huit	absent	absent	absent	absent	absent	absent	absent	[ɥi]
[p] pot	✓	✓	absent	✓	✓	✓	✓	✓
[b] beau	✓	✓	✓	absent	✓	✓	allophone de [p]	✓
[m] mère	✓	✓	✓	✓	✓	✓	✓	✓
[t] tu	✓	✓	✓	✓	✓	✓	✓	✓
[d] dent	✓	✓	✓	absent	✓	✓	allophone de [t]	✓
[n] nez	✓	✓	✓	✓	✓	✓	✓	✓
[k] coq	✓	✓	✓	✓	[k]~[c]	✓	✓	✓
[g] gant	✓	✓	✓	absent	[g]~[ɟ]	✓	allophone de [k]	✓
[ŋ] ligne	✓	[ŋ] alloph.	✓	✓	✓	✓	[ŋ]	✓
[f] feu	absent	✓	✓	✓	✓	absent ??	absent	✓
[v] vent	absent	✓	✓	absent	dial [v] ou [β]	absent	absent	✓
[s] sa	✓	✓	✓	✓	✓	✓	non final	✓
[z] zéro	✓	✓	✓	absent	✓	absent	absent	✓
[ʃ] chat	✓	✓	[tʃ]	absent	✓	[tʃ], ?[ʃ]	absent	✓
[ʒ] jus	absent	✓	[dʒ]	absent	✓	[dʒ]	absent	✓
[ʁ] roue	[ʁ] ds emprunts	[r]	absent	absent	[r] et [r]	[r]	[r] init ~ [n]	[ɣ](~[w])
[l] loi	✓	[l] ~ [ʎ]	✓	✓	vélaire	✓	✓	✓
groupes cons.	C(j/w)V(V)(N)			non				
détente cons.				non			non	
finale sourdes					oui			

	Cri (baie James)	Danois	Dari	Dioula	Espagnol	Estonien	Ewe
[i] ici	✓	✓	✓	✓	✓	✓	✓
[e] ré	entre [e] et [ɛ] ?	distinction en déclin	✓	✓	entre [e] et [ɛ]	entre [e] et [ɛ]	✓ (sauf dial)
[ɛ] lait			absent?	✓			✓ (sauf dial)
[a] la	central (dial?)	distinction en déclin	✓	✓	entre [a] et [ɑ]	[æ]	central
[ɑ] là			✓	absent		✓	
[ɔ] bol	absent	+ postérieur	absent	✓	entre [ɔ] et [o]	entre [ɔ] et [o]	✓
[o] beau	absent	✓	✓	✓		entre [ɔ] et [o]	entre [ɔ] et [o]
[u] roue	✓	✓	✓	✓	✓	✓	✓
[y] rue	absent	✓	absent	absent	absent	✓	absent
[ø] feu	absent	distinction en déclin	absent	absent	absent	entre [ø] et [œ] ?	absent
[œ] seul	absent		absent	absent	absent		absent
[ə] je	absent	+ postérieur	absent	absent	absent	absent	absent
[ɛ] pain	absent	absent	absent	✓	absent	absent	✓
[ɑ] an	absent	absent	absent	✓	absent	absent	✓
[ɔ] bon	absent	absent	absent	✓	absent	absent	✓
[œ] un	absent	absent	absent	absent	absent	absent	absent
[j] lion	✓	✓	✓	✓	✓	✓	[j]~[ɲ]
[w] toi	✓	absent	✓	✓	✓	absent	[w]~[ɣ]
[y] huit	absent	absent	absent	absent	absent	absent	absent
[p] pot	✓	✓	✓	✓	✓	✓	✓
[b] beau	✓	+ assourdi	✓	✓	✓	absent	[b]~[m]
[m] mère	✓	✓	✓	✓	✓	✓	
[t] tu	✓	✓	✓	✓	✓	✓	✓
[d] dent	absent	+ assourdi	✓	✓	✓	absent	✓
[n] nez	✓	✓	✓	✓	✓	✓	[n]~[ɲ]
[k] coq	✓	✓	✓	✓	✓	✓	✓
[g] gant	absent	+ assourdi	✓	✓	✓	absent	[g]~[ŋ]
[ŋ] ligne	absent	[ŋ] phonème??	[ŋ] allophone	✓	✓	[n']	[ŋ]~[j]
[f] feu	absent	✓	✓	absent?	✓	emprunts	✓
[v] vent	absent	[v] entre [v], [w]	allophone de [f]	✓	✓	✓	✓
[s] sa	✓ (dial [s]~[ʃ])	✓	✓	✓	✓	✓	✓
[z] zéro	absent	absent	✓	✓	absent	absent	✓
[ʃ] chat	✓ (dial [s]~[ʃ])	[ç]	✓	absent? [tʃ]?	[tʃ]	emprunts	absent
[ʒ] jus	absent	absent	✓	absent? [dʒ]?	absent	absent	absent
[ʁ] roue	absent	[ʁ] (muet ou [ɛ] après voyelle)	[r] ~ [r]	[r]?	[r], [r]	[r]	[ʁ]~[ʁ]~[ʁ]~[h]
[l] loi	absent	✓	✓	✓	✓	✓	[l]~[l]
groupes cons.			2 postvocalique, 1 pré vocalique	non?			oui
détente cons.							
