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Hindi Pronunciation & Accents
Geo-social Applications of the Natural Phonetics & Tonetics Method

1. Foreword
2. Why do Phonetics?
3. Typography & canIPA symbols

2. Pronunciation & Phonetics
3. The phono-articulatory apparatus
4. The classification of sounds

4. Vowels & vocoids
5. Hindi vowels
6. Mediatic Hindi vowels
7. Some regional differences
8. Some English xenophonemes

5. Consonants & contoids
6. Places & manners of articulation

7. Hindi consonants
8. Nasals
9. Stops
10. Stopstrictives (or 'affricates')
11. Constrictives (or 'fricatives')
12. Approximants
13. Rhotics
14. Laterals
15. Consonant gemination
16. Consonant clusters (including [Ch])
17. Stress
18. The ‘Indian voice’

10. Intonation
11. Tunings
1. Texts in phonotonic transcription
   - The North Wind and the Sun
   - Two conversations

2. Hindi Mini-phono-dictionary

3. Hindi regional accents in India and some neighboring nations (map)
   - Kashmir (Kashmiri)
   - Panjab (Panjabi)
   - Pakistan (Urdu)
   - Sindh (Sindhi)
   - Gujarat (Gujarati)
   - Nepal (Nepali)
   - Assam (Assamese)
   - West Bengal & Bangladesh (Bengali)
   - Orissa (Oriya)
   - Maharashatra (Marathi)
   - Karnataka (Kannada)
   - Andhra Pradesh (Telugu)
   - Kerala (Malayalam)
   - Tamil Nadu (Tamil)
   - Sri Lanka (Singhala)
   - Maldives (Dhivehi)

4. International pronunciation of Hindi

5. Some diachronic phonopses
   - Early Proto-Indo-European
   - Late Proto-Indo-European
   - Sanskrit
   - Pali
   - Old Telugu (Dravidian)
   - Old Tamil (Dravidian)

6. English pronunciation by Indian speakers

7. Hindi pronunciation by English-speaking people

8. Phonopses of 26 languages
   - Introduction
   - English
   - German
   - Dutch
   - French
   - Spanish
   - Portuguese
   - Italian
   - Romanian
   - Russian
   - Czech
   - Polish
164 Bulgarian
164 Greek
165 Hungarian
165 Albanian
166 Finnish
166 Arabic
167 Hebrew
167 Turkish
168 Persian
168 Hindi
169 Burmese
169 Vietnamese
170 Chinese
170 Korean
171 Japanese
171 *Principal consonant orograms*

175 19. Bibliography
181 *Official IPA chart*
13. Hindi regional accents in India and some neighboring nations (& map)

13.0.1. In this chapter, we will provide the phonopses of 16 ‘regional accents’ of Hindi, which are typical of bilingual people in India and in some neighboring nations. For each koiné, the vocogram and tonogram will be shown, for adequate com-

fig 13.0.1. Hindi regional accents: pronunciation map (also see fig 6.13).
6. Hindi vowels

6.1.1. Fig 6.1 shows the orograms of the Hindi vowels, which are ten: three short, i, a, u [i, a, u], and seven ‘long’. As can be seen, we do not list phonemes in a silly alphabetical order. On the contrary, we always show them in a strict phonic way.

The ‘long’ ones are actually diphthongs: five are monotimbric, with very narrow movements, but nevertheless perceptible, i, ē, ā, ō, ū [ii, ee, aa, oo, uu].

The other two are more evident, because they are ditimbric, even if, generally, they are simply described as long vowels, themselves: ä, ö [æœ, œœ]. As a matter of fact, native speakers think they are monophthongs, including the variants given. Thus, Indian people generally use them as such when learning foreign languages, unless they have been adequately trained in natural phonetics.

Although these two diphthongs are ditimbric, we phonemicize them as /ēe, ōo/, because they are the most changing phonemes of the Hindi language, with several realizations, not only regionally, as we will see.

Here are some examples of the three short vowels: din [din], par [par], kul [kul].

Fig 6.1. Neutral Hindi vowels: orograms.
The three corresponding narrow diphthongs are: **din** [diin], **par** [paar], **kul** [kuul].

The other four narrow diphthongs are: **ber** [beer], **ber** [baer], **bor** [boor], **bor** [boor].

Let us cursorily indicate some tiny differences, between different parts of the core Hindi-speaking area. So: **ber** [baer] /beer/, **bor** [boor] /boor/ are generally [beer, boor] (or i ['baer', 'baor]) in the east (Bihar), or [beer, boor] in the west (Rajasthan), or [baer, boor] in the middle (Madhya Pradesh).

6.1.2. Each Hindi vowel may be (distinctively) nasalized (cf fig 5.8), keeping the same basic timbers as their ‘normal’, oral counterparts: **thi** [thi], **hi** [hi, ha, he], **maa** [maa], **oock** [0o0k]. Of course, to nasalize vocoids, it is necessary to lower the velum, as we normally do for nasal contoids. Let us consider, for instance, this comparative example: **rag** [reg] ‘vein’ and **rag** [reg] ‘color’.

Currently, in colloquial or mediatic pronunciations, words such as **hans** [hens] /hens/ tend to be confused with **hais** [haai] /hais/. But, in neutral pronunciation, they must be accurately distinguished, even if [a] has no full contact with the alveolar ridge (cf § 8.2.1-2).

When **ai, ao** are followed by /j, u/, they become **ai** [ei, e], /e, u/; **maiya** [meji, meia, maijaa meiaa], **taiyar** [tejiar, tei'ar, teiar, teiar], **hauwaa** [hewa, heua, hewa, hewa]. The same should hold for Sanskrit words with **ai, au** /ei, eu/; but, currently, these become [ae, o] /ee, e/.  

---

**fig 6.2. Neutral Hindi vowels: vocogram.**

```
\[ /ii/ [ii, i, i] /oo/ [uu, u, u] \\
/ie/ [ie, e, e] /oo/ [oo, o, o] \\
/oo/ [oo, o, o] /ii/ [ii, i, i] /oo/ [uu, u, u] \\
```

**fig 6.3. Neutral Hindi vowels: labiograms.**

```
/ii/ [ii, i, i] /oo/ [uu, u, u] \\
/ie/ [ie, e, e] /oo/ [oo, o, o] \\
/oo/ [oo, o, o] /ii/ [ii, i, i] /oo/ [uu, u, u] \\
```
6. Hindi vowels

Intra-lexemic sequences /eehC, oohC/ may be realized with short vocoids, even when stressed: sēhrā [seefi-ra, sefi-, sef’raa], mōhlät [’moofi-let, ’mofi-, moﬁilet]. When there is grammemic derivation, no shortening occurs (if stressed): lēhy [leefi-jə], mōhnā [moﬁ-na, moﬁ’naa].

Even in English loanwords, we find (more or less evident) shortenings: peet ‘stomach’ [peet], but peet ‘pet (animal)’ [pe’et, ‘pet, ‘pet].

The sequence /eh/, in front of a consonant or /e/, or at word boundary (/ehC, ehe, ehC’), is realized as [əfi, əfi] (which, perhaps, could be marked as ‘/e’/): kahnā [kaﬁna, kaﬁ’naa], pahlā [paﬁla, paﬁ’laa], labar [laﬁer], tab [taﬁ].

In the other cases, /e/ remains (cf the following section), with the following realizations [e, ə, ø, ə, ə]: kahā [kaﬁ’naa], dahē [dəﬁi].

In Sanskrit loans we find /e/ before /he/, as well: rahasy [raﬁes-jə, ‘refi-esj], gahan [gaﬁen], mahattv [maﬁetwɔ].

