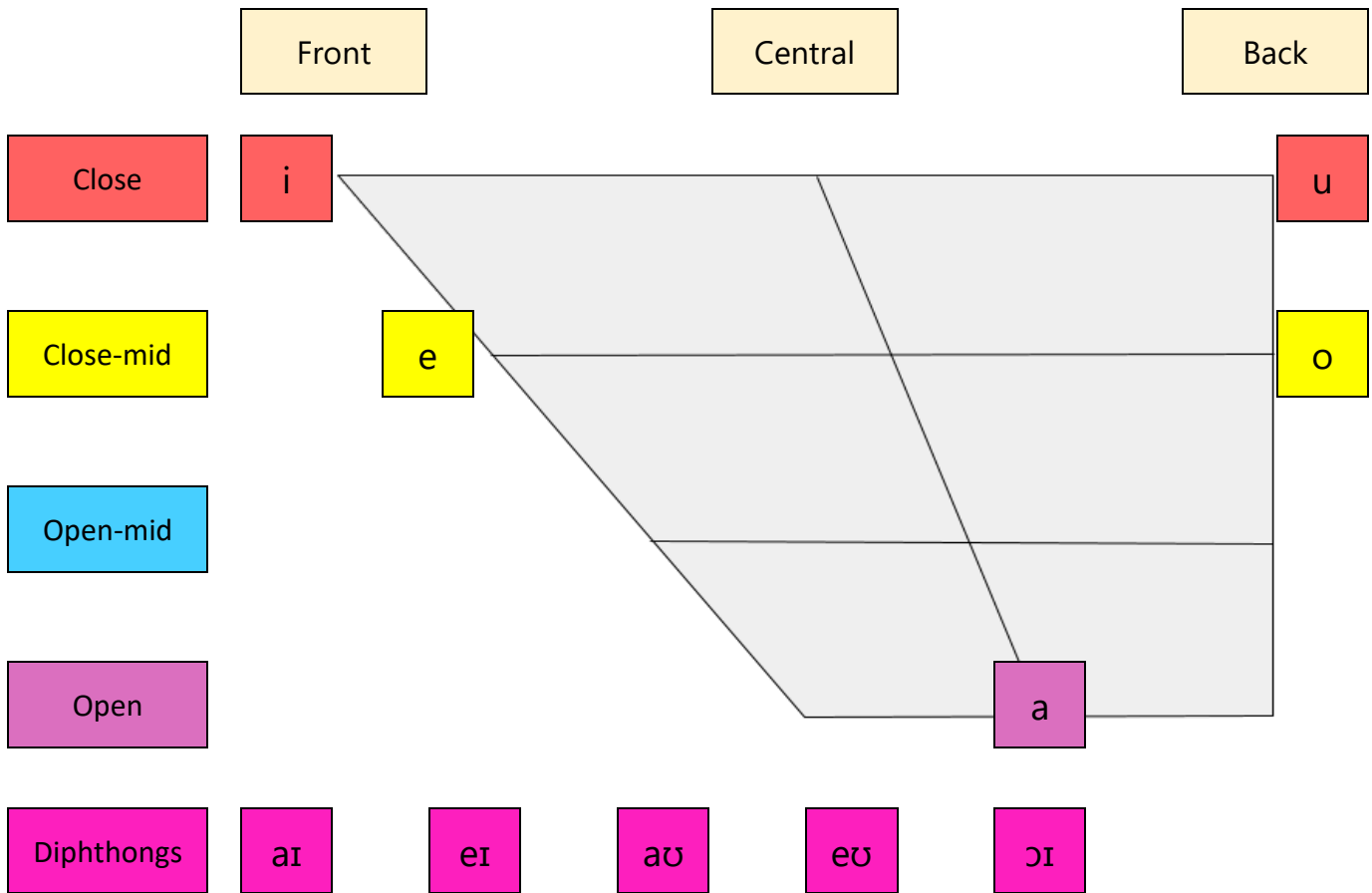


# Spanish consonants, IPA

	Bilabial		Labio-dental		Dental		Alveolar		Palatal		Velar		Uvular	
Plosive	p	[b]			t	[d]					k	[g]		
Affricate									tʃ	[tʃ]				
Fricative	[ɸ]	β	f	[v]	θ	ð	s		[ç]	ʝ	x	χ	[χ]	
Nasal		m		[ɱ]			n		ɲ		[ŋ]	[ŋ]		
Trill							r							
Tap							r							
Approximant		w							j		ɥ			
Lateral approximant							l		ʎ					

- Where symbols appear in pairs, the one to the right represents a voiced consonant.
- Where symbols appear singly, they are placed to the left within their column if they represent a voiceless consonant (e.g. [x]), and to the right for voiced consonants (e.g. [w]).
- Symbols enclosed in brackets represent non-phonemic consonants.
- Blacked-out cells indicate sounds judged to be impossible.
- Dental plosives /t,d/ are in fact denti-alveolar, with tongue blade touching alveolar ridge while tongue tip touches upper front teeth.
- The palatal consonants are a combination of postalveolars (for voiceless phonemes) and true palatals (voiced).
- Voiced plosives [b,d,g] and affricate [tʃ] are not the default allophones of their associated phonemes. The default allophone is either a fricative [β,ð,χ,ʝ] or approximant [w,ɥ,j], depending on dialect. We have chosen to mark the fricatives as phonemic.

# Spanish vowels, IPA



- Back vowels are rounded; front and central vowels are unrounded.

- Instead of the front vowel /a/ or the back vowel /ɑ/, Spanish has a low central vowel, represented by either of these symbols. The choice of /a/ here is arbitrary.

# References

Spanish phonology. (2022). In *Wikipedia*.

[https://en.wikipedia.org/w/index.php?title=Spanish\\_phonology&oldid=1092582606](https://en.wikipedia.org/w/index.php?title=Spanish_phonology&oldid=1092582606)

Swan, M., & Smith, B. (2001). *Learner English: A teacher's guide to interference and other problems, 2ed.* Cambridge.