finales sourdes							

	Farsi	Féroïen	Finois	Grec	Groenlandais	Gujarati	Hakka
[i] ici	+ouvert	✓	✓	✓	✓	✓	✓
[e] ré	+ouvert	✓	entre [e] et [ɛ]	entre [e] et [ɛ]	allophones de [i]	✓	absent
[ɛ] lait	[æ], entre [a] et [ɛ]	✓				✓	
[a] la		✓	[æ]	entre [a] et [ɑ]	✓	[æ] dans emprunts	✓
[ɑ] là	+ arrondi	absent	✓		absent?	✓	absent
[ɔ] bol	absent	✓	entre [ɔ] et [o]	entre [ɔ] et [o]	allophones de [u]	✓	✓
[o] beau	+ ouvert	✓				✓	absent
[u] roue	+ouvert	✓	✓	✓	✓	✓	✓
[y] rue	absent	absent	✓	absent	absent	absent	absent
[ø] feu	absent	✓	entre [ø] et [œ]	absent	absent	absent	absent
[œ] seul	absent	✓		absent	absent	absent	absent
[ə] je	absent	dial	absent	absent	absent	✓	✓
[ɛ] pain	absent	absent	absent	absent	absent	✓	absent
[ɑ] an	absent	absent	absent	absent	absent	✓	absent
[ɔ] bon	absent	absent	absent	absent	absent	✓	absent
[œ] un	absent	absent	absent	absent	absent	absent	absent
[j] lion	✓	✓	✓	✓	✓	✓	✓
[w] toi	allophone de [v]	✓	[v]	absent	absent	[v] entre [v], [w]	✓
[y] huit	absent	absent	absent	absent	absent	✓	absent
[p] pot	✓	✓	✓	✓	✓	✓	✓
[b] beau	✓	absent	emprunts	✓	absent	✓	absent
[m] mère	✓	✓	✓	✓	✓	✓	✓
[t] tu	✓	✓	✓	✓	✓	✓	✓
[d] dent	✓	absent	emprunts	✓	absent	✓	absent
[n] nez	✓	✓	✓	✓	✓	✓	✓
[k] coq	✓	✓	✓	✓	✓	✓	✓
[g] gant	✓	absent	emprunts	✓	[ɣ]	✓	absent
[ŋ] ligne	[ŋ] allophone de [n]	✓	[ŋ]	✓	[ŋ]	✓	✓
[f] feu	✓	✓	emprunts, dial	✓	emprunts	✓	initial
[v] vent	✓	✓	[v]	✓	✓	[v] entre [v], [w]	[v] initial
[s] sa	✓	✓	✓	entre [s] et [ʃ]	✓	✓	initial (~[ç])
[z] zéro	✓	absent	absent	entre [z] et [ʒ]	absent	dans emprunts	absent
[ʃ] chat	✓	✓	emprunts (~[s])	entre [s] et [ʃ]	dial.	✓	absent
[ʒ] jus	✓	absent	absent	entre [z] et [ʒ]	absent	✓	absent
[ʁ] roue	[r] ~ [r]	[ɹ]	[r]	[ɹ] ou [r]	[ʁ]	[r]	absent
[l] loi	✓	✓	✓	✓	✓	✓	initial
groupes cons.	2 postvocalique, 1 prévocalique	oui, mais réduction	limité		entre syllabes	oui	non
détente cons.						non	
finales sourdes							

	Haoussa	Hébreu	Hindi, ourdou	Hongrois	Igbo	Ilocano	Indonésien (malais)
[i] ici	✓	✓	✓	✓	✓	✓	✓
[e] ré	entre [e] et [ɛ] ?	entre [e] et [ɛ]	✓	+ ouvert	✓	absent	rare
[ɛ] lait			souv. diphtongué	+ ouvert	absent	✓	absent
[a] la	entre [a] et [ɑ] ?	entre [a] et [ɑ]	[æ] dans emprunts	+ central	✓	central	central
[ɑ] là			✓	+ arrondi	entre [a] et [ɔ]		
[ɔ] bol	entre [ɔ] et [o] ?	entre [ɔ] et [o]	souv. diphtongué	absent			absent