6.1.3. In unstressed syllables, ‘inherent’ a is pronounced only when it is necessary to give substance to a phono-syllable. Thus, it is often not pronounced at all, except in the case of consonant clusters which are not so easy to utter.

Consequently, at the end of words (or word-internally, mainly after /h/), some free phono-syllables are generally produced with a fading vocoid of the [ə] type (cf fig 6.2). However, this timbre, although attenuated (in length as well), changes in accordance with the contoids preceding it (even in /Ch/ sequences).
Therefore, as shown in fig 6.5-6, after labials ([m, p(h), b(h), q, β]) it has rounded lips: [ọ]. After velars or uvulars ([k(h), q(h), q, x, r]), it moves back: [x] (besides, after [ω], we have [̛], with partial rounding).

After /j/, it moves forwards: [a]. As already seen, this phone generally also occurs in abC [əfiaC, afiaC] /ehC/. And with /h/ near ē, ā [ee, ãe] /ee, êe/, as well (as an echo assimilation): bêhtar [beehter, -ar].

It is a good thing to manage to use these five vocoids (in their attenuated, rather than full, forms), since their coarticulatory logic is quite evident. However, a rather satisfying result can be achieved, if we systematically use an attenuated (‘) (while a full (α) would sound too pushy).

Let us see some examples (but it should be noted that, often, in various published texts, we find ‘[a]’ for [v], even if stressed): kanṭh [kenṭ-ha], pāṇc [peṇṭa], karm [karma] (‘karma’), bāṅg [baăngx] ([baăng] is possible, as well), mūrkh [muurk-ha], anvay [embeja], agamy [ʒeŋ-ja], any [ep-ja], agany [ʒeŋ-ja], mōhnā [moohı̄na, moohı̄naa], mahl [mahál], mēhtar [mehter, mehı̄ter], kāmmy [kaam-mä]. Arguably, all these examples can even be uttered with more reduced vocoids: [v, ʒ, ə, x, ʌ].

6.1.4. In unstressed syllables, the phonetic diphthongs are normally realized as short monophthongs (or, in slow or more accurate pronunciation, as half-lengthened...
monophthongs, [V]): kahānī [kɐ̃hɐˈnɪ], lēnā [ˈlɛnɐ], hāthī [ˈhɑːthɪ], yādō [ˈjaːdʊ], śābās [ˈʃɑːbɑs], ˚Aa." According to stress strength in sentences, for /EE, OO/, as in bē, we have, for instance: [ˈʃəe, ˈʃə, ˈʃə] /ˈʃəe/.

Unfortunately, Hindi grammars persist in placing among the ‘vowels’ a graphophone which in Sanskrit indicated [t] and traditionally is transliterated r. But today, it currently stands for [r] (or an obvious /CV/ sequence): śrī [ˈʃrɨ]. In mediatic or regional pronunciation, we can also find [r, r̥; r̥, r̥o, r̥o].

In § 9 we will see that there are very many consonant sequences. But also vowel sequences are rather numerous, as in the following examples, which exhibit both true diphthongs and hiatuses (including mediatic exchanges).

Diphthongs: leI [ˈlɛI], nāI [ˈnəI], lōI [ˈlɔI], gaU [ˈɡəu], blāuz [ˈblaʊz], tāI [ˈtɑI], suar [ˈsʊər], huA [ˈhʊa], sūa [ˈsʊa], su'aa] [ˈsʊa].

Hiatuses: kāI [ˈkəI], naI [ˈnəI], suI [ˈsʊI], khoA [ˈkʰoʊA] (more rarely [ˈkɛI, ˈnəI, ˈsʊI, ˈkʰoʊA]).

Arguably, oscillations between diphthongs and hiatuses are rather common for different speakers and for single speakers, as well. This is also true of longer words, which can show alternative stress placements, because stress is not distinctive in Hindi, as we already know.

**Mediatic Hindi vowels**

6.1.5. The vowels of mediatic pronunciation are somewhat different from those of neutral pronunciation, as can be seen by comparing fig 6.8 with fig 6.5, including /e/ [ʌ], in contact with [ɳ, t, d, q; g], and its reductions, in free unstressed syllables: [ə, ø, o, y].

**fig 6.8. Hindi mediatic vowels.**

Some minor regional differences

6.1.6. Let us add some regional differences within the area where ‘proper’ Hindi is considered to be typical. Actually, it is mostly in western Uttar Pradesh, northern Madhya Pradesh, eastern Rajasthan and Haryana that people usually speak using a kind of neutral pronunciation. In fact, tendentially neutral speakers of Hindi are found in the areas shown on the map (although together with speakers of other dialects and languages, as well).
The following vocograms show the differences for some phonemes in neighboring territories (cf. fig 6.13): Rajasthan in the West, Madhya Pradesh in the South, and Bihar in the East. In 6.13 more peripheral areas are dealt with in some greater detail for more peculiarities (cf. fig 13.0 for a global map).

fig 6.9. Hindi regional variants: /ı/ [i, ı, ə], /u/ [u, ʊ, o]. West (Rajasthan) [i, ɪ]; South (Madhya Pradesh) [ʊ, o]; East (Bihar) [i, ɪ].

fig 6.10. Hindi regional variants: /ɛ/ [ε, ɛ, ɔ, ɔ], /ɔ/ [o]. West (Rajasthan) [ɛ, e; ɔ, ɔ]; South (Madhya Pradesh) [æ, e; ɔ, ɔ]; East (Bihar) [ε, e] ɪ[aɪ, ɔ], [ɔ, ɔ] ɪ[ʌ, o].

fig 6.11. Hindi regional variants: /æ/ [æ, ɐ, ʌ], /ɐ/ [a]. West (Rajasthan) [æ, ɐ]; South (Madhya Pradesh) [a, ɐ]; East (Bihar) [æ, ɐ; ə, ʌ].

fig 6.12. Hindi regional variants: /æ/ [æ, ɐ, ʌ], /a/ [a]. West (Rajasthan) [æ, ɐ]; South (Madhya Pradesh) [a, ʌ]; East (Bihar) [æ, ʌ].
6. Hindi vowels

Some English xenophonemes

6.1.7. Hindi people who are not fluent in English, or do not speak it properly, tend to use English words as a result of code-mixing, or code-switching. In these circumstances, they normally use the taxophones of their own language, like [ii, i; ee, e; æe, æ; ë; aa, a; œo, ø; oo, o; u; uu, u; ë; oʊ].

These Hindi speakers generally merge /æ, æ/ into [e], while /ɔ/ corresponds to its spelling, using current Hindi vocoids. For the five typical diphthongs, they usually have [ee, tɛɪ], [oo, tʊʊ], [ɛɪ, ɪəʊ], [ʊʊ, ɪəʊ], [ʊɪ, ɪʊ], respectively.

While, for /e, æ, o, œ/, they may oscillate between [iɛ, e, tɛ], [iɛ, æɛ, e, tæ], and [iœ, aa, o, œ, œ], and [iɑɑ, oo, tʊʊ], respectively (as shown in fig 6.14), in words like: pet, bank, dollar, Shaw. See, however, § 16 for a fuller treatment of the Indian-English accent.

fig 6.13. Proper Hindi internal regional areas: North (Uttar Pradesh), West (Rajasthan), South (Madhya Pradesh), East (Bihar) – also see fig 13.0.

fig 6.14. Some xenophonemes for English words often used in Hindi conversations.
8. Hindi consonants

8.1. fig 8.0.1-2 show the consonants of Hindi, including further phonemes for lofty or loan words, coming from Sanskrit (corresponding to n, n, ś) and Arabic, Persian, Turkish and English (q, f, z, k, g), and (contextual) taxophones, as well.

