

**A short guide to Italian
Phonetics and Phonology
for students of Italian Paper**

V

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Oxford University

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INTRODUCTION

Italian Paper V is structured in two parts. The first one investigates structural properties of Italian such as word order in sentences and phrases, the use of tenses, etc. The second focuses on the varieties, otherwise known as *dialects*, found throughout the Italian peninsula. Both parts contain a section dedicated to the understanding and description of sounds, especially the second. The exam also offers the opportunity of phonetically transcribing an Italian passage, as well as providing a detailed commentary of the phonetic transcription of an extract from a dialect.

The following very brief, and by no means exhaustive, guide is meant as a point of *reference*, an easy and quick access to simple explanations of terminology. A proper understanding of the phenomena described will require, needless to say, the consultation of specialised Phonetics and Phonology texts.

The subject matter of this short guide is probably new to most of you: please do not feel discouraged if at the beginning it all seems like an endless list of terms to memorise. They will make a lot more sense when we start using them in commentaries of transcripts. *Coraggio e in bocca al lupo!*

1. VOWELS

Vowels are produced with **egressive, pulmonic** air: in other words, air being pushed out from the lungs. They are always voiced, meaning that the vocal cords are vibrating. You can check this by saying 'aaaaaaaaa' and keeping a finger on your throat, around where men have their Adam's apple: you will feel a slight tremble accompanying the production of the vowel. Compare it with saying 'sssssssss': this is a voiceless consonant, and does not involve vibration of the vocal cords. A typical feature of vowels is that they are produced with the stream of air meeting no obstructions in the mouth, unlike consonants.

Vowels are described in terms of height (i.e. the height at which the tongue is placed in the mouth when producing them, simply **high** or **low**), degree of aperture (put simply, how open or closed

your mouth is) and the shape that the lips adopt when producing them (e.g. **spread** vs **rounded**).

Standard Italian has 7 vowels: [i e ε a ɔ o u].

Imagine a cross-section of a head facing your left, hence with the nose and front teeth on the left side, like this:

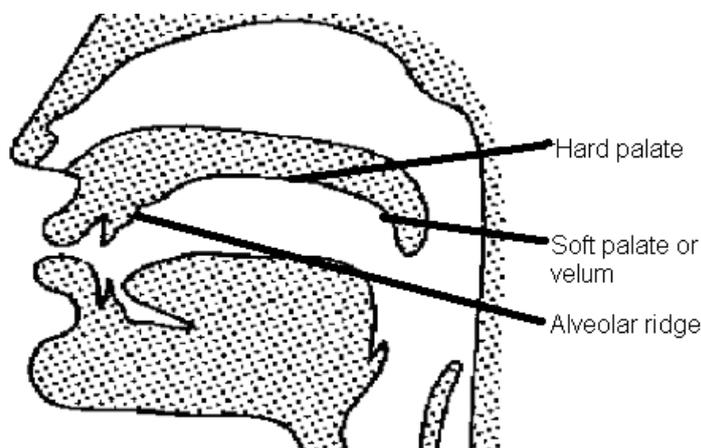


Figure 1: Cross-section of the mouth

The area in the mouth delimited by the teeth and lips at the front, the palate at the top, the velum at the back and the tongue at the bottom is the **oral cavity**. It can schematically be represented by a trapezium, as in the next picture, and it is possible to identify along this shape the place in which each of the vowels is produced.