[o] beau			✓	✓	✓	✓	absent
[u] roue	✓	✓	✓	✓	✓	✓	✓
[y] rue	absent	absent	absent	✓	absent	absent	absent
[ø] feu	absent	absent	absent	✓	absent	absent	absent
[œ] seul	absent	absent	absent	absent	absent	absent	absent
[ə] je	absent	absent	✓	absent	absent	absent	✓
[ɛ] pain	absent	absent	✓	absent	absent	absent	absent
[ɑ] an	absent	absent	✓	absent	?	absent	absent
[ɔ] bon	absent	absent	✓	absent	?	absent	absent
[œ] un	absent	absent	absent	absent	absent	absent	absent
[j] lion	✓	✓	✓	✓	[j]~[ɲ]	✓	✓
[w] toi	✓	absent	[v] ~ [v] ~ [w]	absent	✓	✓	✓
[y] huit	absent	absent	absent	absent	absent	absent	absent
[p] pot	absent	✓	✓	✓	✓	✓	✓
[b] beau	✓	✓	✓	✓	[b] ~ [m]	✓	✓
[m] mère	✓	✓	✓	✓		✓	✓
[t] tu	✓	✓	✓	✓	✓	✓	✓
[d] dent	✓	✓	✓	✓	✓	✓	✓
[n] nez	✓	✓	✓	✓	[l] ~ [n]	✓	✓
[k] coq	[k]~[c]~[k*]	✓	✓	✓	✓	✓	✓
[g] gant	✓	✓	✓	✓	[g]~[ŋ]	✓	✓
[ɲ] ligne	absent	absent	✓	✓	[j]~[ɲ]	[ɲj] et [ŋ]	✓
[f] feu	[ɸ]	✓	[f], dial. [pʰ]	✓	✓	absent	emprunts
[v] vent	absent	✓	[v] ~ [v] ~ [w]	✓	absent/dial.	absent	emprunts
[s] sa	✓	✓	[s], dial. [ʃ]	✓	✓	✓	✓
[z] zéro	✓	✓	[z], dial. [dʒ]	✓	✓	absent	emprunts
[ʃ] chat	✓	✓	[ʃ] ou [ɕ]	✓	✓	✓	emprunts, [tʃ]
[dʒ] jus	absent	dans emprunts	[dʒ]	✓	[dʒ]	absent	[dʒ]
[ʀ] roue	[r] et [ʀ]	[ʀ] et/ou [ʀ]	[r]	[r]	[ɹ] et [ʁ]	[r] et [r]	[r]
[l] loi	✓	✓	✓	✓	[l] ~ [n]	✓	✓
groupes cons.			2 consonnes, pas 3		non	C[j/w]V(C) CV[ŋk]	
détente cons.					voyelle finale	non	
finales sourdes						non	

	Innu (montagnais)	Inuktitut	Italien	Japonais	Kabarde	Kabyle	Kannada
[i] ici	✓	✓	✓	✓	allophone	variation	✓
[e] ré	entre [e] et [ɛ]	absent	✓	entre [e] et [ɛ]	allophone	allophonique	variation allophonique
[ɛ] lait		absent	✓		absent	absent	
[a] la	✓	✓	entre [a] et [ɑ]	entre [a] et [ɑ]	✓	variation	central
[ɑ] là	absent	absent			[æ] allophone	allophonique	
[ɔ] bol	absent	absent	✓	entre [ɔ] et [o]	[ɔ] allophone	absent	✓
[o] beau	entre [o] et [u]	absent	✓		allophone	variation	✓
[u] roue		✓	✓	- arrondi [u]	allophone	allophonique	✓
[y] rue	absent	absent	absent	absent	allophone	absent	absent
[ø] feu	absent	absent	absent	absent	allophone	absent	absent
[œ] seul	absent	absent	absent	absent	absent	absent	absent
[ə] je	[ʌ]~[ə]~[ɪ]	absent	absent	absent	✓	✓	[ə]~[a]
[ɛ] pain	absent	absent	absent	absent	absent	absent	absent
[ɑ] an	absent	absent	absent	absent	absent	absent	absent
[ɔ] bon	absent	absent	absent	absent	absent	absent	absent