The contoids are arranged by places and manners of articulation. fig 8.0.1 is a simplified version, with all contoids which are needed for neutral pronunciation, while fig 8.0.2 provides all the contoids which will be shown in the orograms of the following figures.

It may be interesting to observe that for Sanskrit (and consequently for Hindi, too) ancient grammarians had a rather scientific knowledge of articulatory phonetics (still used in illustrations in medical-sciences treatises, starting from the back of the mouth, rather than from the lips).

At least for consonants which are produced by means of a complete occlusion in the mouth. In fact, stops, stopstrictives, and nasals have always been presented in a table, shown by points and manners of articulation.

Thus, we find: k, kh, g, gh, n – c, ch, j, jh, n – t, th, d, dh, n – t, th, d, dh, n – p, ph, b, bh, m. Arguably, we prefer an even more scientific and modern order (shown with phonic symbols and excluding ‘aspiration’, which we treat as sequential clusters, not as separate phonemes): [m, p, b] [n, t, d] [ŋ, ŋ, q] [p, t, d] [ŋ, k, g].

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**fig 8.0.1.** Table of neutral Hindi consonants (simplified).

<table>
<thead>
<tr>
<th></th>
<th>bilabial</th>
<th>dental</th>
<th>alveolar</th>
<th>postalveolar</th>
<th>postalveopalatal</th>
<th>palatal</th>
<th>prepalatal</th>
<th>velar</th>
<th>palatal</th>
<th>uvular</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>m</td>
<td>[n]</td>
<td>[ŋ]</td>
<td>[ŋ]</td>
<td>[ŋ]</td>
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<tr>
<td>K</td>
<td>p</td>
<td>[t]</td>
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<td>[d]</td>
<td>[d]</td>
<td>[k]</td>
<td>[g]</td>
<td>[q]</td>
<td>[k]</td>
<td>[q]</td>
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<tr>
<td>S</td>
<td>[q]</td>
<td>[s]</td>
<td>[z]</td>
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<tr>
<td>L</td>
<td>[r]</td>
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</tbody>
</table>
Nasals

8.2.1. There are two fundamental nasal phonemes, /m/ [m], and /n/ [m, n, n, n, n], since /n/ sequences are homorganic.

Besides, [m] (or [b]) occurs before [s, s]; [p] (or [j]) before [j]; [n] (or [q]) before [h/], with a rare [n], which would give /nh/ or /ngh/ [n̥h, n̥h]. This clearly shows the advantage of considering sequences of /nh/ as biphonemic, even for stops (and not some metempsychosical and metempirical migration).

It is worth observing that [m, n, p, n, n] are semi-nasal phones, i.e. nasals with no full contact: semi-labial, semi-alveolar, semi-postalveo-palatal, semi-palatal, and semi-velar, respectively, in addition to semi-postaveolar [n] ([n̥]), as well.

The semi-nasal taxophones occur before continuant contoids, while full nasals occur before other nasals, stops, and stopstrictives.

Examples: mōh [ˈmoːh], sambal [ˈsambal, sambel], tin mātā [ˈtːim maːt̪ːa], mātē [ˈmaːt̪ːə], samvād [ˈsamvād, ˈsamwād], nabh [ˈnæbʱ], kāntā [ˈkænt̪ːa], kaṇj [ˈkænd̪ː], vanō [ˈvana], any [ˈænja], pank [ˈpæŋk], inqalāb [ˈɪŋqalaːb, ˈɪŋqslab].

In some words, we find /m, n/ before heterosyllabic consonants: barāmdā [ˈbɔːrəmˈdā], amrūd [ˈæmruːd, ˈɛmruːd], gumṭī [ˈɡumṭi, ɡumṭii], ćamcā [ˈtʃamtʃa, ˈtʃemtʃa], jhumkā [ˈʃɪmʊk, ɪʃɪmʊk], mēṅkā [ˈmeːnka, meːnˈkaː] (generally, indicated in writing by the segments m, n, instead of by the spelling diacritic sign anusvār [ənʊsˈbaːr, ənʊsˈbaːr]).

8.2.2. Furthermore, in lofty Sanskrit words, also /n, n/ [n̥, ȫ: ȫ] occur, and have specific graphemes, n, n, but generally change to /n/. The more frequent genuine realization of /n̥/ is [n̥], a nasalized postalveolar flap, or even a nasalized postalveolar approximant, [n̥].

So, it is better to use the symbol of the diaphone, [n̥], which incorporates these values, although it generally becomes /n/, too.

Also [p] has a particular grapheme, n, even if it does not represent a phoneme
(as was the case, instead, in Sanskrit): bām [baām], bān [baān], bāṅ [baāṅ, baāṅ, baān], ganēś [gaṇēś], gaṇēś, gaṇēś, agany [aṅgaṇya, aṅgaṇja, vānmay [vaṁmaya, -ṃm-e, -ṃm-e, -ṃm-e, -ṃm-e], bāṅg [baāṅg, -ṅg, -ṅ].

Furthermore, we find the sequences /mh, nh/ [mḥ, nḥ], which (together with /lh/ [lḥ] and, possibly, /ŋh, rh/, cf § 8.2.1) have no official devanagari (ie dēvānāgārī or deśnāgārī) graphemes, but combinations. In fact, they did not occur in Sanskrit, contrary to ‘aspirated’ stops and stopstrictives, including /ṭh/ [ṭḥ], which comes from /ṭh/ [ṭh]: kumhār [kumhār, kum'hār], kānh [kānh].

This fact clearly highlights the inconvenient practice of using many ligatures, but only when they were already present in the Sanskrit ‘orthography’.

fig 8.1. Hindi nasals (first set) & seminasals (second set); a third small set gives two unsuitable full nasals, [n, ñ; n], occurring in foreign languages.

Stops

8.3.1. There are four diphonic pairs, /p, b; t, d; t, d; k, k; g, g/. In addition, we have the voiceless uvular xenophoneme /q/ [q, ḍ] preuvular; which can even become [k], a true velar phone, before front vowels, especially i, i, i/. But, currently, it merges with /k/ [k, k] (obviously, with [k] before i, i, i, i). Examples: pitā [pīta], ab [āb], rāt [rāt], nādi [nādi], thīk [ṭhīk], pīṇḍ [pīṇḍ], kāñ [kāṇ], gānā [gāna, gāna], kā [kā], qā [qā, ḍā, ḍā], qārīb [qārīb].

8.3.2. The most remarkable peculiarity of stops is that the elements of diphonic pairs may occur in sequences, with /h/, producing /ph, bh; th, dh; ḍh; kh, gh/
In mediatic pronunciation, it is not rare to find that the ‘aspirated’ voiced ones are, actually, partially devoiced [bfì, dfì, ṭhì, ṭhì; khì, ḍfì], in addition to a fully voiced neutral pronunciation.

Unfortunately, these sequences are, generally, considered to be unitary phonemes: ‘aspirated’ opposed to the corresponding ‘non-aspirated’. No doubt, this opinion derives from their artistic and ‘lacy’—but infelicitous—traditional writing, as well, seeing that particular ‘specific’ graphemes are used.

But, a more modern and functional point of view requires that we actually consider them as mere sequences of /Ch/ [Ch, Ẓfì].

Otherwise, being slave to spelling superstructures, also many other independent sequences ‘should’ absurdly be considered as ‘unitary phonemes’. But, traditional spelling has nothing to do with true phonemic structures.

Even uneducated and illiterate people can understand this simple fact and fully functionally use the phonemes of their own language. As a matter of fact, they are quite free from preconceived illusory—clearly non-linguistic—‘opinions’.

