CONNECTED SPEECH
RHYTHM

- Noticeable event happening at regular intervals of time (heart-beat, flashing light, piece of music)
- Rhythm in speech: regular occurrence of stressed syllables (still, regularity is relative)
- English speech is rhythmical
- Stress-timed rhythm: stressed syllables tend to occur at relatively regular intervals whether they are separated by unstressed syllables or not (not characteristic for “mechanical speech”)
Stress-timed rhythm theory

- The time from each stressed syllable to the next will tend to be the same, irrespective of the number of intervening unstressed syllables

i.e. to maintain uniform length between the stressed syllables, the unstressed syllables, whatever their number, are uttered quickly.
Syllable-timed rhythm theory

- All syllables, whether stressed or unstressed, tend to occur at regular intervals and the time between stressed syllables will be shorter or longer in proportion to the number of unstressed syllables.
- Indian languages are examples of such languages.
Foot

- A unit of rhythm
- Begins with a stressed syllable and includes all following unstressed syllables up to, but not including the following stressed syllable
Tree diagram

Twenty places

Twenty places

S W S S W

S W
Longer phrase

\[
\begin{array}{ccc}
\text{w} & \text{w} & \text{s} \\
\text{s} & \text{w} & \text{s} \\
\text{twenty} & \text{places} & \text{further} \\
\end{array}
\]
How strong is a syllable?

- Strength of a syllable can be measured by counting up the number of times the symbol “s” occurs above it.
- English tends towards a regular alteration of strong and weak syllables and tends to adjust stress levels to make this possible ("stress-shift"): e.g. compact /kəmˈpæk特/ BUT compact disc /ˈkəmpækt ˈdɪsk/
How rhythmically do we speak?

- Very rhythmically – styles of public speech
- Arhythmically – if hesitant or nervous
- One always speaks with some degree of rhythmicality, but the difference is in degree
- In a stress-timed language all the feet are supposed to be of roughly the same duration
Assimilation

- A feature of natural connected speech only
- Sounds belonging to one word can cause changes in sounds (phonemes) belonging to neighbouring words
- More likely to be found in rapid, casual speech
- The cases most often described are assimilations affecting consonants
Assimilation at word boundary

- - - $C_f$ | $C_i$ - - -

word boundary

- Assimilation can be either **regressive** or **progressive**
3 types of assimilation:

1) assimilation of place of articulation

2) assimilation of manner of articulation

3) assimilation of voicing
The most common form involves the movement of place of articulation of the alveolar stops /t/, /d/ and /n/ to a position closer to that of the following sound.

For instance, in the phrase *ten cars*, the /n/ will usually be articulated in a velar position, so that the tongue will be ready to produce the following velar sound /k/.

Similarly, in *ten boys* the /n/ will be produced in a bilabial position, /tem b/ to prepare for the articulation of the bilabial /b/.
BEFORE A VELAR (/k/, /g/)

<table>
<thead>
<tr>
<th>音素</th>
<th>发音</th>
<th>例子</th>
</tr>
</thead>
<tbody>
<tr>
<td>/n/</td>
<td>➔</td>
<td>/ŋ/</td>
</tr>
<tr>
<td>e.g. ten cars</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/d/</td>
<td>➔</td>
<td>/g/</td>
</tr>
<tr>
<td>e.g. good girl //</td>
<td></td>
<td></td>
</tr>
<tr>
<td>/t/</td>
<td>➔</td>
<td>/k/</td>
</tr>
<tr>
<td>e.g. that kid</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### BEFORE A BILABIAL (/m/, /b/, /p/)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>→</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>/n/</td>
<td></td>
<td>→</td>
<td>/m/</td>
</tr>
<tr>
<td>e.g. ten men /tem men/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>→</td>
<td>/b/</td>
</tr>
<tr>
<td>e.g. bad boys</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>→</td>
<td>/p/</td>
</tr>
</tbody>
</table>

- **t + bilabial = p**
- **t + dental = dental plosive** (e.g. that thing / get those / cut through)
- **t + velar = k** (e.g. that case / bright colour / quite good)
- **d + similar contexts = b, d, g**
- **n + similar contexts = m, n, ŋ**
- **s and z + ñ, j become ñ and ζ** (e.g. this shoe, those years)
Assimilation of manner

- The change is most likely to be towards an easier consonant – one that makes less obstruction to the airflow.
- Final plosive becomes a fricative or nasal (that side, good night).
- A plosive / nasal + word-initial /ð/ : in the, get them, read these (consonant ð becomes identical in manner to the cons. final, but with dental place of articulation).
Assimilation of voicing

The vibration of the vocal folds is not something that can be switched on and off very swiftly, as a result groups of consonants tend to be either all voiced or all voiceless. Consider the different endings of ‘dogs’ /dɔɡz/ and ‘cats’ /kæts/, of the past forms of the regular verbs such as ‘kissed’ /kɪst/ and ‘sneezed’ /sniːzd/.

Only regressive assim. of voicing is found: cons.final voiced + cons.initial voiceless devoices cons.final: e.g. get them /get təm/

Progressive assim. of voicing with suffixes s/z
Elision is very simply the omission of certain sounds in certain contexts. The most important occurrences of this phenomenon regard:

1. Alveolar consonants /t/ and /d/ when ‘sandwiched’ between two consonants (CONS – t/d – CONS), e.g.

<table>
<thead>
<tr>
<th>The next day…</th>
</tr>
</thead>
<tbody>
<tr>
<td>The last car…</td>
</tr>
<tr>
<td>Hold the dog!</td>
</tr>
<tr>
<td>Send Frank a card.</td>
</tr>
</tbody>
</table>
Cases of elision

1) Loss of weak vowel after p/t/k: potato, tomato, perhaps, etc.
2) Weak vowel + n/l/r = syllabic n / l / r: tonight, police, correct, etc.
3) Avoidance of complex cons. clusters: “George the Sixth’s throne”
4) 2/3 plosives + a fricative: the middle plosive disappears: acts, looked back, scripts, etc.
5) Loss of final /v/ in of before consonants: lots of them, waste of money, etc.
Elision = disappearance of sounds

- This can also take place within affricates /tʃ/ and /dʒ/ when preceded by a consonant, e.g.
  - lunchtime
  - strange days

A phoneme may have zero realisation or be deleted.
Are **contractions** a case of elision?

- Had, would : “´d”
- Is, has : “´s”
- Will : “´ll”
- Have : “´ve”
- Not : “n´t”
- Are : “´re”
Linking (Liaison)

- Words in English can be linked in special ways: “linking r” and “intrusive r”
- Linking r: “here are” vs. “here”
  “four eggs” vs. “four”

- Intrusive r: “Formula A”
  “media event”

These are special cases of juncture.
Juncture

- Refers to the relationship between one sound and the sound/s that immediately precede it or follow it
- E.g. “my turn” vs. “might earn”
- Example of close juncture: m + ai
- External open juncture: m, n are in such posit.
- Internal open juncture: how are the two above mentioned examples differentiated?
- Answer: due to aspiration or non-aspir. of /t/ thanks to its position at word boundary