THE INTERNATIONAL PHONETIC ALPHABET (revised to 2018)

CONSONANTS (PULMONIC)

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| | <u> </u> | | | | | | | | | | | | | | | | | | | | | |
|---------------------|------------|---|-------|--------|--------|---|------|------|--------------|---|-----------|---|---------|---|-------|---|--------|---|------------|---|---------|---|
| | Bilabial I | | Labio | dental | Dental | | Alve | olar | Postalveolar | | Retroflex | | Palatal | | Velar | | Uvular | | Pharyngeal | | Glottal | |
| Plosive | p | b | | | | | t | d | | | t | d | c | J | k | g | q | G | | | 3 | |
| Nasal | | m | | ŋ | | | | n | | | | η | | ŋ | | ŋ | | N | | | | |
| Trill | | В | | | | | | r | | | | | | | | | | R | | | | |
| Tap or Flap | | | | V | | | | ſ | | | | r | | | | | | | | | | |
| Fricative | ф | β | f | V | θ | ð | S | Z | ſ | 3 | ş | Z | ç | j | X | γ | χ | R | ħ | S | h | ĥ |
| Lateral fricative | | | | | | | ł | ß | | | | | | | | | | | | | | |
| Approximant | | | | υ | | | | J | | | | J | | j | | щ | | | | | | |
| Lateral approximant | | | | | | | | 1 | | | | l | | λ | | L | | | | | | |

Symbols to the right in a cell are voiced, to the left are voiceless. Shaded areas denote articulations judged impossible.

CONSONANTS (NON-PULMONIC)

| Clicks | Voiced implosives | Ejectives |
|------------------|-------------------|-----------------------|
| O Bilabial | 6 Bilabial | • Examples: |
| Dental | d Dental/alveolar | p' Bilabial |
| ! (Post)alveolar | f Palatal | t' Dental/alveolar |
| ‡ Palatoalveolar | g Velar | k' Velar |
| Alveolar lateral | G Uvular | S' Alveolar fricative |

OTHER SYMBOLS

M Voiceless labial-velar fricative

W Voiced labial-velar approximant

U Voiced labial-palatal approximant

H Voiceless epiglottal fricative

Yoiced epiglottal fricative

 $\mathbf{2}$ Epiglottal plosive

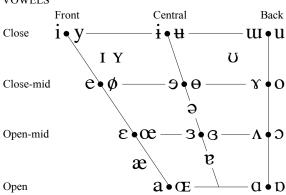
C Z Alveolo-palatal fricatives

J Voiced alveolar lateral flap

Simultaneous \int and X

Affricates and double articulations can be represented by two symbols joined by a tie bar if necessary.

VOWELS



Where symbols appear in pairs, the one to the right represents a rounded vowel.

SUPRASEGMENTALS

| I | Primary stre | SS | .fo∪nə ['] tı∫ən |
|---|--------------|------|---------------------------|
| ı | Secondary st | ress | Iroone tijen |
| I | Long | eı | |
| • | Half-long | e' | |
| J | Extra-short | ĕ | |

Minor (foot) group

Major (intonation) group

. Syllable break __i.ækt

Linking (absence of a break)

TONES AND WORD ACCENTS LEVEL CONTOUR

| EE , EE | 001110010 |
|---------------------------------|---------------------------------|
| e or ∃ Extra high | \check{e} or Λ Rising |
| é ⊣ High | ê √ Falling |
| \bar{e} \dashv Mid | ĕ 1 High rising |
| è de Low è de Low low | ĕ ⊿ Low rising |
| ề ⊿ Extra low | è → Rising-falling |
| ↓ _{Downstep} | ✓ Global rise |
| ↑ _{Upstep} | → Global fall |

DIACRITICS Some diacritics may be placed above a symbol with a descender, e.g. $\check{\eta}$

| 0 | Voiceless | ņ | ģ | | Breathy voiced | ÿ | a | Dental t | ď |
|---|-----------------|----|---------|----|--------------------|------------------|--------------|----------------------------|-------|
| _ | Voiced | ŝ | ţ | ~ | Creaky voiced | þ | a | _ Apical _ t | ф |
| h | Aspirated | th | d^{h} | * | Linguolabial | ţ | ğ | _ Laminal t | ₫ |
|) | More rounded | Ş | | W | Labialized | t^{w} | d^{w} | ~ Nasalized | ẽ |
| | Less rounded | Ş | | j | Palatalized | t ^j | dj | n _{Nasal release} | dn |
| + | Advanced | ų | | Y | Velarized | t ^y | d^{γ} | 1 Lateral release | d^1 |
| | Retracted | e | | ſ | Pharyngealized | t ^s | d٩ | No audible release | ď |
| " | Centralized | ë | | ~ | Velarized or phary | /ngealiz | zed | 1 | |
| × | Mid-centralized | ě | | _ | Raised | ę | (<u>I</u> = | voiced alveolar fricative) | |
| | Syllabic | ņ | | - | Lowered | ę | <u>β</u> = | voiced bilabial approximar | nt) |
| _ | Non-syllabic | ě | | -1 | Advanced Tongue | Root | ę | | |
| 1 | Rhoticity | ð | a | ۲ | Retracted Tongue | Root | ę | | |