In fact, these ‘aspirated sounds’ are compellingly phonemic (and phonetic) sequences constituted by plain stops + /h/, which is realized as [h], after voiceless consonants, or as the normal (in Hindi) voiced laryngeal approximant, [ɦ], after voiced consonants. All the more so because, generally, they are realized as heterosyllabic, instead of tautosyllabic, sequences.

This can be seen by the placement of stresses, which is more evident and logical within a word or a rhythm group: pal [pɛl], phal [pʰɛl]; bâlā [baala, ba'laa], bhâlā [bfâala, b-hâlaa]; tal [tɛl], thal [thɛl]; dâvā [daaʃa, da'ʃa], dhâvā [dʃaαa, d-ha-ša]; tappâ [tɛppa, tɛp'pa], ṭhappâ [tʰɛppa, t-ʰɛp'pa]; dil [dɿi], dbil [dɿiil]; kâl [kaal], khâl [khaal]; gîrâ [ɡɾr̥a], ghîrâ [ɡɦɿraa].

8.3.3. In mediatic pronunciation, it is not unusual for /b, bh/ to be realized as [ blister, blister]. Furthermore, attenuations are also possible for /k/ [h, ɣ, ɿ], /kh/ [hx, x], /g/ [ɣ, ɣ, ɰ], /gh/ [ɣf]. Before front vowels (or before /j/), /kh/, ɡ(h)/ are realized

Fig 8.2. Hindi consonants: stops (the last 4 are unsuitable foreign phones).
as prevelar, [(ŋ)k, (ŋ)q]. In final position, the stops may have inaudible release: nāk [ˈnaːk, ˈnaːk], ab [ˈəb, ˈəb].

This is contrary to what happens to ‘aspirated’ sequences, which do not simplify, even if the laryngeal element may be less evident, in this final position (for other consonants, too).

But /h/ may not be fully missing, because it is distinctive: sikh [ˈsɪːk, ˈkʰ], nabh [ˈnəbʱ, ˈbʱ] (and: bōjh [ˈbʊdʱ, ˈdʱ], bārh [ˈbɑːrʱ, ˈrʱ]). Actually, we often find [-Cʰh].

Only within sequences like /ChC/, may /h/ be dropped (cf § 9.2.4). Also word-final /h/ may be attenuated (or even disappear completely): byāh [ˈbʲaːɾʱ, -aʱ, -aa].

In addition, let us notice that [ʔ] is frequently used to separate vowels in contact between words, especially when the second (initial) vowel is stressed, so that /VN/ becomes [ˈVɾN]: khaɾa uːt [ˈkʰaːɾʱ ʊːt], tērī ˈɾoː [ˈteːrɪ ˈɾoː, tɛɾɪ].

Stopstrictives

8.4. We only find the postalveopalatal diphonic pair, /tʃ, ʧ̪/ [tʃ, ʧ̪] (too often indicated as ‘⟨tʃ, dʒ⟩’ and even ‘⟨tʃ, ḍ̪⟩’, but, in Hindi, they have no lip protrusion).

The corresponding ‘aspirated’ sequences are also present /tʃʰ, ʧ̪ʰ/ [tʃʰ, ʧ̪ʰ], including the possibility of [dʒ̪h] (as for the stops): catur [ˈtʃâːʈʰɔːɾ], rāf [ˈrɑːdʒ], ċāl [ˈtʃāl], ḍhāl [dʒ̪hɑːl], jāl [dʒ̪hɑːl], ḍhāl [dʒ̪hɑːl].

In various contexts, there may be frequent attenuated realizations (ie constrictive or approximant), even after a pause (or, instead, sharper ones, ie stops), for /tʃ/ [ʃ], /tʃʰ/ [ʃʰ, ʃ; ŋː], /tʃ̪/ [ʒ, ʒː; ŋː], /dʒ̪/ [ʒʱ, ʒʱ; ŋʱ]. This mostly happens in mediatic pronunciation. Their ograms are regularly shown in fig 8.4 & fig 8.2, respectively. Let us add that a word like jnān is normally realized as [ˈjɑːn, ˈnː, ‘nː; ɡʱnː] (using ‘special’ phones, which are not typically Hindi). Let us also note: mujh- se [ˈmʊtʃʰˈʃee, mujhˈʃee].

Fig 8.3. Hindi consonants: stopstrictives (only a pair; the last 4 are unsuitable foreign phones).

Constrictives

8.5. In actual fact, we find two voiceless constrictives: s, ʃ /s, ʃ/ [s, ʃ] (cf fig 8.4). Sometimes, ʃ /ʃ/ [ʃ] is realized as velarized postalveolar, [ʃ̪], ie [ʃ̪] with velarization, especially in mediatic pronunciation.
In Sanskrit loans, we also find /s/ [Ś] (which currently becomes /ʃ/ [ʃ]: biṣ [bīṣ, bīḷ]). On the other hand, /s/ becomes [ṣ], before /tʃ/: kast [kæst] (shown in writing, as well).

In Persian, Arabic, and English loans, we find /f, z/ [φ, ζ] [φ, ζ], too (which currently become /ph, ĸh/ [ph, ĸh]): faqīr [φaqīr, -kiir, -kiir, ph-], fut [φut, phut], bāzār [ba'zaar, ba'da'aar, baad'gar].

Approximants

8.6.1. In this manner of articulation, there are three fundamental phonemes, with different and particular taxophones: /v/ [β] (bilabial constrictive), /ω/ (rounded semi-velar approximant), /y/ [j, j] (the latter is a palatal semi-approximant), /h/ [ɦ; h] ([ɦ] is a voiced laryngeal approximant).

Let us notice that both [ɦ] and [h] are clearly laryngeal approximants, not constrictives (or ‘fricatives’), as we are obliged to read in practically all publications, even for English – in the 3rd millennium!

Notice that, [ω], mainly occurs after consonants, or after /uu, u/, and sometimes after a pause. But, in actual fact, the two types alternate quite freely: sār [sʌər], kōśś [kʊʊʃ, kʊʃ], ravīr [ravīr], nīv [nǐi, nǐiɪ, nǐiɪm], vrat [vɾat], hauṇḍa [hauṇḍa], ‘hauṇḍa, ‘hauṇḍa, ‘hauṇḍa, svarg [sɔɾ], vahā [vɔhā, ʌvɔhā] (ie after a pause).

In addition, [j] occurs between vowels, in unstressed syllables: ye [jee], dhyān [dɪjɑːn], liyē [li'ee, li'ee], sāyad [sɑːjɑːd, sɑːjɑːd]. When it occurs in unstressed final position (with an inherent a), it sounds [-a] or [-e].

When preceded by i, it drops, often closing /i/ ([i] → [i]), except in careful pronunciation: samay [səməj, səməj], kṣay [kʃəj, -e, kʃ-], ēy [tʃa'ja, tʃa'e], kṣatrej [kʃət-riʃ, kʃət-riʃ, -ə, -ə, kʃ-, kʃ-].
8.6.2. Generally, the /h/ phoneme is [ɦ]; while [h] occurs with voiceless ‘aspirated’ consonants. Near nasalized vowels, /h/ becomes nasalized: hāthi [ɦaathon, ɦaathii], garh [ɡerɦ], pahlā [paɦləa, ˈpaɦila, ˈpeɦila], tērah [teerəɦ, tɛɾəɦ, tɛɾɛɦ], bāsnā [fiɛs-ˈnaa, ɦēsna], bāb [bāɦ], kahā [kəɦa]. In mediatic pronunciation, we often find [ɦ, fî; h, ɦ], both for /h/ and /Ch/.