[œ] un	absent	absent	absent	absent	absent	absent	absent
[j] lion	absent	✓	✓	✓	✓	✓	✓
[w] toi	absent	absent	✓	✓	✓	✓	[w]~[β]
[y] huit	absent	absent	absent	absent	absent	absent	absent
[p] pot	✓	✓	✓	✓	✓	absent	✓
[b] beau	absent	absent	✓	[b] (ou [β])	✓	✓	✓
[m] mère	✓	✓	✓	✓	✓	✓	✓
[t] tu	✓	✓	✓	✓	✓	✓	[t]~[tʰ]
[d] dent	absent	absent	✓	✓	✓	✓	✓
[n] nez	✓	✓	✓	✓	✓	✓	✓
[k] coq	✓	✓	✓	✓	✓	✓	✓
[g] gant	absent	[ɣ]	✓	[g] ~ [ɣ] ~ [ŋ]	emprunts?	✓	✓
[ŋ] ligne	absent	[ŋ]	✓	((ŋ))	absent	absent	allophone
[f] feu	absent	absent	✓	✓	✓	✓	emprunts [f]~[p]
[v] vent	absent	✓	✓	absent	✓	[β]	[v]~[β]~[w]
[s] sa	✓	✓	distincts entre voyelles en ital.	✓	✓	✓	✓
[z] zéro	absent	absent	standard, non régional	✓	✓	✓	emprunts [z]~[ʒ]~[s]
[ʃ] chat	entre [s] et [ʃ] ?	absent	✓	✓	✓	✓	emprunts
[ʒ] jus	absent	absent	[dʒ] ou dial.	absent ou [ç]	✓	✓	✓
[ʁ] roue	absent	[ʁ] (~[N]~[ʔ])	[r]	[r]	[r] et [ʁ]	[r] et [ʁ]	[r]~[r]
[l] loi	✓	✓	✓	absent	✓	[l] et [ʎ]	✓
groupes cons.		pas initial; CC entre syllabes	oui, sauf qq dial.	non			
détente cons.							voyelle finale
finales sourdes							





	Letton	Lingala	Lituanien	Macédonien	Madurais	Malgache	Malinké *	Mandarin	Maori
[i] ici	✓	✓	✓	✓	✓	✓	✓	✓	✓
[e] ré	✓	✓	✓	absent	✓	entre [e] et [ɛ]	✓	✓	absent
[ɛ] lait	✓	sauf Kinshasa	✓	✓	✓		✓	variation allophonique	✓
[a] la	[æ]	✓	[æ]	central	central	central	entre [a] et [a]		✓
[a] là	central	absent	central						[ɔ]
[ɔ] bol	emprunts	✓	?	✓	✓	dialectes, entre [ɔ] et [o]	✓	variation allophonique	✓
[o] beau	absent	sauf Kinshasa	✓	absent	✓		✓	✓	absent
[u] roue	✓	✓	✓	✓	✓	✓	✓	✓	absent
[y] rue	absent	absent	absent	absent	absent	absent	absent	✓	absent
[ø] feu	absent	absent	absent	absent	absent	absent	absent	variation allophonique	absent
[œ] seul	absent	absent	absent	absent	absent	absent	absent		absent
[ə] je	absent	absent	absent	dial [ʌ]~[ɨ]	✓	absent	absent	✓	absent
[ɛ] pain	absent	absent	absent	absent	absent	absent	absent	absent	absent
[a] an	absent	absent	absent	absent	absent	absent	absent	absent	absent
[ɔ] bon	absent	absent	absent	absent	absent	absent	absent	absent	absent
[œ] un	absent	absent	absent	absent	absent	absent	absent	absent	absent
[j] lion	✓	✓	✓	✓	✓	absent	✓	✓	absent
[w] toi	absent	✓	[v]	absent	emprunts	absent	✓	✓	✓
[y] huit	absent	absent	absent	absent	absent	absent	absent	✓	absent
[p] pot	✓	✓	✓	✓	✓	✓	✓	initial	✓