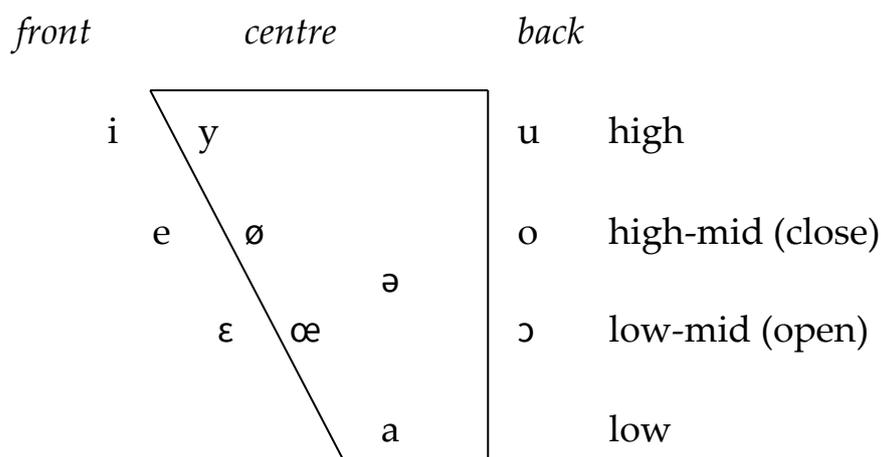


Figure 2: Vowel distribution in the mouth

Some examples of these vowels in words:

/i/: ch[i]ll[i], f[i]ch[i], f[i]ll[i]

/e/: m[e]nta, p[e]p[e], v[e]rde
 /ɛ/: b[ɛ]ne, p[ɛ]sca, v[ɛ]spe
 /a/: c[a]s[a], p[a]ll[a], l[a]n[a]
 /ɔ/: f[ɔ]glio, c[ɔ]sa, cu[ɔ]re
 /o/: p[o]zzo, c[o]rro, f[o]rno
 /u/: m[u]ro, f[u]ngo, sc[u]ro

Each of these vowels gives rise to **phonemic** distinctions: a change in the vowel corresponds to a change in the meaning of the word. Compare:

m[e]le vs m[a]le vs m[ɔ]le vs m[u]le
 (apples) (bad) (big amount) (female mules)

The Italian front vowels (e.g. i, e, ɛ) are characterised by spread lips; the central and back vowels (e.g. a, ɔ, o, u) are produced with rounded lips.

2. CONSONANTS

Differently from vowels, consonants are produced with an obstruction to the flow of air that takes place in a number of different points in the vocal tract. The obstruction is caused by the interaction of two **articulators**, usually one active and one passive: these are simply two parts/points in the mouth that are involved in the production of a particular sound. The description of a consonant is hence given in terms of the type of obstruction and the place at which this obstruction obtains: the former is known as **manner of articulation**, the latter **place of articulation**.

2.1 MANNER OF ARTICULATION

Depending on the way the stream of air is obstructed when producing them, consonants can be classified in the following way:

Technical name	Italian name	Features	Examples
PLOSIVES	<i>Occlusive</i>	Flow of air meets complete closure, pressure builds up behind point of obstruction to be quickly released in an 'explosion'.	[p] – palla [b] – bello [t] – topo [d] – dove [k] – carro [g] – gatto
FRICATIVES	<i>Fricative o Spiranti</i>	Air is met with incomplete closure, which allows the flow to continue subject to friction with some point in the mouth.	[f] – foglia [v] – viola [s] – sole [z] – viso [ʃ] – sciarpa [ʒ] – Tuscan <i>fagiolo</i>
AFFRICATES	<i>Affricate</i>	A combination of plosives and fricatives: complete closure is followed by continuous flow of air subject to friction.	[tʃ] – pezzo [dʒ] – zona
NASALS	<i>Nasali</i>	Air stream is expelled via the nose, as the velum is lowered, and not the mouth.	[m] – miele [n] – notte
TRILLS	<i>Trilli o Vibranti</i>	Air stream is met with rapid movements of, for example, tongue.	[r] – rospo
LATERALS	<i>Laterali</i>	Air stream is met with an obstruction in the middle of the mouth, but still manages to escape via the sides.	[l] – lino

SEMI- CONSONANTS OR SEMI- VOWELS	<i>Approssimanti</i>	The two articulators do not meet, they simply move towards each other.	[j] – piano [w] – uomo
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Table 1: Manner of consonantal articulation

2.2 PLACE OF ARTICULATION

The two articulators involved in producing a sound are usually the tongue and a point in the mouth: the tongue either meets or approaches this point. The point in the mouth where the interaction takes place is known as the place of articulation of the consonant. The following 8 are identified in Italian and the dialects:

Technical name	Italian name	Features	Examples
BILABIAL	<i>Bilabiale</i>	Upper and lower lips are involved, either creating complete or incomplete closure.	Complete closure: [p], [b], [m] Incomplete closure: [β] – Sardinian <i>caballu</i>
LABIO-DENTAL	<i>Labio-dentale</i>	Lower lip and upper teeth move towards each other creating an incomplete closure.	[f], [v]
DENTAL	<i>Dentale</i>	Tongue tip and front teeth create complete closure.	[t], [d]
ALVEOLAR	<i>Alveolare</i>	Tongue and alveolar ridge interact to produce a variety of sounds.	[s], [z], [ts], [dz], [l], [n]

PALATO-ALVEOLAR	<i>Palato-alveolare</i>	Tongue, alveolar ridge and palate interact with rounded lips to produce a few sounds.	[ʃ], [ʒ] [tʃ] – cento [dʒ] – gioco
RETROFLEX	<i>Retroflesso</i>	Tongue tip faces back of throat, so that under tongue can approach hard palate.	[ʈ] – Sicilian troppu [ɖ] – Sicilian beddu
PALATAL	<i>Palatale</i>	Tongue interacts with hard palate.	[j] [ɲ] – gnocchi [ʎ] – gli
VELAR	<i>Velare</i>	Body of tongue interacts with the soft palate (or velum).	[k], [g] [ŋ] – angolo [ɣ] – Neapolitan pago

Table 2: Place of consonantal articulation

Italian has a total of 7 vowels, 2 semi-vowels and 21 consonants.

3. PHONOLOGICAL PROCESSES

3.1 VOWELS

3.1.1 CENTRALISATION

This is a process that affects mainly unstressed vowels and reduces them to a central vowel, known as ‘schwa’, [ə]. It is witnessed abundantly in Neapolitan words, cf. Latin VESTITU(M) and Neapolitan [və stitə].

3.1.2 DIPHTHONGISATION

The next two processes are frequent in the development between Latin and Italian. This develops one vowel into two, a **diphthong**. Cf. Latin HŌMU(M) and PĔDE(M) and Italian [wɔmo] and [pjɛde].

3.1.3 MONOPHTHONGISATION

Two adjacent vowels reduce to one, a **monophthong**. Cf. Latin AURU(M) and PĀENA(M) and Italian [ɔro] and [pena].

3.1.4 ANAPHONESIS

A raising phenomenon found in Italian and Tuscan: it affects late Latin [e] and [u] (< Ī, Ē; < Ō, Ū) before [ŋk] and [ŋg], and only for [e], before [ŋŋ] and [ʎ]. LĪNGUA(M) > *lénɡua* > *lingua*; FŪNGU(M) > *fónɡo* > *fungo*.

3.2 CONSONANTS

3.2.1 ASSIMILATION

When two sounds are produced in sequence, one affects the other, or, more precisely, one of the sounds 'takes on' a feature of the other. This is evident in the quality of the nasal that precedes a velar: compare *anche* with *notte*. Clearly the 'n' of *anche* is very different from the 'n' of *notte*, and the two are in fact transcribed using different symbols: [aŋke] vs [nɔtte]. The same difference can be noticed in English between the 'n' in *jogging* and in *night*. The nasal 'takes on' velar quality from the velar that follows it, and the assimilation is based on the [+velar] feature.

There are varieties of assimilation, minimally **partial** and **total**.

Partial assimilation obtains when a sound 'takes on' only one feature of the other sound. Other examples are assimilation in terms of place of articulation: the bilabial [p] affecting the alveolar [n] when produced in sequence. The realisation of *in piazza* is [im pjattsa]: you can imagine that the preparation of the lips to produce a bilabial sound results in the nasal to be realised as a bilabial [m] rather than as an alveolar [n]. This assimilation is based on the [+bilabial] feature. Another example is the quality of [s] when it precedes a voiceless and a voiced consonant: [s] is itself voiceless, but is realised as a voiced fricative when it precedes a voiced consonant. This assimilation is based on the [+voice] feature: *spegnere* [speŋnere] vs *sdentato* [zdentato].

If two sounds are totally assimilated they are identical in every respect. Imagine the diachronic evolution of Latin FACTUM into Italian *fatto*: in the consonantal cluster -ct- [k] has assimilated completely to [t]. Other examples include Roman *quanno* (cf. Latin QUANDO), in which the alveolar [n] and [d], already sharing the

same place of articulation, have assimilated in the manner of articulation, i.e. they are both nasals.