There are two further approximants, for Persian and Arabic loans, for which the official uvular constrictive symbols are often used, ’/χ, ʁ/’ (or, even less precisely, the velar ones, ’/x, ɕ/’). However, they are uvular approximants: /χ, ʁ/ [χ, ʁ] (preuvular [χ, ʁ] before /ii, ɪ, j/). But, for the voiced one, the uvular tap, [ʁ], occurs more often.

In addition, they currently become /kh, q/ [kh, kh; g, ɡ]: dakah [dəkæl, dəkɑl], kāna [ˈkaana, ˈkhaanaa, ˈkha’naa] (cf ‘khāna [kʰaana, kʰa’naa]), bāg [ˈbaɑ, ˈbaɑa, bɑɡ] (cf bāg [baag]).

8.7. In this category, we have an alveolar tap, /ɾ/ [ɾ], and a postalveolar flap, /ʃ/ [ʃ]. The former can become [ɾ], especially for emphasis. The latter is generally rendered with the unsatisfactory official IPA symbol /ʃ/. In natural phonetics, the symbol [ʃ] represents a postalveolar trill, which would be too strong a phone for Hindi [ʃ].

They oppose distinctively (and, sometimes, the former may be stronger, a true trill: [ɾ], or –on the contrary– weaker: an (alveolar) approximant [ʃ]). On the contrary, /ʃ/ [ʃ] is often weaker than normal, becoming an approximant [ʃ], similar to British English [ʃ], but with no lip rounding at all.

Examples: haraṛ [ɦaɾəɽ], laṛkā [ləɾːka, ləɾːkaa, -ɾ]. There are also the sequences /ɾh/ [ɾɦ, ɾɦ], /ɾh/ [ɾɦ]: barhā [bəɾhɔa, -ɾhɔa] (cf barā [bɔɾa, -ɾa]), arhar [əɾhəɾ, əɾhəɾ].
Laterals

8.8. Hindi has only one lateral phoneme, /l/, but with three taxophones: [l, ], [ ]. Notice that the symbol of postalveo-palatal [ ] differs from that of prepalatal [], used in other languages. In addition, there is the sequence /lh/ [l].

Examples: lāt [laat], malāl [məlaal], kal ćalō [kəl tʃlloo], kal yahā āō [kəl jəhāa ‘aao], dālād [dəaļdəa, də[ləa], kūlbā [kuul-ha, ku[h]a].

Laterals

8.6. Hindi consonants: ‘rhotics’ (the last 5 are unsuitable foreign phones).

8.7. Hindi consonants: ‘laterals’ (the last 3 are unsuitable foreign phones).
9. Hindi structures

Consonant gemination

9.1.1. As for the vowels, which oppose as short and ‘long’, or rather narrow diphthongs, as we have seen, gemination is distinctive for the consonants, too: \textit{patā} [pɔ-taː], \textit{pattā} [pɔt-taː], \textit{bačā} [bɔtʃaː], \textit{bacčā} [bɔtʃtʃaː, bɔtʃtʃaː], \textit{usē} [uˈseː], \textit{usse} [uˈseː, uˈseː]. This fact changes the syllabic structure; consequently, often even stress can change (although without phonemic relevance).

We have already mentioned and demonstrated in some examples, that –in Hindi– sequences of two or three consonants syllabify moving the last one to the beginning of the next syllable: \textit{saty} [sæt-jaː], \textit{gadhā} [gædfiːaː], \textit{abhrak} [æbHˈɾąk], \textit{Ωukl} (ëUk-l).

Obviously, in case of isolated initial sequences, the syllabicility scale joins the elements in one syllable, although some slight difference is maintained. However, if they are internal, they divide into two syllables, including a preceding vowel: \textit{jhIl} [dʒhiːl], and: \textit{lambI jhIl} [læmbiːdʒhiːl] (in spite of its strange appearance).

In fact, the Hindi sequences /ChV/ are [ChV], rather than [ChV], as /CIV/ are, as well. Notice that /V/ indicates a sonant consonant like \{m, n, r, r, l, j, v\} and their possible variants. A number of examples can be found in sections 9.2.(1-5) and elsewhere.

To be true, transcriptions like [ChV, CIV] would be misleading. It is sufficient to carefully listen to those sequences to be convinced that a syllabication with [C], rather than [C], is much more realistic, although the transition from [C] to the next contoid is less clear because of natural assimilation facts. Even passing from a [C] to a [V] has not an absolutely cret-cutt division.

9.1.2. The Hindi geminates are heterosyllabic, [C#C], between vowels, but tautosyllabic, [C#], when followed by a consonant, even for /j, v, h, r, l/. In this last context, especially short stops and stopstrictives are often realized as [C#] plus a consonant. Thus, the difference with geminates is tendentially neutralized: \textit{buddhā} [bʊdʃhaː], \textit{vidyālaː} [βiːdʒaːløː], \textit{læː}, \textit{-læː}.

If the number of consonants in the sequences exceeds three, the last two move to the beginning of the second syllable: \textit{Satyārthprakāś} [sætjæɑːrθ-prəkɑːʃ].

Another interesting phenomenon, that complicates the description and the acquisition of this language, concerns the epenthesis of a vowel. Therefore, an att-
tenuated vocoid is inserted (cf § 6.1.3, although here we indicate it simply as an audible offset, [*]). This happens not only in complex consonant clusters, but also—in not fast pronunciation—at the end of words, even after a single consonant (especially if voiced).

Let us consider some examples: agar [əɡər], ūpar [ʊˈpər], ēlānā [ɛlːənə], phāl [pɦaːl], sārbat [səˈɾɡɛt, ˈɾɛbet], bādmaś [bəˈdamɑː], bâd-maʃ, lārkā [lɑːrka], khirki [kʰirki], abhâs [abʱaʃ], abhâ-s, samay [səməj], râkhnâ [rəkhnə], ʊghnâ [ʊˈɡɦnə], par [pəɾ], ʊpəɾ [pəɾ*]...

Consonant clusters (including /Ch/)

9.2.1. Hindi taxophonics presents some peculiar consonant clusters, either at the end or beginning of words (but also within words and phrases). In fact, we may find, for instance: mvaːg [mvəɡ], mlən [mlən], nyyā [njæː, njɑːja], nṛisans [nɾɪʃəns], pyâlā [pjaala, p-jaˈlaː], brâj [bɾɛdʒ], blâk [blaːk], bhram [bhɾɛm], ɪvârâ [twəˈɾaː], trâs [tɾaas], dvîp [dvəip], dhvast [dʰwəst].

Also: dhruv [dɦruː], ðyârî [dɪˈjoːhi, dɪjɔːhi], ñyut [ˈɲjut], jôti, kyâ [kjaː], kvâth [kˈwɑːθ], khvâb [kʰwɑːb], grâm [ɡɾɑːm], glâni [ɡlaːni], and ghrâñ [ɡʰraːn, -n].

More: kyâl [kwâː], khjaal, hrâs [ɦɾaːs], śmaːsân [sməsən], śrânt [ˈʃɾaːnt], īlath [ˈɪlθ], skândh [ʃkəndʰ], skhalan [skʰələn], star [stəɾ], sthal [stʰəl], smit [ˈʃmɪt], sânap [snaːp], sâh [səʃ], swarq [swəɾq], sraṣṭâ [sɾəˈʃʈə], yâdâ [ˈʃjaːda, z-ja-ˈdaː], vyâthâ [vɨˈθʰaː], vrât [ˈvɾɛt].

In Sanskrit loans, we find /kʃ/ as well (but, in mediatic and colloquial pronunciation, people generally change it into [kʃ]): kṣaṇ [kʃən, kʃən, kʃən, kʃən], kṣîr [kʃîr, kʃər].

