Part- II

English Phonetics &
Spoken English
CHAPTER-9

DESCRIPTION AND CLASSIFICATION OF
ENGLISH SPEECH SOUNDS

9.0 All English speech sounds (vowels as well as consonants) are
produced with a pulmonic egressive airstream mechanism. All English
vowels are voiced and consonants can be voiceless or voiced, depending
upon the state of the glottis. If the vocal cords are wide apart and the
glottis is wide open the consonant sound is voiceless, and if the vocal
cords are held loosely together and they vibrate the sounds produced
are voiced. For example, /p,t,k,tʃ, f, θ, s ʃ, h/ are voiceless and
/b,d,g,dʒ,v,ð, m,n,ŋ,r ɹ,j,w/ are voiced consonant sounds. English speech
sounds can also be classified as oral or nasal depending upon the position
of the soft palate; if it is raised so as to shut off the nasal passage of the
air, the sounds produced are oral and if it is lowered to open the nasal
passage of air combined with an oral closure, the sounds produced are
nasal. All English speech sounds are oral except /m,n,ŋ/.

9.1 THE ENGLISH VOWELS: PHONEMIC AND PHONETIC DETAILS

There are twenty vowel sounds in the Received Pronunciation of
England (R.P.). These include twelve pure vowels and eight diphthongs,
belonging to different phonemes. The following chart illustrates
distributional characteristics of each English vowel in words followed
by examples:
<table>
<thead>
<tr>
<th>Vowel</th>
<th>Description</th>
<th>Phonetic Details</th>
<th>Distribution</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>/i/</td>
<td>Front, close, unrounded vowel</td>
<td>Initially, medially and finally</td>
<td>[l:] Long: finally and before voiced consonants</td>
<td>east, even piece, cheat tea, sea</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[l] Reduced: before voiceless consonants</td>
<td>tree, bee bead, sead seat, heat</td>
</tr>
<tr>
<td>/i/</td>
<td>Front, centralized, half-close, unrounded vowel</td>
<td>Initially, medially and finally slightly reduced: before voiceless consonants</td>
<td></td>
<td>it, if hit, sit city, pity bit, wish</td>
</tr>
<tr>
<td>/e/</td>
<td>Front, between half close and half-open unrounded vowel</td>
<td>Initially and medially slightly long: before voiced consonants slightly reduced: before voiceless consonants</td>
<td></td>
<td>any, egg leg, many head, bed bet, net</td>
</tr>
<tr>
<td>/æ/</td>
<td>Front, just above the half-open position, unrounded vowel</td>
<td>Initially and medially long: before voiced consonants reduced: before voiceless consonants</td>
<td></td>
<td>ass, add mad, pat bag, bad lack, mat</td>
</tr>
<tr>
<td>/æ/</td>
<td>Back, open, unrounded vowel</td>
<td>Initially, medially and finally</td>
<td>[æ:] long: finally and before voiced consonants</td>
<td>after, ask task, last star, far jar, car hard, card heart, pass</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>[a:]</td>
<td></td>
</tr>
<tr>
<td>Vowel</td>
<td>Description</td>
<td>Initials and Medial Long</td>
<td>Words</td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
<td>--------------------------</td>
<td>-------</td>
<td></td>
</tr>
<tr>
<td>/ə/</td>
<td>Back, just above the open-position, rounded vowel</td>
<td>Initially and medially slightly long: before voiced consonants</td>
<td>offer, often fog, log god, cod</td>
<td></td>
</tr>
<tr>
<td>/ɔː/</td>
<td>Back, between half-open and half-close, rounded vowel</td>
<td>Initially, medially and finally long: finally and before voiced consonants</td>
<td>all, oughts stall, small low, saw core, hoard, board</td>
<td></td>
</tr>
<tr>
<td>/ɔ/</td>
<td>Reduced: before voiceless consonants</td>
<td></td>
<td>caught, short</td>
<td></td>
</tr>
<tr>
<td>/u/</td>
<td>Back, close, rounded vowel</td>
<td>Medially and finally in only one word</td>
<td>wood, hood unaccented form of the preposition to</td>
<td></td>
</tr>
<tr>
<td>/uː/</td>
<td>Back, centralized, just above half-close, rounded vowel</td>
<td>Initially, medially and finally long: finally and before voiced consonants</td>
<td>ooze, oops pool, wool clue, glue blue, shoe rude, food</td>
<td></td>
</tr>
<tr>
<td>/uː/</td>
<td>Reduced: before voiceless consonants</td>
<td></td>
<td>boot, root</td>
<td></td>
</tr>
<tr>
<td>/ʌ/</td>
<td>Central, between open and half open, unrounded vowel</td>
<td>Initially and medially slightly long: before voiced consonants</td>
<td>upper, utter bus, luck bud, gun</td>
<td></td>
</tr>
<tr>
<td>/ɜː/</td>
<td>Central, between half-close and half-open, unrounded vowel</td>
<td>Initially, medially and finally long: finally and before voiced consonants</td>
<td>earth, earn first, burst occur, refer her, fur word, girl</td>
<td></td>
</tr>
<tr>
<td>/ɜː/</td>
<td>Reduced: before voiceless consonants</td>
<td></td>
<td>curse, hurt</td>
<td></td>
</tr>
</tbody>
</table>
/Ə/ Central, just below half-open unrounded vowel