[b] beau	✓	✓	✓	✓	✓	✓	✓	absent	absent
[m] mère	✓	✓	✓	✓	✓	dial pas final	✓	absent	✓
[t] tu	✓	✓	✓	✓	✓	✓	✓	initial	✓
[d] dent	✓	✓	✓	✓	✓	✓	✓	absent	absent
[n] nez	✓	✓	✓	✓	✓	dial pas final	✓	✓	✓
[k] coq	✓	✓	✓	✓	✓	✓	✓	initial	✓
[g] gant	✓	✓	✓	✓	✓	✓	absent	absent	absent
[ŋ] ligne	✓	✓	[ŋ] allophone	✓	✓	absent	✓	[ŋ] final	[ŋ]
[f] feu	emprunts	✓	emprunts ?	✓	absent	✓	✓	initial	[f]~[ɸ]
[v] vent	✓	✓	[v]	✓	absent	✓	absent	absent	absent
[s] sa	✓	✓	✓	✓	✓	+ palatalisé	✓	initial	absent
[z] zéro	✓	✓	✓	✓	absent	+ palatalisé	absent	absent	absent
[ʃ] chat	✓	✓	✓	✓	absent	absent	absent	[ʃ]	absent
[ʒ] jus	✓	??	✓	✓	absent	absent	absent	absent	absent
[ʁ] roue	[r]	absent	[r] et [rʲ]	[r]	[r]	[r]	[r] et [r]	[ʁ]~[z]	[r]~[r]
[l] loi	✓	✓	[ʎ] et [lʲ]	[l] et/ou [ʎ]	✓	+palatalisé	✓	initial	absent
groupes cons.								non	non (syll.CV)
détente cons.								non	
finales sourdes	non			oui ?				non	

	Marathi	Mooré	Néerlandais	Népalais	Norvégien	Oromo	Pachto	Pendjabi
[i] ici	✓	[i] et [ɪ]	✓	✓	✓	✓	✓	✓
[e] ré	[e] entre	✓	selon dialecte	✓	✓	✓	entre [e] et [ɛ]	✓
[ɛ] lait	[e] et [ɛ] ?	? allophone	+ fermé	absent	+ fermé	✓		✓
[a] la	[æ] ds emprunts	central	+ postérieur	central	+ fermé	[e]	+ central	central
[a] là	central		✓		central	✓	✓	
[ɔ] bol	emprunts	? allophone	✓	[ʌ]	+ ouvert	✓	entre [ɔ] et [o]	✓
[o] beau	✓	✓	selon dialecte	✓	+ ouvert	✓		✓
[u] roue	✓	[u] et [ʊ]	✓	✓	+ ouvert	✓	✓	✓
[y] rue	absent	absent	✓	absent	✓	absent	absent	absent
[ø] feu	absent	absent	emprunts seulmt	absent	✓	absent	absent	absent
[œ] seul	absent	absent	✓	absent	✓	absent	absent	absent
[ə] je	✓	absent	+ postérieur	absent	✓	absent	absent	✓
[ɛ] pain	absent	absent	absent	[e]	absent	absent	absent	✓
[a] an	absent	✓	absent	✓	absent	absent	absent	✓
[ɔ] bon	absent	absent	absent	[ʌ]	absent	absent	absent	✓
[œ] un	absent	absent	absent	absent	absent	absent	absent	absent
[j] lion	✓	[j] (~[ɲ])	✓	✓	✓	✓	✓	✓
[w] toi	[v]	✓	[v]~[β]~[w]	✓	[v]	✓	✓	[v]
[u] huit	absent	absent	absent	absent	absent	absent	absent	absent
[p] pot	✓	✓	✓	✓	✓	emprunts	✓	✓
[b] beau	✓	✓	✓	✓	✓	✓	✓	✓
[m] mère	✓	✓	✓	✓	✓	✓	✓	✓
[t] tu	✓	✓	✓	✓	✓	✓	✓	✓
[d] dent	✓	✓	✓	✓	✓	✓	✓	✓
[n] nez	✓	✓	✓	✓	✓	✓	✓	✓
[k] coq	✓	✓	✓	✓	✓	✓	✓	✓
[g] gant	✓	✓ (~[ɣ]??)	✓	✓	✓	✓	✓	✓
[ŋ] ligne	absent	allophone de [j]	[ŋ] allophone	[ŋ]	[ŋ]	✓	absent	✓
[f] feu	absent	✓	✓	absent	✓	✓	✓	emprunts ?
