**Section 4**

**4. Aspects of Connected Speech**

**4.1 Introduction**

**4.2 Rhythm**

**4.3 Assimilation and other phonological phenomena**

**4.3.1 Assimilation**

**4.3.2 Types of Assimilation**

**4.3.3 Cases of Assimilation**

**4.3.4 Exercises**

**4.4 Elision**

**4.4.1 Instances of Elision**

**4.4.2 Exercises**

**4.5 Epenthesis**

**4.6 Metathesis**

**4.7 Linking**

**4.8 Exercises**

**4. Aspects of connected speech**

**4.1 Introduction**

There have been some attempts at developing machines to produce speech,

but just for very restricted purposes and messages, e.g, robots and talking-machines.

But these messages are often unintelligible and lacking suprasegmental features

(intonation, stress and pitch). Thus, it is almost impossible to synthesize speech and

this will help us understand more clearly the importance of connected speech as

opposed to mechanical one.

**4.2 Rhythm**

The notion of rhythm is detectable in the regular occurrences of stressed

syllables. Rhythm in speech is not mechanical; e.g. ‘You **`got** to **`do** it if you **`want**

to suc**`ceed’**. > Regular intervals between four stressed syllables.

English speech is rhythmical; it is said to have *stress-timed rhythm* , based on

the contrast between stressed and unstressed syllables. Arabic, too, is quite rhythmic

but not French which has a syllable-timed rhythm. The contrast in English is

between strong and weak syllables and weak form words vs. strong form words;

e.g. 'Walk 'down the 'path to the 'end of the 'canal’. > the intervals of time are more

or less regular, i.e., all feet have roughly the same duration.

**4.3 Assimilation and other phonological phenomena**

**4.3.1 Assimilation**

How would you imagine a device that produces mechanical speech?

In such a machine or computer all the words of a language would be

recorded or entered in isolation and a significant difference appears in natural

speech. In connected/natural speech the sounds belonging to one word can cause

changes in sounds belonging to neighbouring words; this phenomenon is called

*assimilation*. In this case, the phonemes are realised differently when occurring near

some other phonemes. Assimilation varies according to speaking rate and style

(casual/ formal, informal/careful).

Most cases of assimilation occur this way:

**Regressive**

- - - -Cf │ # Ci- - - -

*Word boundary*

**Progressive**

**4.3.2 Types of assimilation**

**a) Regressive assimilation:** the initial consonant of the next word (Ci)

influences the final consonants of the previous word (Cf); e.g., “I like tha**t p**icture.’

[ ]. Here: /t/ → [p] / \_ [bilabial]

**b) Progressive assimilation:** the final consonant of the first word (Cf)

influences the first consonant of the next word (Ci); e.g., Dogs [ ]; in this

case, the lenis plosive [g] influences the fortis fricative [s] which acquires voicing

and becomes lenis [z]. Phonological rule: /s/ → [z] / [+voice] \_

This also occurs with the ‘s’ of the third person of simple present tense and

possessive case; e.g., in ‘gives’ vs. ‘takes’ and ‘John’s’ vs. ‘Pat’s’.

**N.B**This type of Progressive assimilation occurs much less than the regressive one.

**4.3.3 Cases of assimilation**

**a) Assimilation of place**

It is most clearly observable in cases of alveolar consonants and following

non-alveolar consonants: Cf alv-con │ Ci non-alv;

e..g, ‘On board’ [ m bɔ:d] /**n/** → [m] / \_\_ [bilabial], i.e, the phoneme /n/ is

realised as [m] in the environment of a bilabial.

**b) Assimilation of manner**

It is much less noticeable than place assimilation and only found in most casual and

rapid speech. In other words, the tendency of this assimilation is towards an easier

consonant realisation, i.e., less obstruction to the flow of air. For example: ‘That

side’ [ ] / **/** →[ ] / \_\_ [fricative] regressive assimilation of

manner. Good night [ ] / **/** →[ ] / \_\_ [nasal] regressive

assimilation of manner.

**c) Assimilation of voicing**

It is also found in a limited way in English as it only occurs as regressive

assimilation across word boundaries. If Cf is lenis (voiced) and Ci is fortis

(voiceless), then the lenis loses its voicing > devoiced;

e.g., ‘His car’ [his ka:] /z**/** → [s] /\_\_ [-voice];

‘We’ve taken it’ [ ] /v**/** → [f] / \_\_ [-voice] .

When Cf is fortis there is no assimilation of voicing e.g., ‘I like that bla**ck d**og.

Similar effects are observable at morpheme boundaries and even within the

morpheme as in final syllable cluster: nasal + plosive or fricative;

e.g., tenth [ h Ɵ] / **/** → [ ] / \_\_ [dental]. In this case the place of

articulation of the nasal consonant is always determined by that of the other

consonant as in ‘bank’ [ ]. As for as voicing is concerned, there are two

interesting examples from English, progressive assimilation of voicing at morpheme

boundary:

**1. The suffix morpheme {s}** used as plural form or 3rd person present tense or

in possessive case is realised as [ ] when preceded by voiced sounds, e.g,

[ ] but [ ],[ ] but [ : ],[ ] but [ ].

