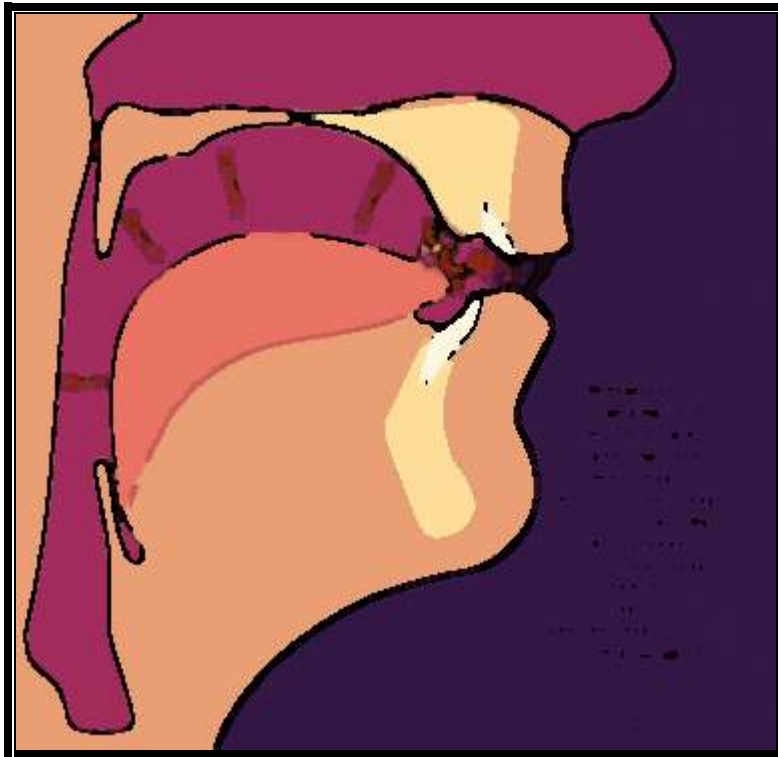


A Phonemic Inventory of Italian



[Ankit Kumar Srivastava]

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A PHONEMIC INVENTORY OF ITALIAN: MAINSTREAM VARIETY

ANKIT KUMAR SRIVASTAVA

University of Washington

This paper describes the phonetic characteristics of a native Italian speaker from Treviso, Italy. An attempt is made to classify the dialect used in this study, in sections 1.1 and 1.2. A word list was prepared and the consultant's pronunciation of these items was recorded into a CD. Interesting observations of the sound distributions were made by transcribing the speech sounds (using IPA characters). The Italian vowel and consonant charts are included in the appendix on Page 11.

1. INTRODUCTION. Italian is a Romance language under the Italic branch of the Indo-European family. It is a modern descendant of Latin, along with such languages as French, Spanish, Portuguese, and Romanian (Baldi 1983:37).

Italian is ranked as the 18th most spoken language in the world (Wikipedia.org 2007). It is spoken by about 61.5 million people in Italy, parts of Croatia, San Marino, Slovenia, Switzerland, Vatican State, and within diaspora communities in Australia, Bosnia and Herzegovina, Brazil, Canada, Egypt, France, Germany, Israel, Libya, Philippines, Romania, Saudi Arabia, United Arab Emirates, United Kingdom, and United States of America (Ethnologue.com 2005). Italian is written using the Latin alphabet.

1.1. ITALIAN DIALECTS. The reasons for the existence of widely divergent varieties of Italian some of which are mutually unintelligible are outside the focus of this paper. Suffice it to say that the differences between varieties of English (in the United States for example) are much less dramatic than those between varieties of Italian (Maiden & Robustelli 2000:2). See Figure 1 on Page 4 for a geographical distribution of the numerous Italo-Romance dialects. Some phonological variants existing among the dialects are shortening of Latin long consonants, palatalization of velar consonants before front vowels, existence of a distinction between intervocalic /s/ and intervocalic /z/, etcetera.

Standard Italian adopted after the unification of Italy is based mainly on the dialect of Florence (in Toscano region in Fig. 1). A majority of Italian speakers belong to either the group who command the standard language but also actively use a dialect, or

the group which only speaks standard Italian (Agard & Di Pietro 1965:4). However recent studies show that contemporary **mainstream Italian** – not following the standard in all respects – appears to be a variety under construction by a process driven by the media, workplace conversations, and education (Rogers & d’Arcangeli 2004). The consultant used in this study clearly belongs to this emerging third group (see below for details). The term “Italian” in this paper henceforth will imply this mainstream variety.