Furthermore, for initial sequences with /sʃ(C)/, current pronunciation prefixes an epenthetic vowel, generally [ə, i] – but, before non-front vowels, [e, ə] is possible, as well (and also [ə, i, ɪ] with the other variants seen, cf § 6.1.3 & fig 6.5): strî [ˈʃtrɪ], střî, ɪs,-is-, spûrî [ˈʃpuʁti, -i, is-, is-, is-, is-, is-, is-, is-]. The same also happens with /ʃ/: slôk [ˈʃloːk, ʃˌløk, ʃˌlʊk, ʃˌlʊk, ʃˌlʊk].

9.2.2. As far as word-final position is concerned, we find consonant clusters such as: gupt [gʊpt], ʃabd [ʃˈbʊd], lũdb [lʊbdə], tâps [təps], nabh [nəbə], kubj [kʊbdʒ], mũft [mʊft], ʊts [ʊts], râkt [ˈɾɛkt], dagdb [dɑːɡdə], ɑkš [əkʃ], mōkš [mʊkʃ]-, kʃ, sakt [ˈʃəat, -kʃ], šaks [ʃəкс, -kʃ], baks [bəks, -kʃ, -kʃ], ċust [ˈʃʊst], svaṭh [ˈʃvətʰ], kasti [ˈkəst], vâsp [ˈvɑːsp].

In final position, geminates are possible, as well, realized as long contoids: gapp [ɡɛp], ðitt [ˈtɪt], râdd [rəd], ann [ən], sarr [ˈʃər, -ɾəɾ], prâphull [pɾəˈphʊl], bhaṭṭ [bʱəʈʈ], ʊjâdd [uˈdʒəd], õcç [ˈʊtʃ], nilajj [nɾədʒ].

Consonant sequences which include a laryngeal are also found: jutth [dɻtɻ], yuddh [ˈʃudɦ], sikkh [ˈʃikʰ], svačh [ˈʃvətʃ].
Final consonant clusters, in morphological derivation, resyllabify in accordance with the phonic structure of the Hindi language: pāp [paap], pāpī [paapi]; rakt [rek], raktim [rek-tim, rek’tim].

9.2.3. Short [i, e, u] /i, e, u/, in final position, have the peculiarity of fading (cf § 6.1.3), to a point in which they drop as well, as it happens to /e/, /i/, /o, a, z, ō/ (notice that here [∅] means a ‘zero’ vocoid). Our transliteration shows no -a.

Or else, /i, e/ strengthen, ie [i, u], simply as closer realizations of /i, u/, or actually becoming /ii, uu/. In this case, stress shifts are also possible, especially as mediatic pronunciation, according to the new weight of the syllables constituting given words: ravi [rebi, re‘bi], tithi [‘tithi, tr‘hii], sīsu [‘sīsu, ‘sr‘uu], vasu [‘vasu, ‘be‘suu]. However, in more traditional pronunciation, final i, u tend to remain [i, u], at least for some too careful speakers.

As just said, the change /i/ → /ii/ is not considered completely neutral, in spite of being very widespread indeed (with many supporters too), and in mediatic pronunciation, as well.

Finally, as many examples have already shown, sequences of /VVN/ + /V, V, C/ are realized as [VVN]: hāni [‘ha‘nii], kām [‘ka‘m], ākrānt [ak‘raa‘nt]. The same goes for /VVV/ → [VVV]: tin mātā [ti‘m ma‘taa‘ē] (repeated just below for assimilation), and, in mediatic pronunciation, also /VNN/ → /VVN/: nayā makān [‘na‘jaa ma‘kaa‘n, ‘na‘ja‘a]. But, in more traditional pronunciation, all these nasalizations are not usual.

9.2.4. Dealing with consonants, we have already seen the typical assimilation characteristics within words.


Besides, both within words and sentences, in not slow –nor emphatic– speech, for diphonic consonants (ie pairs of voiceless and voiced phonemes), voicing assimilation is regular, to the second element of a sequence (while a possible /h-/- is lost).

Examples: Akhbar [‘ek‘ber, ‘ek‘ber], tasbih [tezbi‘h, tezbi‘h], ēp bāthō [t‘ub bā‘t‘ho, ‘t‘ub bē‘thoo], ēchāp gāyā [t‘heb gā‘jaa], sāth bāthō [saad bā‘t‘ho, ‘saad bē‘thoo], ab tak [‘ep ‘tek], hāth dō [‘haad‘h ‘doo], āk par [‘aak‘per], āk din [eree ‘din], jāb ki [‘jaap‘ki, bāg kā [ba‘aax kaa, ‘k k-, ‘kh k-].

Several examples have shown, again, that /Ch/ are diphonemic sequences, and not unitary, independent phonemes (although we generally have [Ch, C-h] for /Ch/).

In addition, let us notice that /Cj/ sequences, ēy, jy, ‘jy, in mediatic pronunciation, may become [Cj] (sometimes, even plain [C]), instead of neutral [Cj].

9.2.5. Let us add some further examples of complex consonant sequences: kvārā [kwa‘a‘raa, k‘b-, ‘raa], gvyārah [gja‘raeh, gja‘raeh], fjō [fjō ‘joo], mediatic also: m[fj-, fj-],
In Hindi, the position of stress is not distinctive. In fact, the same speaker, in different occasions, may stress different syllables of the same word. Furthermore, these fluctuations also depend on the combination of words in sentences, on nearby words, on orthological highlighting and emphasis.

Still more important is the fact that stress is distributed among rhythm groups, usually moving back from the end, according to syllabic ‘weights’. This holds for isolated words as well, but always with a certain flexibility. For instance, in neutral pronunciation, we normally have hindí (hindī) but hindí ke hindí ke (hindī & hindī &). On the other hand, given its non-distinctiveness, native speakers use stress as something fluctuating (even without realizing that), frequently alternating, for rhythmic reasons, within rhythm groups. After all, it is the same thing for segmental duration and for syllabic pitch, in languages where they are not distinctive: they may change quite freely, without real problems.

Stress 9.3.1. In Hindi, the position of stress is not distinctive. In fact, the same speaker, in different occasions, may stress different syllables of the same word. Furthermore, these fluctuations also depend on the combination of words in sentences, on nearby words, on orthographical highlighting and emphasis.

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In Hindi tunes (both for the three marked, and the unmarked one, or continua-
tive), the terminal post-tonic syllable, generally, bears a secondary stress.
This happens even immediately after a stressed syllable, as the examples hindī kē[ka] have
already shown, or in Ėk din ki čhuṭṭī [‘eek dîṅtʃ ‘huṭṭi], but Kal čhuṭṭi hā
[‘kɛltʃ ‘huṭtʃi], or Mā čhuṭṭi par hā [‘mɑætʃ ‘huṭṭi ‘pɛɾʃʊʊ].

This fact complicates the differentiation and identification of stress strength on the
different non-light syllables (but, sometimes, on the light ones, too).

9.3.2. However, some rules may be formulated in order to produce a coherent
effect, if rigorously applied. This is true even if these rules might be considered ex-
cessively precise or even mechanical, as regards current language.

We must accurately distinguish between neutral Hindi stress and mediatic Hin-
di stress, although even ‘good’ professional speakers, also in the recordings of lan-
guage—and even pronunciation—courses, inevitably and unconsciously, oscillate
between neutral and mediatic realizations.

Thus, we are obliged to provide both the neutral and the mediatic stress pat-
terns, one after the other, although the one given first should be preferred, even
if it is actually used more rarely than the other(s).