3

In all these examples /s**/** → [z] / [+voice] \_\_ case of progressive

assimilation of voicing. As vowels are voiced, the following suffix {\_s} is

voiced e.g., says, heroes, Jo’s, Mary’s.

**2. The verb suffix {\_ed}**. When the suffix {\_ed} is preceded by a voiced

sound, there is no assimilation but /d/ loses its voicing when preceded by a

voiceless sound, as in ‘worked’ [ : ] /d/ → [ ] / [- voice] \_\_.

**N.B.** These are sometimes referred to as cases of ‘fixed assimilation’

Another type of assimilation, which occurs frequently in English is called

*nasalisation*. The influence of a nasal consonant on other sounds, especially vowels

e.g. No, I can’t [ h : ] / :/ → [ : ] / \_\_ [nasal]; regressive assimilation of

manner.

As assimilation is a universal phenomenon, it would be a good thing to exemplify

the various types from other languages in addition to English, in particular from

French and Arabic which students are accustomed with (Standard and dialects).

Examples:

- In `ten books’, /n/ → [m] / \_\_ [bilabial] ; regressive assimilation of place >

same with French `impossible’ general rule: prefix {in-} + /p, b, m/ → [im-]

(fixed assim represented even in spelling (immature, improbable, ...); same

with Arabic **نم دعب** realized [mi**m**baʕd]. Also, realisations of /n/ in the

negating prefix {in-} according to the consonant that follows (both in Eng

and Fr): e.g., illegal, irregular, but `i**n**sane’ no assimimilation; or `i**n**accurate’

where no assimilation occurs as `accurate’ begins with a vowel.

- Voicing/devoicing: in ‘looked’, /d/ loses its voicing; [lukt]; /d/→ [t]/ [-voice]

\_\_progressive assimilation of voicing. Same in French ‘prof’ pronounced

[pχof] in which /R/→[χ] in the environment of /p/ voiceless so /R/→[χ]/[- voice]

progressive assim of voicing. Same type of voicing assimilation with

Arabic dialect: in [χselt] from /ɣasal/ ‘o wash’, /ɣ/→ [χ] / \_\_ [-voice]

regressive assimilation of voicing; and in [ʃtima:ʕ] ‘meeting’ , [ӡ] →[ ʃ ] / \_\_

[-voice]

- In `boys’ and `gives’, the {-s} gains voicing under the influence of the

preceding voiced segment> /s/ → [z] / [+voice] \_\_ ; progassim of voicing.

- So, the aim is to make students aware of the universality of the

phenomenon... They will certainly find a lot of examples from English,

French and Arabic and they should be able to analyse them.

**4.3.4 Exercise**

1. What is assimilation? Illustrate.

2. Why is assimilation regarded as a universal phonological phenomenon?

Explain illustrating with examples.

3. When does assimilation of voicing occur in English? Illustrate

4. Transcribe the following sentences: Mark stresses and use weak forms

where necessary and comment on all assimilation cases you can find.

a. He confirmed that he had never been there.

b. She has talked of her own problem.

c. You have to run as fast as you can.

d. He says that he has forgotten them at home.

e. Does she know where he comes from?

5. Does assimilation occur at morpheme boundary in English? Illustrate.

**4.4 Elision**

*Elision* is a process in which one or more phonemes are ‘dropped’, usually in

order to simplify the *pronunciation*. In certain circumstances, sounds may disappear

completely, i.e., a phoneme is realised as . This phenomenon is typical of rapid,

casual speech. It is important to be aware of such phenomenon as elision and

assimilation especially when native speakers talk to each other. Elision (deletion) is

also a phenomenon attested in virtually all languages; resulting from the principle of

sound economy, ‘law of least effort’ (Martinet 1960 and others). In English, p**`**haps,

t**`**night’, `can’t’, etc. In French `la p’tit maison’ (schwa deletion); in Arabic dialects

[ktəbt] etc... It can be seen clearly in contracted forms like *isn't* (is not), *I'll* (I

shall/will), *who's* (who is/has), *they'd* (they had, they should, or they would), *haven't*

(have not) and so on. We see from these examples that vowels and consonants can

be elided.

**4.4.1 Instances of Elision:**

**a.** Loss of weak vowel after /p,t,k/ in case aspiration takes up the occurrence

of / / e.g [ ] - [ ] - [ ]

**b.** Weak vowel followed by /n, l, r/ we get syllabic consonant

e.g [ ]→[ ] - [ : ]→[ : ] - [ ]→[ ]

**c.** Avoidance of consonant cluster:

e.g George the sixth’s throne [ : ]

Three plosives or two plosives + fricative; the middle plosive can disappear

e.g acts [ ] - He looked back [ ]

**d.** Loss of final [ ] in `of’ before consonants e.g `lots of them’

[ ], It’s a waste of money [ ]

**e.** Contractions of grammatical words, e.g, ‘I’d like to!’

[ ]

**4.4.2 Exercises**

1. What is elision? When and how are sounds elided in English? Illustrate with examples.

2. What makes the schwa so important in the English language?