CONSONANTS

Obstruents **Sonorants**

Stops Fricatives Affricates Nasals Liquids Glides

Obstruents

Stops

complete closure of the articulators
oral ([d]) or nasal ([n])

Pulmonic egressive stops = plosives; the oral plosives can be voiced or voiceless
[t, d], [p, b], and [k, g] the most common plosives in languages.

Glottalic egressive = ejectives: [t'], [p'], [k'].
only voiceless ejectives are possible (since they are produced with the closed glottis).

Glottalic ingressive = implosives: [ɗ], [ɓ], [ɖ].
Most of the implosives are voiced (since for their production the glottis is narrowed). Voicelessness may be showed with a little circle underneath the segment: [ɗ̥] = voiceless bilabial implosive.

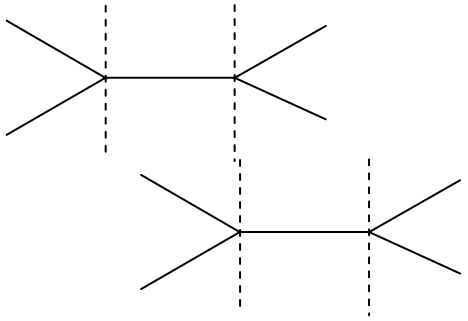
Velaric ingressive airstream = clicks (common in African languages). Clicks can be bilabial [ʘ], dental [ǀ], alveolar [ǃ] and alveolar lateral [ǁ]. There are no velar or pharyngeal clicks

because of the nature of these sounds: they are produced with participation of the velum. In other languages clicks can exist (and exist) in non-linguistic function (to express disapproval, to attract the horse's attention).

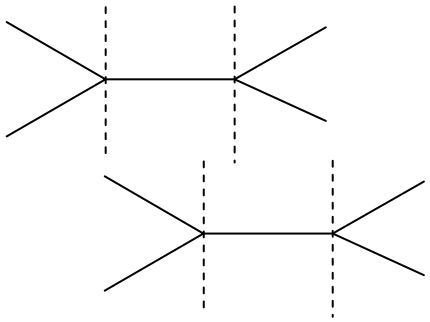
The articulation of any consonant involves **three stages**:
closing (the active articulator raises to the passive one),
closure (the articulators remain in contact), and
release

If there is no closure, there is no stop. (The absence of the other two stages can be observed when a stop neighbours with a homorganic segment [t+d], d+n, etc.]

a) Non-overlapping stop sequences:



b) Overlapping stop sequences:



Release stage:

Voiceless plosives and aspiration.

Voicing lag; voicing lead

Voice Onset Time (VOT);

positive VOT

negative VOT

Phonetically, English distinguishes *voiced plosives*, *voiceless unaspirated plosives,* and *voiceless aspirated plosives.*

voiceless plosive + liquid or glide = devoicing liquid or glide: 'play', 'tree', 'cute'.

Fricatives

narrow passage between the articulators; the air passing through creates this friction.

voiced or voiceless.

English has: alveolar [s, z], labio-dental [f, v], dental [θ,ð], alveo-palatal [ʃ, ʒ], and glottal [h]. There is no voiced pair to [h], even though sometimes, depending on the voice quality of the person or on this person's emotional stage, we can here [ɦ]: 'behind'.

ɸ, β - Spanish
ç – German
x - Irish, Welsh English, German, Russian
ɣ - Byelorussian
ɦ - Ukrainian

Affricates

Affricates have the closing stage and the closure as the plosives, but the release is gradual, which creates a friction, and in this affricates are similar to the fricatives. English has [tʃ] and [dʒ], German has [pf], Quebecois French has [ts, dz].

Sonorants

Nasals

Nasals are nasalized plosives. The most common nasals are alveolar nasal stop [n] and bilabial nasal stop [m].
English [ŋ]
French [ɲ]

Liquids

laterals (l-sounds):

[l]

[ʎ] – palatal lateral (some dialects of Spanish, 'calle')

[ʟ] – velar lateral (an Australian language)

rhotics (r-sounds):

alveolar trill [r]

alveolar tap [ɾ]

alveolar continuant [ɹ]

retroflex [ɻ]

uvular roll [ʀ]

fricative [ʁ]

Variation of [r] in English:

a. Rhotic accents (postvocalic [r], 'clear', 'chart', 'bird') – most American Englishes, Irish English, Scottish English.

b. Non-rhotic accents (only a prevocalic [r]) - most varieties of British English, Australian English, South African English.

Linking 'r' vs. **Intrusive 'r'**: 'bear is there' vs. 'idea [r] is clear'.

Glides

Articulatorily = vowels, but behave like consonants (cannot be the centre of a syllable).

[j], [w], [ɥ]