[v] vent	[v]	✓	+ assourdi	absent	[v]	emprunts	absent	[v]
[s] sa	✓	✓	+ chuintant	[s] (~[ʃ])	✓	✓	✓	✓
[z] zéro	absent	✓	+ assourdi + chuintant	absent	absent	emprunts	✓	emprunts ?
[ʃ] chat	✓	absent	+ postérieur ds emprunts	emprunts [ʃ]~[s]	✓	✓	✓	emprunts ?
[ʒ] jus	[dʒ]	absent	+ postérieur ds emprunts	absent	absent	absent	✓	absent
[ʁ] roue	[r]	[r]	[r]~[ʁ]~[-ɐ]	[r]	[r]~[r]~[ʁ]~[x]	[r]	[r]	[r] et [ɾ]
[l] loi	✓	✓	[l]~[ʎ]	✓	[l]~[ʎ] (~[ɾ])	✓	✓	✓
groupes cons.	non ?	peu?				au moins 2		
détente cons.		? Cons. Finales						
finales sourdes		? Cons. Finales						

	Peul *	Polonais	Portugais	Romanche	Roumain	Russe	Sango
[i] ici	✓	✓	✓	✓	✓	✓	✓
[e] ré	allophone ?	absent	entre [e] et [ɛ]	✓	entre [e] et [ɛ]	entre [e] et [ɛ]	✓
[ɛ] lait	✓	[ɛ] (~[e])	✓	✓			✓
[a] la	central ?	central (~[a])	central	central	absent	entre [a] et [ɑ]	✓
[ɑ] là		absent			central		absent
[ɔ] bol	✓	✓	✓	✓	entre [ɔ] et [o]	entre [ɔ] et [o]	✓
[o] beau	allophone ?	absent	✓	✓			✓
[u] roue	✓	✓	✓	✓	✓	✓	✓
[y] rue	absent	absent	absent	dial	absent	absent	absent
[ø] feu	absent	absent	absent	dial	emprunts	absent	absent
[œ] seul	absent	absent	absent	dial	emprunts	absent	absent
[ə] je	absent	absent	[ɛ]	inaccentué [ə]~[ɐ]	+ postérieur	✓	absent
[ɛ̃] pain	absent	[ɛ <sup>n</sup> ]~[ɛw]~[ɛ]	+ fermé	absent	absent	absent	[ɛ̃ <sup>n</sup> ]
[ɑ̃] an	absent	absent	+ antérieur	absent	absent	absent	[ɑ̃ <sup>n</sup> ]
[ɔ̃] bon	absent	[ɔ <sup>n</sup> ]~[ɔw]~[ɔ]	+ fermé	absent	absent	absent	[ɔ̃ <sup>n</sup> ]
[œ̃] un	absent	absent	absent	absent	absent	absent	absent
[j] lion	✓	✓	?	✓	+ palatalisé	✓	✓
[w] toi	✓	✓	?	absent	+ labialisé	absent	✓
[ɥ] huit	absent	absent	absent	absent	absent	absent	absent
[p] pot	✓	✓	✓	✓	✓	✓	✓
[b] beau	✓	✓	✓ (dial. ~[β])	✓	✓	✓	✓
[m] mère	✓	✓	✓	✓	✓	✓	✓
[t] tu	✓	✓	✓	✓	✓	✓	✓
[d] dent	✓	✓	✓ (dial. ~[ð])	✓	✓	✓	✓
[n] nez	✓	✓	✓	✓	✓	✓	✓
[k] coq	✓	✓	✓	✓	✓	✓	✓
[g] gant	✓	✓	✓ (dial. ~[ɣ])	✓	✓	✓ (dial. ~[ɣ])	✓
[ŋ] ligne	✓	✓	✓ (dial. ~[j])	✓	absent	absent	[ŋ]
[f] feu	✓	✓	✓	✓	✓	✓	✓
[v] vent	absent	✓	✓	✓	✓	✓	✓
[s] sa	✓	✓	✓	✓	✓	✓	✓
[z] zéro	absent	✓	✓	✓	✓	✓	✓
[ʃ] chat	[tʃ]	[ʃ] rétroflexe	✓	✓	✓	[ʃ] rétroflexe	absent
[ʒ] jus	[dʒ]	[z] rétroflexe	✓	✓	✓	[z] rétroflexe	absent
[ʁ] roue	[r]	[r]~[r]	[r]~[r], dial. ~[ʁ]~[ʀ]~[x]~[ɦ]	[r], dial [ʁ]	[r]~[r]	[r]	[r], dial. [r]~[ʀ]
[l] loi	✓	✓	[l]~[ɫ]~[u]	✓	✓	[l], [ɫ]	✓
groupes cons.	syllabes CVC	oui	variation dialectale		au moins 2	oui	non
détente cons.							