Initially, medially and finally (only in un-accented syllables) weak forms along, ago melody, towards centre, data a, an, to, her, for, the

/ei/ Front, unrounded vowel, just below half-close, to a centralized, front unrounded vowel, just above half close [ɛ:i]

Initially, medially and finally long: finally and before voiced consonants pray, play prays, plays

[ei] Reduced: before voiceless consonants race, place

/ai/ Front, open unrounded vowel, to a centralized, front, unrounded vowel just above half-close [a:i]

Initially, medially and finally long: finally and before voiced consonants dye, buy bide, guide

[aɪ] Reduced: before voiceless consonants bite, light

/oɪ/ Back, rounded vowel between open and half-opens, to a centralized, front unrounded vowel, just above the half-close position [ɔːi]

Initially, medially and finally long: finally and before voiced consonants joy, boy coin, join

[ɔɪ] Reduced: before voiceless consonants hoist, voice

/au/ Back, open, rounded position and moves in the direction of R.P. [u]

Initially, medially and finally out, owl foul, bowl cow, now
<table>
<thead>
<tr>
<th>Phonic</th>
<th>Pronunciation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[aːu]</td>
<td>long: finally and before voiced consonants</td>
<td>vow, how loud, down</td>
</tr>
<tr>
<td>[au]</td>
<td>Reduced: before voiceless consonants</td>
<td>house, mouse</td>
</tr>
<tr>
<td>/ɔː/</td>
<td>Central, unrounded vowel, between half-close and half-open, to a centralised, back, rounded vowels, just above the half-close position</td>
<td>Initially, medially and finally</td>
</tr>
<tr>
<td>/iː/</td>
<td>Centralized, front unrounded vowel just above half-close to a central unrounded vowel, between half-close and half-open</td>
<td>Initially, medially and finally</td>
</tr>
<tr>
<td>[iː]</td>
<td>long: finally and before voiced consonants</td>
<td>show, no</td>
</tr>
<tr>
<td>/ʊə/</td>
<td>Centralized, back, rounded vowel, just above half-close to a central, unrounded vowel, between half-close and half-open</td>
<td>Reduced: before voiceless consonants</td>
</tr>
<tr>
<td>/eː/</td>
<td>Front, half-open, unrounded vowel, to a central, unrounded vowel, between half-close and half-open</td>
<td>Initially, medially and finally</td>
</tr>
<tr>
<td>[eː]</td>
<td>long: finally and before voiced consonants</td>
<td>fierce, pierce</td>
</tr>
<tr>
<td>/eː/</td>
<td>Reduced: before voiceless consonants</td>
<td>during, jury cure, contour</td>
</tr>
</tbody>
</table>


9.2 The English Consonants: Phonemic and Phonetic Details:

There are twenty four distinctive consonants in English R.P. Given below is a list which shows distributional characteristics of each English (R.P.) consonant with illustrative examples:

<table>
<thead>
<tr>
<th>Consonants (Phonemes)</th>
<th>Description</th>
<th>Phonetic Details</th>
<th>Distribution</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>/p/</td>
<td>voiceless, bilabial plosive</td>
<td>[p]</td>
<td>Initially, medially and finally</td>
<td>pen, pure appear, approach hope, shop</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(pʰ)</td>
<td>Aspirated: initially in accented syllables</td>
<td>paint, appear pew</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[p]</td>
<td>Unaspirated: accented after /s/;</td>
<td>spew, spill, spin</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Weakly accented: relatively unaspirated;</td>
<td>upper, gospel, capable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Syllable final;</td>
<td>cheap, shape, lap</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[pʰo]</td>
<td>With no audible release: before another plosive or affricate consonant;</td>
<td>top coat, captain, a cheap coat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[pʰ]</td>
<td>Before nasal consonant</td>
<td>topmost, happen, cheap meat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[pʰl]</td>
<td>Before lateral consonant</td>
<td>apple, couple, please</td>
</tr>
<tr>
<td>/b/</td>
<td>voiced, bilabial, plosive</td>
<td>[b]</td>
<td>Initially, medially and finally</td>
<td>boy, bin obtain, oblique mob, job</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[b]</td>
<td>Word initial: partially devoiced</td>
<td>big, bark, boast</td>
</tr>
</tbody>
</table>
/t/ Voiceless, alveolar, plosive

