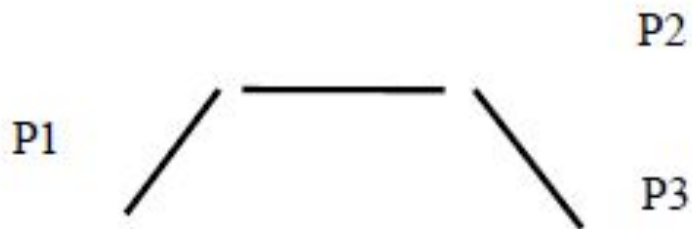

Theoretical Phonetics

— Lecture 4 —

Modification of Speech Sounds in Connected Speech

1. **Sound changes in connected speech**
2. **Assimilation and its types**
3. **Accomodation**
4. **Reduction and elision**

Articulatory Stages



where P1 / stands for the on-glide, $\overline{\text{P2}}$ for the retention-stage
and / P3 for the off-glide.

Principal ways of linking two adjacent speech sounds

I. Merging of stages

II. Interpenetration of stages

Joining

(a) a consonant to a following vowel (C+V), as in the word [mi:] *me*;

(b) a vowel to a following consonant (V+C), as in the word [ən] *on*;

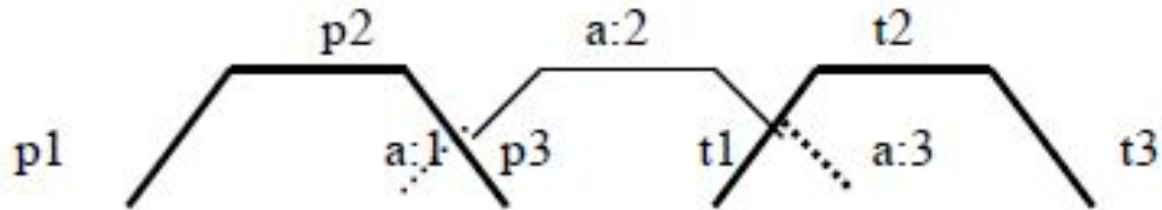
(c) two consonants (C+C), as in the word [bləu] *blow*;

(d) two vowels (V+V), as in the word [ri:'əliiti] *reality*;

Merging of stages

two adjacent sounds of a different nature are joined together

[pa:t]



Merging of stages

sounds of different nature are joined together, that is to say, the sounds articulated

(a) by different organs of speech C+V [pa:t] [mi:] V+C [a:m] [i:v] C+C [fju:] [spei]

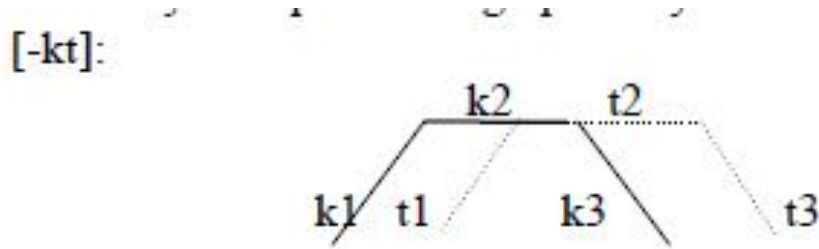
(b) by different parts of the tongue C+V [gɪv] V+C [i:gl] C+C [kju:] V+V [kjuəɾɪ'osɪtɪ]

(c) both by different organs of speech and by different parts of the tongue C+V [wɪ:] V+C [-i:w-]

Interpenetration of Stages

consonants of a similar or identical nature are joined

the end of the first sound penetrates not only into the beginning but also into the middle part of the second sound, as in *[-kt]* *act*, *[begd]* *begged*.



Sound adjustments

	Types of adjustments	Kinds of adjustments
1.	Adjustments related to C-C linking	1. Assimilations = modifications of a C under the influence of a neighboring C.
2.	Adjustments related to V-V, C-V, V-C linking	1. Liaison = connecting of the final sound of one word or syllable to the initial sound of the next. 2. Accommodation (adaptation) = modifications of C under the influence of the adjacent V or vice versa: e.g. <i>two</i> = labialized /t/ under the influence of the rounded /u:/; <i>let</i> = more open /e/ after /l/. 3. Glottal stop/hard attack
3.	Adjustments related to sound deletion/insertion	1. Elisions (elipsis or omission) = deletion of a sound in rapid or careless speech. 2. Epenthesis = inserting of a V or C segment within an existing string of segments. 3. Smoothing = a diphthong optionally loses its second element before another vowel, or it is monophthongized: e.g. <i>fire</i> / ^h faiə- ^h fəə - ^h fɑ:/.
4.	Adjustments on the syllable level	Compression when two syllables, usually both weak, optionally become one. Applies only to /ɪ/, /ʊ/, syllabic consonants: /ɪ/ becomes like /j/, e.g. <i>lenient</i> / ^h li:nɪənt/ - / ^h li:njənt/, etc.
5.	Weakening	Weakforms are alternate forms of words so reduced in their articulation that they consist of a different set of phonemes. Weakforms differ from strongforms by containing a weak vowel resultant from reduction or by elision of one or more of its phonemes, e.g. <i>can</i> [kən], [kn]