1.2. CONSULTANT BACKGROUND. FG is a 30-year old female from Treviso (in the Veneto region) in Italy. She spoke the local dialect (Venetian) as a child but stopped when she was 10. Her pronunciation, in her opinion, does not reflect the local one, probably because of the standard Italian pronunciation classes she took first as part of drama classes during childhood and then in college where she obtained her MA in Translation Studies from the University of Bologna. There are no foreign language influences in her accent, but her speech is perceived as closer to the standard variety by people from her region. In addition to being a native Italian speaker, she has an advanced command of English and French. Prior to moving to Seattle, four years ago, she lived in Italy, France, and Ireland.

1.3. RECORDING CD. The CD containing the consultant’s pronunciation files divided into 7 tracks as follows. The word list in section 4 adheres to the same order of items.

TRACK NO.	DESCRIPTION OF THE CONTENTS
1	Session begins. Introduction with date, name, language and consultant description AS (me)
2	Description of the format for items with glosses AS
3	The word list with English glosses (Items 1 through 103) FG
4	Description of the format for items without glosses AS
5	The word list without English glosses (Items 1 through 38) FG
6	The word list without glosses contd. (Items 38.5 through 103) FG
7	Session ends. Sign-off. AS

TABLE 1: CD Contents: How are the sound files arranged?

THE ITALIAN DIALECTS



FIGURE 1: Italian Dialects: Standard Italian is based on Florentine variety in Toscano region and the consultant hails from Veneto region (the gray shaded area).

2. PHONEMIC INVENTORY. As indicated in the phoneme chart in the appendix, Italian features 7 oral vowels, and 20 consonant phonemes all of which can geminate (i.e. double consonants). In the following descriptions, the reference (word n) refers to the nth item in the word list in section 4.

2.1. CONSONANTS. Italian consonants are distributed among 7 places of articulation and 6 manners of articulation. Plosives (bilabial, dental, velar), affricates (alveolar and post-alveolar), and fricatives (labio-dental and alveolar) occur in pairs of voiced and voiceless sounds. There are 40 basic word pronunciations in the word list, 2 for each consonant - word-initially and elsewhere.

The distinctive feature of Italian that separates it from English pronunciation is the absence of aspiration of voiceless stops like /p/, /t/, /k/ (Agard & Di Pietro 1965:9). Word 1 and word 38 support this claim. There is discrepancy in the articulation of dental plosives /t/, /d/, and /n/. Some sources like (Rogers & d’Arcangeli 2004) list these consonants as alveolar, clumping them with /ts/, /dz/, /r/, /s/, and /l/. However, listening to the consultant’s pronunciation in (word 11 through word 17) convinced me that these are dental consonants similar to the dental phonemes in my native language, Hindi.

(Agard & Di Pietro 1965:7) claims that the dental nasal /n/ has an allophone /ŋ/ before members of /k/ phoneme. Compare [baŋkə] in word 3 and [fiŋta] in word 7. I do not believe my consultant has this distinction.

2.2. VOWELS. The 7 Italian vowels are classified thus:

PHONEME	HEIGHT	HORIZONTAL POSITION	ROUND
/i/	high	front	unrounded
/e/	higher mid	front	unrounded
/ɛ/	lower mid	front	unrounded
/a/	low	center	unrounded
/ɔ/	lower mid	back	rounded
/o/	higher mid	back	rounded
/u/	high	back	rounded

Italian vowels are an essential ingredient of a syllable (Agard & Di Pietro 1965:10). All the words in the word list support this claim. (Agard & Di Pietro 1965:12) claims that the vowels /e/, /ɛ/, /a/, /ɔ/, and /o/ has one allophone in all positions, stressed and unstressed. There are some instances of nasals, like in word 97 and word 98.

2.3. GEMINATES. All Italian consonants can occur doubly. Look at word 59 through 72 for evidence. All stressed vowels are somewhat longer before single consonants (word 59, word 61, etc.) than before double consonants (word 60, word 62) and other consonant clusters (Agard & Di Pietro 1965:11).