finales sourdes		?		oui		oui	

	Serbo-croate	Shanghaïen	Sindhi	Slovaque	Slovène	Somalien	Suédois	Swahili
[i] ici	✓	✓	✓	✓	✓	✓	✓	✓
[e] ré	entre [e] et [ɛ]	absent	✓	entre [e] et [ɛ]	✓	✓	✓	absent
[ɛ] lait		✓	absent		✓	+ postérieur ?	✓	✓
[a] la	central	✓	[æ]	[æ] (rare)	+ central	[æ]	+ central	absent
[a] là		variation	✓	central	absent	✓	✓	✓
[ɔ] bol	entre [ɔ] et [o]	allophonique ?	✓	entre [ɔ] et [o]	✓	✓	✓	✓
[o] beau		variation	✓		✓	✓	✓	✓
[u] roue	✓	allophonique ?	✓	✓	✓	✓	✓	
[y] rue	absent	✓	absent	absent	absent	absent	✓	absent
[ø] feu	absent	✓	absent	absent	absent	absent	✓	absent
[œ] seul	absent	absent	absent	absent	absent	absent	✓	absent
[ə] je	allophone	✓	[ɐ]	absent	✓	absent	+ postérieur	absent
[ɛ] pain	absent	absent	absent	absent	absent	absent	absent	absent
[ɑ] an	absent	absent	absent	absent	absent	absent	absent	absent
[ɔ] bon	absent	absent	absent	absent	absent	absent	absent	absent
[œ] un	absent	absent	absent	absent	absent	absent	absent	absent
[j] lion	✓	✓	✓	✓	✓	✓	✓	✓
[w] toi	absent	absent	[v]~[w]	absent	[v]~[w]~[v]~[u]	✓	absent	✓
[u] huit	absent	✓	absent	absent	absent	absent	absent	absent
[p] pot	✓	initial	✓	✓	✓	absent	✓ (aspiré)	✓
[b] beau	✓	initial	✓	✓	✓	✓	✓	implosive [ɓ]
[m] mère	✓	initial	✓	✓	✓	✓	✓	✓
[t] tu	✓	initial	✓	✓	✓	✓	✓ (aspiré)	✓
[d] dent	✓	initial	✓	✓	✓	✓	✓	implosive [ɗ]
[n] nez	✓	initial	✓	✓	✓	✓	✓	✓
[k] coq	✓	initial	✓	✓	✓	✓	✓ (aspiré)	✓
[g] gant	✓	initial	✓	✓	✓	✓	✓	implosive [ɠ]
[ŋ] ligne	✓	initial	✓	✓	[ŋj], ?[ŋ]	absent	[ŋ]	✓
[f] feu	✓	initial	✓	✓	✓	✓	✓	✓
[v] vent	✓	initial	[v]~[w]	[v]~[ʋ]	[v]~[w]~[v]~[u]	absent	✓	✓
[s] sa	dental	initial	✓	✓	✓	✓	✓	✓
[z] zéro	dental	initial	✓	✓	✓	absent	absent	✓
[ʃ] chat	✓	[ɕ]	absent	souvent rétroflexe	✓	✓	[ɕ]	✓
[ʒ] jus	✓	[ʒ̥]	absent	souvent rétroflexe	✓	absent	absent	absent
[ʁ] roue	[r]	[ɽ]	[r]~[r̥]	[r]	[r]	[r]	[r]~[ɽ]~[z]~[r̥]~[ʁ]	✓
[l] loi	[ɭ]	absent	✓	✓	✓	✓	✓	✓
groupes cons.		non			oui		oui	
détente cons.		non						
finale sourde		non			oui			



	Tibétain	Tigrinya	Turc	Twi (akan)	Ukrainien	Vietnamien	Wolof
[i] ici	✓	✓	✓	✓	+ ouvert	✓	✓
[e] ré	✓	entre [e] et [ɛ]	entre [æ], [ɛ] et [e]	✓	absent	✓	✓
[ɛ] lait	✓			✓	✓	✓	✓
[a] la	✓	entre [a] et [ɑ]	central	[æ]	absent	entre [a] et [ɑ]	central
[ɑ] là	absent			[a]	✓		
[ɔ] bol	allophone de [o]	entre [ɔ] et [o]	entre [ɔ] et [o]	✓	entre [ɔ] et [o]	+ ouvert	✓
[o] beau	✓			✓		✓	