[b] Intervocalic: voiced; labour, symbol, rubber

[b] Final: voiceless; bulb, rib, sob

[bo] With no audible release; obtain, object, subject

[bⁿ] Before nasal consonant; ribbon, submit, submerge

[bˡ] Before lateral consonant; blank, bliss, blow

[t] Initially, medially and finally; toy, talk

[ṭ] Initially, medially and finally; attain, sustain, put, shut

[ṭⁿ] Aspirated: initially tall, try, tin in accented syllables

[ṭ] Unaspirated: accented after /s/; style, stamp, stone

[ṭ] Weakly accented: Relatively unaspirated; butter, utter, later

[ṭ] Syllable final; boat, late, past

[to] With no audible release; outpost, football, great joke

[ṭⁿ] With homorganic nasal release; cotton, button, eaten

[ṭˡ] With homorganic lateral release; cattle, battle, little

/d/ voiced, alveolar, plosive

[d] Initially, medially and finally; door, deer

[ḍ] Word initial; partially devoiced date, dog, dry

[ḍ] Sudden, hidden road, load
[d] Intervocalic: voiced order, adorn, under

[d] Final: voiceless old, gold, bold

[do] With no audible release: bad pain, head-girl, red car

[dº] With homorganic nasal release; sudden, hidden, red nose

[d] Before [m]; admit, road map,

[d] With homorganic lateral release; middle, padlock, good luck

/k/ voiceless, velar, plosive

[k] Initially, medially and finally cod, coal occur, active back, check

[k¹] Spirated: initially in accented syllables car, cry, according

[k] Unaspirated: accented skin, school, scar after /s/;

[k] Weakly accented; equal, income relatively unaspirated; secret

[k] Syllable final; rock, choke, bank

[ko] With no audible release; locked, black-board, black-cat

[kº] Before nasal consonant; acknowledge, dark- night, thicken

[k¹] Before lateral consonant clean, close clear

/g/ voiced, velar, plosive

[g] Initial, medial and final goat, game rugby, bigger bag, fog

127
| [g] | Word initial; gease, guess, partially devoiced; glass |
| [g] | Final: voiceless; leg, dog, vague |
| [gʰ] | With no audible release; bagpipe, bigchin, wagtail |
| [gʰ] | Before nasal consonant; ignore, bigman, dogma |
| [gʰ] | Before lateral consonant; glitter, glory, glow |

/tʃ/ voiceless, palato alveolar, affricate

| [tʃ] | Initial, medially and final; choose, chain, cheap, kitchen, question, orchard, watch, witch, pitch |

/dʒ/ voiced, palato alveolar, affricate

| [dʒ] | Initial, medial and final; jam, june, jar, margin, injure, ledger, edge, change, judge |

| /m/ | voiced, bilabial nasal |

<p>| [m] | Initial, medial and final; march, mark, lemon, humble, game, lame |
| [m] | After word initial /s/; smile, smooth, smack |
| [m] | Word final clusters; warmth, glimpse, prism |
| [m] | Partially devoiced; tomost, smoke, happen after voiceless constants; |
| [m] | Labio-dental; before [f,v]; circumvent, nymph, triumph |
| [m] | Syllabic; rhythm, prism, lissom |</p>
<table>
<thead>
<tr>
<th>Sound</th>
<th>Description</th>
<th>Example Words</th>
</tr>
</thead>
</table>
| /n/          | Voiced, alveolar, nasal          | [n] Initial, medial and final  neat, name many, any moon, soon  
               |                                  | [n] After word initial /s/;  snow, snatch  
               |                                  | [n] Partially devoiced:  after voiceless consonant;  snake, snug  
               |                                  | [n] Bilabial; before bilabial consonant ten boys, ten people  
               |                                  | [n] Labio-dental; before [f,v]:  invoice, infant,  
               |                                  | [n] Dental: before and sometimes after/θ,ð/;  when they, ear then, southern  
               |                                  | [n] Post alveolar; before [γ]:  henry, enrol,  
               |                                  | [n] Velar; before velar consonant  ten girls, ten cups  
               |                                  | [n] Syllabic  cotton, mutton, button  
| /ŋ/          | Voiced, velar, nasal             | [ŋ] Word medial  anxiety, hanger  
               |                                  | [ŋ]g | Word medial+/g/  longing  
               |                                  | [ŋ]k | Word medial +/k/; anchor, monkey  
               |                                  | [ŋ]k | Word final +/k/; sink, distinct, monk  
               |                                  | [ŋ] | Word final: syllabic (occasionally)  blacken, thickness  
               |                                  | /f/ | Voiceless, labiodental, fricative  feel, fit, fail  
               |                                  | Initially, medially and finally word initial clusters;  affair, offer, suffer  
               |                                  | Fry, fly, few leaf, cough, laugh  