3. PHONOLOGY. The phoneme /s/ has an allophone /z/ before voiced consonants and inter-vocalically. See word 73 through word 80. (Agard & Di Pietro 1965:15) says that for speakers who have a [s] in risalire (word 79) and a [z] in risorgere (word 80), /s/ and /z/ belong to separate phoneme classes. However, my consultant has a /s/ in both words. Hence she like most Italians has only /s/ in her phonemic inventory with /z/ as an allophone of /s/. The rule is as follows:

$$\left[\begin{array}{l} + \text{cont} \\ + \text{cor} \\ - \text{voice} \end{array} \right] \rightarrow \left[+ \text{voice} \right] / V - V$$

$$\left[\begin{array}{l} + \text{cont} \\ + \text{cor} \\ - \text{voice} \end{array} \right] \rightarrow \left[+ \text{voice} \right] / - \left[\begin{array}{l} + \text{cons} \\ + \text{voice} \end{array} \right]$$

The sounds /k/ and /tʃ/ can be orthographically represented by the roman letter 'c' which leads to some ambiguity. Look at words 81 through 84. The rule is that 'c' followed by a vowel /a/, /o/, /ɔ/, /u/, is pronounced as /k/ and 'c' followed by vowels /i/, /e/, and /ɛ/ is pronounced as /tʃ/. The rule is as follows.

$[+cont]$
 $[+cor]$
 $[-voice]$ \rightarrow $[+voice]$ / $-$ $[+cons]$
 $[+voice]$

4 WORD LIST

PHONEME	BROAD	NARROW	GLOSS	ITALIAN	
4.1 Consonants					
1	/p/	/panka/	[paŋkə]	bench	panca
2		/kapo/	[ka:po]	boss (masc.)	capo
3	/b/	/banka/	[baŋkə]	bank	banca
4		/babo/	[bab:o]	dad	babbo
5	/m/	/mankare/	[maŋkare]	lacking	mancare
6		/lama/	[la:ma]	blade	lama
7	/f/	/finta/	[fiŋta]	pretense	finta
8		/telfono/	[tɛl:foːno]	telephone	telefono
9	/v/	/vinta/	[viŋta]	won	vinta
10		/telivizione/	[tɛli:viziɔːne]	television	televisione
11	/t/	/teto/	[tɛt:o]	roof	tetto
12		/porta/	[pɔrta]	door	porta
13	/d/	/deto/	[dɛt:o]	saying	detto
14		/fredo/	[frɛd:o]	cold	freddo
15	/ŋ/	/neto/	[nɛt:o]	net	netto
16		/nomi/	[no:mi]	names	nomi
17		/pana/	[paŋ:a]	cream	panna
18	/r/	/roto/	[rot:o]	broken	rotto
19		/buro/	[bur:o]	butter	burro
20	/s/	/soto/	[so:t:o]	under	sotto
21		/roso/	[ros:o]	red	rosso
22		/tsotsa/	[sots:a]	dirty	zozza

23	/ts/	/patso/	[pats:o]	crazy	pazzo
24	/dz/	/dzero/	[dʒe:ro]	zero	zero
25		/mɛdzo/	[mɛ'dz:o]	middle	mezzo
26	/l/	/lɔto/	[lɔt:o]	piece of land	lotto
27		/pila/	[pi:la]	battery	pila
28	/ʃ/	/ʃata/	[ʃaʔ:a]	neglected	sciatta
29		/peʃe/	[pe:ʃe]	fish	pesce
30	/tʃ/	/tʃelare/	[tʃila:re]	to hide	celare
31		/amitʃi/	[ami:tʃi]	friends	amici
32	/dʒ/	/dʒelare/	[dʒila:re]	to freeze	gelare
33		/rɛdʒo/	[rɛ:dʒo]	regal	regio
34	/ɲ/	/ɲomi/	[ɲo:mi]	gnomes	gnomi
35		/puɲa/	[pu:ɲa]	battle	pugna
36	/ʎ/	/ʎi/	[ʎi]	the	gli
37		/puʎia/	[pu:ʎia]	name of an Italian region	puglia
38	/k/	/kara/	[ka:ra]	dear (fem.)	cara
38.5		/pɔko/	[pɔ:ko]	little	poco
39	/g/	/gara/	[ga:ra]	competition	gara
40		/ago/	[a:go]	needle	ago
4.2 Vowels					
41	/i/	/fine/	[fi:ne]	end	fine
42		/dita/	[di't:a]	company	ditta
43		/ira/	[i:ra]	rage	ira
44	/e/	/deta/	[dɛt:a]	said	detta
45		/venti/	[vɛnti]	twenty	venti
46	/ɛ/	/era/	[ɛ:ra]	era	era
47		/venti/	[vɛnti]	winds	venti