Regardless of the consonants that may precede a vowel, we define a light sylla-
ble, [i], one which contains a short vowel, [i, u] /i, u/ not followed by any
consonant (in the same syllable): sumati [su’måti].

Within a word, the attenuated realizations of /e/, [æ, æ, æ, æ, æ], do not even
count (cf § 6.1.3 & fig 6.5-7). In fact, they are usually more elusive, [æ, æ, æ, æ, æ]. They
are just a mere physical support, necessary to make a word pronounceable, but
they may drop completely, especially in faster speech.

Furthermore, we have mid syllables, [$], constituted by /VC/ (ie a short vowel
with a consonant), or by /VV/: bal [‘bɛl], kyā [‘kja], hindī [‘hinde, ‘hinde], savyā
[‘ʃeʃja, ‘ʃeʃja]. They also include ‘bisyllabic’ syllables, in counting morae, as bhāi
[bhɑi, b-‘hɑi] (/’ɑa/ + /ii/= four morae).

Besides, there are heavy syllables, [$], formed by /VCC“, or /VCC“/ (more rarely
/VCC“, VCCC“/ as well): ant [‘ɛnt], ām [‘ɑɑm], ārt [‘aɑrt], vāsp [‘bɑɑp, ‘w-], astr [‘ɛstr].

9.3.3. Stress assignment, in isolated words, is done on the basis of the identifi-
cation of the ‘heaviest syllable’, as in (always with the addition of mediatic vari-
ants): upāḍhi [‘ʊpɑa’dɦi], upānt [‘ʊpaɑnt], ādyōpānt [ad-jo’paɑnt, ad’joopɑnt], kāli
[kɔl], kāmnā [‘kɑ’mna, ‘kɑ’mna], kōṇārk [ko’naark, ko’naark, ko’naark, ko’nark],
kāndāni [‘kɑndɑnɪ, ‘kɑndɑ’nɪ], jyāmīti [‘dʃi’jɑmɪti], tābēdār
[tæb’dɑr, tæb’edɑr], tigunā [tɪɡʊnɑ], prithvirājṛśō [p-rɪtʰwɪɾɑdʃ-ra’sɔʊ].

More: banduṅkāzi [bɛnɖuŋbɑazi, bɛnɖuŋbɑazi], mardāŋgi [mɛrdɑ’ŋgi, mɛrdɑ’ŋgi], māndhāta
[mɑndhɑtaata, mɑndhɑtaata, ‘mɑn̥dɦata], Satyaprakāś [sɛt-jɑrθ-prɔkɑʃ, sɛt-jɑrθ-prɔkɑʃ], Satyārthprakāś [sɛtθɑrθ-prɔkɑʃ, sɛtθɑrθ-prɔkɑʃ], sāngōpāṅg [sɑŋɡo’paɑŋ, ‘sɑŋɡo’paɑŋ], tāmān [tɑma’, tɑma’n], bānī [‘ba’nɪ].
If a word has more than one non-light syllable of the same weight, there are two possibilities: a stress preferably hits either the last syllable but one or the last but two (or even the very last, especially if constituted by ⟨VV⟩, as happens more often within a sentence, with particles and postpositions).

Examples: sakuntalā [səˈkʊntələ], gararīyā [ɡəˈʐːɾiːə], bahādurī [bɔːˈɦaːdʊrɪ], mabhāḥārāt (məfiaˈbaːɾəɾt, məfiaabˈhaːɾəɾt), Yudhaṁthir [jʊdhaˈm̩θɪɾ, ˈjʊdhaˌm̩θɪɾ, ˈjʊdhaˌmːθɪɾ], sabhīligt [səˈfuːliːt, səfuˈliːt].

More examples: āśtṛvād [əʃːtrvəd, əʃːiːɾˌwːd], aqlmand [aɭˈmːənd, əqɭˈmːənd, əqɭˈmːəɾd, əqɭˈmːəɾɾd], ānakānī [ənəkaˈɑːnɪ, ənakaˈɑːnɪ], dhvanī [dɦʊˈnːɪ, ˈbə-, ˌʊ-, ˌʊɭ-], parvartī [pəɾʋəɾtɪ, pəɾvəɾtɪ, ˌbə-, ˌʊ-, ˌʊɭ-], bartan (bəɾtən, bəɾtəɾn), bastā [bəstə, bəstəː], bhalā [bɦala, bɦaˈlɑː], samiti [səˈmɪtɪ], sālānā [sælɑːnə, sælɑːnə], sānčalān [səŋtʃɑalen, səŋtʃɑˈlən], hērāphērī [hɪəɾpʰɪəɾɪ, hɪəɾˈpʰɪəɾɪ], bēhārī [bəhɑːrɪ, bəhɑˈrɪ, bəhɑˈrɑː], sākuntalā [səˈkʊntələ], lāpānī [ləpəˈnːɪ, ləpəˈnːɪ].

9.3.4. The same stress pattern occurs in inflected and derived words, as well: bahīkō [bəɦɪkˈkoː], lāghutar [ləɡˈɦʊɾəɾ], sucitam [sʊˈsuːtəm], məslēgā [məsˈlːəɡə], məslēgaa, lāpātā [ləapətə, ləpəˈtːə], galiyārā [ɡəliˈɑːrə], pāgalpan [pəˈɡɛlən, pəˈɡɛɫpən, pətʊˈɡɛlən, pətʊˈɡɛɫpən], sūndartā [sʊnˈdɜːtə, sʊnˈdɜːɾtə], bāhnāpā [bəfɪˈnaːpə, bəfɪˈnɑːpə].

Among Hindi monosyllables, lexemes bear a stress, even in sentences, while grammemes (ie postpositions, conjunctions, auxiliaries, enclitics) are unstressed (or half-stressed, for rhythmic reasons, as shown in some examples below): ab [əb], kam [kəm], kām [kəːm], ār [əɾ], dēs [dɛʃ]; but: kā [kɑː], hā [ɦaː], hē.

9.3.5. Lexemic compounds, normally, have the following stress pattern [əʊəʊ]. This is because the second stress, which is generally more attenuated, may sometimes reach a degree of prominence that is relatively slightly more perceptible than a secondary stress. The degrees of intensity strength is [˘] [˘] [˘] (respectively: primary, intermediate, and secondary stress).

Examples: rasātghar [ɾəsəˈtʃʰgʰəɾ], dēshnikālā [deʃɪnˈkə(ː)lə], wiśvakōś [ˈbɪʃʊxˈkɔʊʃ], dīrārdī [dɪuˈɾɑɾdɪi], diḷālā [diɭˈɦələ], nimmlihīt [nimmˈliɾhɪt], čandrakāntā [ˈʧəndɾəkɑːntə], čandrakāntāṃtā [ˈʧəndɾəkɑːntəmːtə].

More: mabhāsabbā [məfiaˈsɛbəʃə], bhindaṁbāsabhā [ɦɪnduməʃɦaˌsɛbəʃə], tū karm-hin vyakti hē [tuu kərmˈɦiːtəm wjoɛktəʃa, -tɪfɪa], tū karm-hīn hē [tuu kərmˈɦiːn hə [tuu kərmˈɦiːn hə], ām-vām [ɑːmˈwə(ː)m], kānō-kān [kənɔːkən, kənɔːkʊ], kām-kāj [kənɔːkəd], āsā-vāsā [ɑːsəˈvɑːsə].

In the examples just seen, we indicate [V[V), because the prominence on those syllables may be sufficient as [V], but it may also need to actually become [VV].

Complete reduplications always keep both stresses strong: lāl-lāl [ləlˈlɑːl], dhīrē-dhīrē [dʃiːɾɪɾd ʃiːɾɪɾ].