Assimilation (consonants)

Two adjacent consonants within a word or at word boundaries often influence each other in such a way that the articulation of one sound becomes similar to or even identical with the articulation of the other one.

assimilated sound (consonant whose articulation is modified)

assimilating sound (the consonant which influences the articulation of a neighbouring consonant)

Assimilation affecting

1 (a) the point of articulation

e.g. *tenth* [tenθ], *in them* [in ðem], *width*, [wɪð], *read this* ['ri:d ðɪs], *wealth* [welθ], *sixth* [sɪksθ], *has the* [hæz ðə].

Changes in the manner of articulation:

- **loss of plosion:** (plosive + plosive) *glad to see you, great trouble*
- **nasal plosion:** (plosive + nasal sonorant) *sudden, at night, let me see*
- **lateral plosion:** (plosive + [l]) *settle, at last*

(b) both the point of articulation and the active organ of speech

e.g. *Congress* ['kɒŋgrəs], *concrete* [kən'kri:t].;

bacon ['beɪkən] → [beɪkŋ], *I can go* [aɪ 'ken ɡʊ] → [aɪ kŋ ɡʊ]

When [m] occurs immediately before [f] or [v] it is assimilated to them, and its principal *bilabial variant* is replaced by its subsidiary *labio-dental variant*

Assimilation affecting

2 the manner of the production of noise

e.g. *give me* [gɪm mɪ], *let me* [lem mɪ]

3 the work of the vocal cords: *goose* [gu:s] - *gooseberry* ['gʊzbəri]

used [ju:zd] - *used to* [ju:st tu]

Used they to live here? ['ju:st ðeɪ tu 'lɪv ,hɪ ə]

No, they usedn't ['nɜ: | ðeɪ `ju:snt]

What is this? ['wɒt ɪz `ðɪs]

What's this? [wɒts `ðɪs]

Assimilation affecting

4 Lip position

E.g. quick [kwɪk], twenty [twentɪ] swim [swɪm]

5 the position of the soft palate

sandwich ['sænwɪdʒ], kindness ['kaɪnnɪs], grandmother ['grænmʌðə]

handkerchief [hæŋkətʃɪf]

Degrees of assimilation

- 1. Complete** e.g. *horse-shoe* ['hɔ:ʃʊ:] *does she* ['dʌʃʃɪ].
- 2. Partial** e.g. *twice* [twɑɪs], *please* [pli:z], *try* [traɪ],
- 3. Intermediate** e.g. *gooseberry*, *Congress*, *That's all right* ['ðætʰs ɔ:l ˌraɪt]

Literature

Sokolova - P. 45-50

Vrabel p. 30-62

Roach p. 110-116

Types of Assimilation (direction)

1 Progressive : A→B, where A is the assimilating consonant, and the B assimilated consonant.

e.g. What's this? place

2 Regressive the preceding consonant is influenced by the one following it.

E.g. news [nju:z] newspaper [nju:speɪpə]

Final /t/ or /d/ may assimilate to a following initial /p/, /k/, /b/, /g/

<i>good boy</i>	<i>good girl</i>	<i>at peace</i>	<i>pet kitten</i>
<i>/b:/</i>	<i>/g:/</i>	<i>/p:/</i>	<i>- /k:/</i>

Types of Assimilation (direction)

3 Double (coalescent/reciprocal) two adjacent consonants influence each other

/t/, /d/ + /j/ = affricates /tʃ/ /dʒ/

e.g. *twenty* ['twentɪ], *quick* [kwɪk]

don't you ['dʒʌnt ju], ['dʒʌntʃʊ], *can't you* ['kɑ:nt jʊ], ['kɑ:ntʃʊ].

t + j = /tʃ/	e.g. <i>Is that your dog?, virtue, statue</i>
d + j = /dʒ/	<i>Would you mind moving? education, during</i>
s + j = /ʃ/	<i>issue, He is coming this year.</i>
z + j = /ʒ/	<i>Does your mother know?</i>

Historical Assimilation

[s], [z], [t] + [j] = [sj], [zj], [tj] = [ʃ], [ʒ], [tʃ]

occasion [ə'keɪʒən] *session* ['seʃən] *question* ['kwestʃən] *nature* ['neɪtʃə]

ACCOMODATION

1 Unrounded - rounded

*Unrounded variants of
consonant phonemes*

[ti:] tea

[les] less

[nʌn] none

*Rounded variant of consonant
phonemes*

[tu:] too

[lu:s] loose

[nu:n] noon

ACCOMODATION

2. A *fully* back variant of a back vowel phoneme is replaced by its slightly *advanced* (fronted) variant under the influence of the preceding mediolinguual phoneme [j].