48	/u/	/fune/	[fu:ɲe]	rope	fune
49		/ruto/	[ruʈ:o]	burp	rutto
50		/nudo/	[ɲuɖo]	naked	nudo
51	/ɔ/	/nɔdo/	[nɔ:ɖo]	knot	nodo
52		/lɔte/	[lɔʈ:e]	fight	lotte
53		/rɔka/	[rɔk:a]	fort	rocca
54	/o/	/rɔto/	[rɔʈ:o]	broken	rotto
55		/boka/	[bok:a]	mouth	bocca
56		/ora/	[o:ra]	hour	ora
57	/a/	/ara/	[a:ra]	altar	ara
58		/late/	[laʈ:e]	milk	latte
4.3 Geminates					
59	/p/	/kapa/	[ka:pa]	boss (fem.)	capa
60		/kapa/	[kap:a]	mantle	cappa
61	/f/	/tufo/	[tu:fo]	tufa	tufo
62		/tufo/	[tuf:o]	plunge	tuffo
63	/v/	/piɔve/	[piɔ:ve]	it rains	piove
64		/piɔve/	[piɔv:e]	it rained	piovve
65	/g/	/lego/	[leg:o]	I read	leggo
66		/lego/	[le:go]	I tie	lego
67	/k/	/koka/	[ko:k:a]	sweetheart	cocca
68		/moka/	[mo:ka]	coffee machine	moca
69	/b/	/gabia/	[gab:ia]	cage	gabbia
70		/labiale/	[labia:le]	labial	labiale
71	/r/	/karo/	[ka:ro]	dear (masc.)	caro
72		/karo/	[kar:o]	carriage	carro
4.4 Allophones					
73		/zdraio/	[zɖrayo]	garden chair	sdraio

74	S	/zɡantʃare/	[zɡantʃa:re]	detach	sganciare
75		/sensa/	[sɛnsa]	without	senza
76	Z	/aspɛto/	[aspɛt:o]	appearance	aspetto
77		/kaza/	[ka:za]	house	casa
78		/spoza/	[spoza]	spouse	sposa
79		/risalire/	[risali:re]	going up	risalire
80		/risordzere/	[risordzere]	reborn	risorgere
81		k tʃ	/tʃokolato/	[tʃoko:lato]	chocolate
82	/kupo/		[ku:po]	dark	cupo
83	/tʃi/		[tʃi]	there	ci
84	/ki/		[ki]	who	chi
85	i,i:	/vita/	[vi:ta]	life	vita
86		/vista/	[viʃta]	view	vista
87	o,o:	/koro/	[ko:ro]	chorus	coro
88		/koro/	[kor:o]	I run	corro
89	u,u:	/buko/	[bu:ko]	hole	buco
90		/buro/	[bur:o]	butter	burro
91	e,e:	/tʃera/	[tʃɛ:ra]	wax	cera
92		/tʃepo/	[tʃɛp:o]	block	ceppo
93	ũ	/luna/	[lũna]	moon	luna
94	õ	/kome/	[kõme]	like	come
95	y	/yeri/	[yɛ:ri]	yesterday	ieri
96	w	/wɔvo/	[wɔ:vo]	egg	uovo
97	ĩ	/mai/	[maj]	never	mai
98	ũ	/kauza/	[kauza]	cause	causa

4.5 Foreign words					
99	-	/valtɪr/	[valtɪr]	Walter (name of a person)	walter
100	-	/di dʒe/	[dʒi dʒe]	DJ (acronym for disk jockey)	d j
101	-	/mælkʌm ɪks/	[mælkʌm ɪks]	Malcolm X	malcolm x
102	-	/kayak ^h /	[kaya:k ^h]	kayak	kayak
103	-	/yezi/	[yezi]	name of a town	Yesi

REFERENCES

Agard, F. B., & Di Pietro, R. J. (1965). *The sounds of English and Italian*. Chicago: The University of Chicago Press.

Baldi, P. (1983). *An introduction to the Indo-European languages*. Carbondale: Southern Illinois University Press.

Ethnologue.com (2005). *Ethnologue: Languages of the world*. 5 December 2007 <http://www.ethnologue.com/show_language.asp?code=ita>.

Maiden, M., & Robustelli, C. (2000). *A reference grammar of modern Italian*. London: Arnold Publishers.

Rogers, D., & d'Arcangeli, L. (2004). Illustrations of the IPA: Italian, *Journal of the International Phonetic Association*, **34**(1), 117-121.

Wikipedia.org (2007). *List of languages by number of native speakers*. 5 December 2007 <http://en.wikipedia.org/wiki/List_of_languages_by_number_of_native_speakers>.

PHONEME CHARTS

Consonants

The shaded cells represent voiced sounds

	Bilabial	Labio-dental	Dental	Alveolar	Post-alveolar	Palatal	Velar
Plosive	p b		t̥ d̥				k g
Affricate				ts dz	tʃ dʒ		
Nasal	m		ɳ			ɲ	
Trill				r			
Fricative		f v		s (z)	ʃ		
Lateral approximant				l		ʎ	

Vowels