When, given two sounds A and B in this linear order, if A affects B the assimilation is called **progressive**, if B affects A, it is called **regressive**. These types of assimilation obtain through contact, i.e. the two sounds are adjacent. It is also possible to have **distance assimilation**, especially in cases of word-internal vowel harmony (cf. **metaphony**, raising of a stressed vowel caused by a high, unstressed one, cf. Venetian [galɔ] 'rooster' vs [gɛli] 'roosters'). Some examples of assimilations involving place and manner of articulation are:

- **Velarisation** – a velar sound A affects a B sound (as in the case of [k] affecting [n] in *anche*);
- **Palatalisation** – a front vowel affects the quality of the sound that precedes it (e.g. Latin CENTUM [kɛntum] and Italian *cento* [tʃɛnto]);
- **Labialisation** – a vowel adjacent to one or more bilabial sounds becomes round (e.g. Latin FEM(I)NA(M) and Piedmontese *fomna*);
- **Nasalisation** – a vowel adjacent to a nasal becomes nasalised (e.g. Latin VINUM and Venetian *vin* [vĩŋ]);
- **Voicing** – a voiceless consonant between two vowels (i.e. intervocalic) becomes voiced (e.g. Latin LACU and Italian *lago*);
- **Spirantisation** – a process that affects intervocalic plosives (e.g. Latin RIPA(M) and Italian *riva*, in which both voicing (p → b) and spirantisation (b → v) have occurred);
- **Deletion** – an intervocalic consonant is deleted (e.g. Latin CAUDAM and Venetian *coa*).

Voicing and spirantisation are instances of **lenition** (cf. **fortition** processes such as *Raddoppiamento Fonosintattico*), and they often occur in sequence, of which deletion is the final stage.

Devoicing is witnessed when a voiced consonant turns into a voiceless one (e.g. Latin FRIGIDU(M) to Friulian *frêṭ*). This is often

the case for word-final consonants following the loss of a final vowel.

3.2.2 METHATESIS

With this process two sounds, of which one is very often a liquid, are inverted: for example, Latin *FORMATICU(M) is *fromaio*, and Latin DE INTRO is *drento* in some Venetan-type dialects.

3.2.3 DELETION OF SOUNDS

Sincope is an instance of sound deletion. It can either be a single vowel (usually unstressed) or a segment of (consonant) vowel (consonant). An example is Latin PULICE(M) and Italian *pulce*; or Latin FRIGIDU(M) and Italian *freddo*, in which the unstressed 'i' is deleted, and then [g] and [d] assimilate to [d]. If the deletion process affects the initial segment of a word it is called **apheresis**; if it deletes the final segment of a word it is called **apocope**. When what is deleted is a vowel under the effect of another adjacent vowel, the phenomenon is called **elision**.

3.2.4 INSERTION OF SOUNDS

When a sound or segment is introduced in a word the process is called **epenthesis**. When a vowel is inserted in word-initial position, the phenomenon is called **prosthesis**; when the vowel is inserted in word-final position, **paragoge**. Southern Italian dialects, for example, insert a paragogic vowel in words that end in a consonant in an attempt to make the syllable as close as possible to their 'preferred' structure of CVCV: Italian *gas* becomes Neapolitan *gassə* and Sicilian *gassi*.

Notice also the presence of fortition processes such as **Raddoppiamento Fonosintattico**, in which, simply put, in a sequence word1 – word2, word1 causes the initial consonant of word2 to lengthen: *farà caldo* is realised as [farak kaldo]. This is usually triggered by oxytonic words (stressed on final – or only – syllable, such as *è, però, così, ha, perché, città, caffè*, etc) and by a number of unstressed words (e.g. *ma, e, se, o, come, sopra, fra, su*, etc). Cf. the univerbation cases *sebbene, oppure, suddetto*, etc.

Fortition processes can also be witnessed historically in word-internal position: cf. Latin FEMINA(M), TOTU(M) and ALAUDULA(M) and Italian *femmina*, *tutto* and *allodola*.

4. FURTHER READING – A FEW SUGGESTIONS

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