9.3.6. There is a difference between compounds and collocations. The latter have independent sentence icts: lāl-pagṛī [ləlˈpɑɡːɾiː] ‘policeman’ (ie ‘red-turban’) and lāl pagṛī [ləlˈpɛɡːɾiː] ‘red turban’, or: kālā-pānī [kaːlɑːˈpɑːnɪ] ‘penal colony’ (ie ‘black-water’), and kālā pānī [kaːlɑːˈpɑːnɪ] ‘black water’.

For contrast, there is emphasis on the marked element (and attenuation on the second occurrence of the unmarked element): hindū-mandir, yā hindū-ghar? [ţi-hindū-'mandir, 'jaa hindū-'ghār], atm-prem, yā atm-gyān [ătm-'prem, 'jaa ātm-'gyān].

9.3.7. Let us add some further examples to show different stress possibilities, even in bisyllables: bhārtiy [bHAr’tiJ] , khūbsūrat [khuupsuaret, khuupsuret], rēzgārī [rezgāari, rezgārii, ‘reezgārī], rājnītī [raḍṇītī, raḍṇītīi, ‘raḍṇītī], gōbār [goobār, go’bār], āndōlan [āndōloren, āndōlen, ‘āndōlen].


9.3.8. In conclusion, it seems that any stress pattern is possible. This happens ‘unfortunately’, or ‘happily’, depending on the degree of attention a single speaker gives to this important subject.

However, the following are the simple rules for a true neutral pronunciation:

1) [-$@@@]: stress on the last syllable if this is heavy, [$]: [VVC$, VVC$, VVCC$, VCC$, VCC$];
2) [-$]: stress on the only mid syllable of a word, [$]: [VC$, VVV$] (but notice carefully that /Ch/ count as a single /C/, or one mora, for stress assignment, in spite of its more typical phonetic division as [Ch, Ch-h]);
3) [-$(S)$/$$$$]: stress on the last but one mid syllable, [$], in words with two or more mid syllables, [VC$, VVV$];
4) [-$(S)$/$$$$: stress on the last but one light syllable, [$], in words with only light syllables, [(C)VVV$].

But all other patterns may even be more widespread than the true neutral ones, including [$@@@$], instead of [$$@@@$]: hindī [fiṇdi, fiṇ’dī], bābā [baaba, ‘baaba].

The least preferable stress patterns are /(C)VVV, (C)VVC/, instead of proper /(C)VVV, (C)VVC/: hāsī [hiśśī, ‘hiśśī], ucīt [uṭṭīt, utṭīt] (which are not included in the Mini-phono-dictionary of ฿ 12), and /VVVV$/ [VVVV$], bhāī [bhi’āi], instead of /VVVV$/ [VVVV$], bhāī [bhi’āi].

For the prominence of unstressed syllables two principles are followed: rhythmic alternation between stressed and unstressed syllables, and their intrinsic (syllabic) heaviness. So, we can find both [$$@$$, $$$@$] and [$$@$$, $$@$] (and other combinations, as well). Thus, in the end, we decided not to indicate secondary stress in current transcriptions, except in some special cases where it was more important.
The ‘Indian voice’

9.3.9. Paraphonically, there is a peculiar type of ‘Indian voice’, with *breathy voice* (·) (cf fig 3.4.f: lenis voicing) or, in the uneducated accents (1), with *tense voice* (‡) (cf fig 3.4.j).

Besides, we also find *middorsal*, (Y), and *stiff jaw*, (‡), settings (fig 9.1 & fig 9.2, respectively). Of course, these settings add up even more characteristics to the ‘Indian voice’.

Let us also observe that the posttonic syllables of the interrogative (· ·) and suspensive (· ·) tunes are generally accompanied by *falsetto*, for all kind of voices, (cf fig 3.4.f). In fact, these syllables are in the mid and high pitch bands (as will be clear from fig 10.7 & fig 10.8). In our phonotonic transcriptions, falsetto is marked with [*"] after the tunes.

We must keep in mind that, in sentences with an unstressed final syllable, a secondary stress is generally added, too ([*"]):

/\/: Mā hindi bółtā hū. [mā hindī bol.taːɦuː] [*ɦuː]
/?: Kyā vah pustak parh rahī hā?: [k jaːb ah pus.teːkraːɦi raːɦiiː*] [*ɦiː*]
/\/: Yab mā jaldī-jaldī bółtā hū, āp mērī bāt nabī samajhtē. [dʒel mái dʒel diː dʒel diː bol.taːɦuː* ap.meerī baat nɛ fiiɾ섬ʃ tee..] [*ɦuː*].

fig 9.1. Two paraphonic vowel settings.

![Diagram of Normal (V) and Middorsal (Y) jaw positions](image)

fig 9.2. *Normal* jaw position (1) (·); *stiff* jaw position (2) (‡).
14. International Hindi pronunciation

14.1. Hindi is a major language, spoken by a considerable number of native speakers (ie more than 400 million) and by still more foreign people especially bilinguals, in and around India.

Thus, it is inevitable to think about a kind of ‘international’ pronunciation to be suggested, rather than accepting the many national varieties of foreign accents. Such accents are often very different, although the language should be exactly the same.

14.2. Thus, our well though-out proposal is a sort of mediation between actual neutral pronunciation and the various bilingual (but not foreign) accents. In a way, it may be more similar to the mediatic accent of Hindi itself.

In fact, it must be somehow simpler, but not artificial. As near as possible to the native neutral pronunciation, but with fewer complications. In addition, as far as possible, it should feature more natural and general phones and intonation patterns. Avoiding too peculiar, though native, characteristics.

14.3. Therefore, fig 14.1 shows the vowels of international Hindi. In addition to /əɪn əʊ/ [ɪ, ʊ], let us notice, in particular, /æə, ɔɔ/ [ɛɛ, ɔɔ], exactly matching our phonemic choice. In addition, the inherent /v/ sound can be more present than not, provided it does not become too intrusive.

It is to be fully understood that the following unstressed taxophones of /ɛɛ, ə, ɔɔ/ [ɛ, ə, ɔ] are not an additional problem, but something more natural.

14.4. The same principles must also be valid for the consonants. In fact, fig 14.2 provides the most proposable ones, with a view to more natural contoids, as well. Again, some consonantal taxophones, shown between square brackets, are simply natural assimilations to a following contoid. In addition, /ɦ/ [h] may sound a little peculiar, but still more general.

14.5. Prosodically, stress should not be too odd, trying to imitate the native usage, in spite of its oscillation, due to its non-distinctiveness.

In addition, intonation should not be too peculiar, too, but systematically constant. Again, it should not be too different from native patterns, in order not to distract hearers (cf fig 14.3).
14.6. Lastly, paraphonically it is not at all essential to be able to use the typical ‘Indian voice’, although native speakers (and hearers) – no doubt – would appreciate its use, provided it is done in a rather natural way.

fig 14.1.1. International Hindi pronunciation: *vowels.*

```
/ii/ [ii, i] /u/ [u]  
/i/ [i]    /o/ [ɔ]  
/ee/ [ee, e] /oo/ [oo, o]  
/e/ [ε, e]  /ç/ [ç, ʃ]  
/εɛ/ [ɛɛ, ɛ]  /çç/ [çç, ʃʃ]  
/εi/ [ɛi]  
/ε/ [ɛ, ɛC, ɛʃ, ɛʃ']  /aa/ [aa, a]
```

fig 14.2. International Hindi pronunciation: *consonants.*

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fig 14.3. International Hindi pronunciation: *intonation.*

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/ / [⋯⋯⋯⋯⋯⋯⋯⋯]  
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