| /v/ voiced, labio-dental, fricative | Word final clusters; Word initial medial and final Word initial clusters; Word final clusters; | fifth, baffles, twelfth vast, van, view over, silver, ever leave, give, dove view leaves, solves, oven(s) |
| /θ/ voiceless, dental, fricative | Word initial, medial and final Word initial clusters; Word final clusters | thin, three, thief anthem, author, method path, bath, oath three, throw, thwart depth(s), mouth(s) month(s) |
| /ð/ voiced, dental, fricative | Word initial, medial and final Word initial clusters; Word final clusters; | this, that, they leather, gather, father with, soothe, see the southern, writhed, rhythm(s) |
| /s/ voiceless, alveolar, fricative | Word initial, medial and final Word initial clusters; Word final clusters; | sample, soon, soap essay, escape, excite pass, mouse, ice spare, stain, smoke helps, cats, pulse |
| /z/ voiced, alveolar, fricative | Word initial, medial and final Word final clusters; | zoo, zeal, zero easy, busy, lazy says, days, nose hands, rings, bulks |
| /ʃ/ voiceless, palato-alveolar, affricate | Word initial, medial and final | sheet, shout, sugar bishop, mission, machine dish, fish, wish |
Word initial clusters;      shrink
Word final clusters;      fashion (ed),
fashion (ed),
mention (ed)      mention (ed)
pushed      pushed

/3/ voiced, palato-
      alveolar, fricative
      Word initial
      (French loan
      word);      genre, gigolo,
      Word medial;      gigue
      Word final
      (only in French
      loan words)      pleasure, measure,
      Word final      usual
      clusters;      rouge, beige,
                      prestige
                      vision(s)

/h/ voiceless, glottal,
      fricative
      Word initial and
      medial      heat, huge, human
      ahead, behind,
      behave

/l/ voiced, alveolar,
      lateral          [l] Clear
                      word initial,
                      medial and
                      final;
                      intervocalic in
                      context      leave, love, late
                      glad, flat, select
                      full, bill, hill
                      full it, will you,
                      all over

[l] Voiceless:
      after voiceless
      consonants;
      (less devoicing
      after a weakly
      accented voiceless
      plosive)

[r] Dark:
      word final, after
      vowel;
      after vowel, before
      help, bulb, cold
      consonant;

[œ] Syllabic
      word initial
      word medial
      little, middle, table
      red, rose, rule
      vary, arrow, hurry

131
approximant  
(inter vocalic in  
context)  
Word final /r/  
link with  
following word  
beginning with  
a vowel  

far away,  
poor old man,  
once for all  

Consonant clusters:  

[/]  
After voiceless  
accented plosive;  
tree, cream,  
crow  

[/]  
After voiceless  
fricative;  
fry, throw,  
thrive  

Unaccented,  
voiceless  
plosive, or  
accented  
voiceless plosive;  
after /s/ in the  
same syllable;  
scream, street,  
straight  

[/]  
Completely  
devoiced;  
price, try,  
cream  

after accented/  
p,t,k,/;  

[ ]  
Partially devoiced:  
after unaccented  
voiceless plosive  
initial in a syllable  
and in rapid speech,  
at syllable or word  
boundaries, in the  

syllable initial  
sequences /spr/,  
/skr/;  
after other  
accented voiceless  
consonants;  

spring, string  
scream  
fry, shrink,  
thrive  

Linking /r/:-  
When the word  
ends with the  
letter /r/ and  
the next word  
begins with the  
vowel and there  

butter and jam  
father and mother
<table>
<thead>
<tr>
<th>Sound</th>
<th>Description</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>/j/</td>
<td>voiced, palatal, approximant</td>
<td>young, yet, yes,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>pursue, spatula,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>occulist</td>
</tr>
<tr>
<td>/w/</td>
<td>voiced, labio-velar approximant</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>