Fully back variant of [u:]

['bu:tɪ] booty

[mu:n] moon

Back-advanced [u:]

['bjɜ:tɪ] beauty

['mju:zɪk] music

ACCOMODATION

3 A vowel phoneme is represented by its slightly more open variant before the dark [ɫ] under the influence of the latter's back secondary focus

E.g. bell, tell

bed, ten

Accomodation

- *labialization* of Cs under the influence of the following Vs [o, o:, u, u:, a:] resulting in lip rounding (*pool, rude, ball, car*);
- *labialization* of Cs under the influence of following or preceding Vs [i, i:] resulting in lip spreading (*tea-eat, feet-leaf, keep-leak, pill-tip*);
- *palatalization* of Cs under the influence of Vs [i, i:] (*part-pit, top-tip*).
- nasalization of Vs under the influence of preceding or following sonorants /m/ /n/: *nice, men, morning*

Linking

Linking /r/ - far - far away, far out, near enough

Intrusive /r/ - vanilla(r) ice-cream, media(r) event

Resyllabification

lef/t arm , fin/d out, push/ed up, adap/table

Examples	Elongated consonant
<i>stop pushing</i>	[p:]
<i>bad dog</i>	[d:]
<i>short time</i>	[t:]
<i>big gap</i>	[g:]
<i>quick cure</i>	[k:]
<i>less serious</i>	[s:]

Glottal Stop

ʔ, Is a plosive made at the glottis by the vocal folds

Functions

1. Used as a way of adding emphasis to a syllable that begins with a vowel sound
2. Used to separate adjacent vowel sound in successive syllable

Underexpose - [ʌndə'spəʊz] - [-əʔɪk-].

3. Part of certain interjection **e.g. AmE *uh-uh*.**

4. Used as an allophone of the phoneme /t/ in certain position

atmospheric [ætməs'ferɪk]-[æʔməs-], *button* ['bʌtʰn]-['bʌʔn]

What's that ? [wɒʔs'dæʔ], *quite wrong* [kwaɪʔrɒŋ]

Ellision (ellipsis, omission, deletion)

Sound disappears or is dropped

*E.g. Next week, next thing, next question, stand clear, stand firm,
Camera - give camera , always, all right,*

<i>Phonetics</i>	<i>[fɜː 'netɪks]</i>	<i>[f 'netɪks]</i>
<i>mostly</i>	<i>['mɔːstli]</i>	<i>['mɔːsli]</i>
<i>all right</i>	<i>[ɔːl 'raɪt]</i>	<i>[ɔː 'raɪt]</i>
<i>next day</i>	<i>['nekst deɪ]</i>	<i>['neks deɪ]</i>

Common Ellisions

1 [t] and [d], when they appear within a consonant cluster

We arrived the nextday. ([t] elided between [ks] and [d])

When we reached Paris, we stopped for lunch, ([t] elided between [t] and [p], and between [p] and [f])

We bought a lovely carved statuette, ([d] elided between [v] and [st])

2 [ə] can disappear in unstressed syllables

I think we should call the police. ([ə] can disappear in the first syllable of police)

I'll love you forever, promise. Well, perhaps. ([ə] can disappear)

3 [v] can disappear in of, before consonants

My birthday's on the 11th of November.

It's a complete waste of time!

Reduction (a strong vowel becomes weak)

- **in related words:** anatomic [ˌænæ'tɒmɪk] – anatomy [ə'nætəmi];
- **in affixes:** president ['prezɪdənt] – preside [pri'zaid];
- **variant pronunciations:** Monday ['mʌndei] – ['mʌndi];
- **in function words:** from [frɒm] – [frəm].

Reduction

1. Quantitative reduction (shortening of a vowel length in the unstressed position) affects mainly long vowels (he [hi: - hi·- hi *At last he has come*]- knee-need- neat).

2. Qualitative reduction (obscuration of vowels towards [ə, ɪ, ʊ]) affects both long and short vowels (can [kæɪn - kən]).

Vowels in unstressed form-words in most cases undergo both quantitative and qualitative reduction (to [tu: - tu· - tu]).