[u] roue	✓	✓	✓	✓	+ ouvert	✓	✓
[y] rue	✓	absent	✓	absent	absent	absent	absent
[ø] feu	✓	absent	entre [ø] et [œ]	absent	absent	absent	absent
[œ] seul	absent	absent		absent	absent	absent	absent
[ə] je	allophone de [a]	[e]	absent	absent	absent	sud seulement	✓
[ɛ] pain	✓	absent	absent	absent	absent	absent	absent
[ɑ] an	absent	absent	absent	absent	absent	absent	absent
[ɔ] bon	absent	absent	absent	absent	absent	absent	absent
[œ] un	✓	absent	absent	absent	absent	absent	absent
[j] lion	✓	✓	✓	absent	✓	sud seulement	✓
[w] toi	✓	✓	absent	✓	[w]~[β]~[v]	✓	✓
[y] huit	absent	absent	absent	[ɥi] alloph.	absent	absent	absent
[p] pot	✓	✓	✓	aspiré	✓	final	initial
[b] beau	allophone de [p]	✓	✓	✓	✓	initial [ɓ]	✓
[m] mère	✓	✓	✓	✓	✓	✓	✓
[t] tu	✓	✓	✓	aspiré	✓	pas en fin de mot	✓
[d] dent	allophone de [t]	✓	✓	✓	✓	initial [ɗ]	initial
[n] nez	✓	✓	✓	✓	✓	✓	✓
[k] coq	initial	[k]~[x]	[k]~[c]	aspiré	✓	pas en fin de mot	initial
[g] gant	allophone de [k]	✓	[g]~[ɟ]	✓	✓	absent	✓
[ŋ] ligne	[ŋ] initial, [ɲ]	✓	absent	allophone de [n]	[ŋʲ]	✓	✓
[f] feu	absent	✓	✓	✓	✓	✓	✓
[v] vent	absent	emprunts	✓	absent	✓	pas en fin de mot nord seulement	absent
[s] sa	✓	✓	✓	✓	✓	pas en fin de mot	✓
[z] zéro	absent	✓	✓	absent	✓	nord seulement	absent
[ʃ] chat	[ç], [ʂ]	✓	✓	absent	✓	sud : [ʂ] nord : absent	absent
[ʒ] jus	absent	✓	✓	absent	✓	sud : [z] nord : absent	absent
[ʁ] roue	[ʁ] ~ [r] initial	[r]	[r]~[r]	[r], [r], [ɾ]	[r]	[ʁ] (sud : [ʁ]~[r]~[r])	[r]
[l] loi	initial	✓	✓	absent	✓	pas en fin de mot	✓
groupes cons.		CV, CVC	(C)V(C)(C)		pas en fin de mot	initial : cons. + semivoy.	pas initial
détente cons.							
finales sourdes	amuïes		oui				oui

	Yiddish	Zoulou
[i] ici	[ɪ]	✓
[e] ré	absent	final
[ɛ] lait	✓	non final
[a] la	central ?	central
[a] là		
[ɔ] bol	✓	non final
[o] beau	absent	final
[u] roue	[ʊ]	✓
[y] rue	absent	absent
[ø] feu	absent	absent
[œ] seul	absent	absent
[ə] je	✓	absent
[ɛ] pain	absent	absent
[a] an	absent	absent
[ɔ] bon	absent	absent
[œ] un	absent	absent
[j] lion	✓	✓
[w] toi	absent	✓
[y] huit	absent	absent
[p] pot	✓	✓
[b] beau	✓	✓
[m] mère	✓	✓
[t] tu	✓	✓
[d] dent	✓	✓
[n] nez	✓	✓
[k] coq	✓	✓
[g] gant	✓	✓
[ŋ] ligne	[ŋ] allophone	✓
[f] feu	✓	✓
[v] vent	✓	✓
[s] sa	✓	✓
[z] zéro	✓	✓
[ʃ] chat	✓	✓
[ʒ] jus	✓	[dʒ]
[ʁ] roue	[ʁ]~[ʁ]~[r]~[r]	absent
[l] loi	[ɫ]	✓
<b>groupes cons.</b>	oui	
<b>détente cons.</b>		
<b>finales sourdes</b>	non	