

Phonological processes

In Connected Speech



Introduction

- Phonology is **not** only concerned with the establishment of the phonemes of a language and the distribution of sounds. It is concerned with sound patterns in general. **Alternation** is a type of sound patterns in a language.

Alternation

- **Alternation, where a word turns up in two or more forms, and there are systematic sound-differences between the forms.**

Phonological Processes

They operate upon natural groupings of sounds, and give rise to alternations in the form of the words. Phonological processes belong to a small number of frequently occurring types.

1. Assimilation

2. Elision (*deletion*)

3. linking

Assimilation

- **When a sound is changed into another because the influence of a neighbouring sound, there is said to be a process of **assimilation**.**
- **The assimilation may be **complete** or **partial**.**

- **Check the following examples:**

- **Complete assimilation (noticeable)**

1) *tenth* : [tenθ]... pronounced as dental

2) *in the* : [inð̥]... pronounced as dental

- **Partial assimilation (slight)**

1) *Fact finding*: [fækt faindiŋ] ... pronounced as week *t* (we cannot symbolize in transcription)

2) *Wrapped parcel*: [ræpt pa:rsel] ... pronounced as week *t* (we cannot symbolize in transcription)

- **Again, when we find a phoneme realized differently as a result of being near some other phoneme belonging to a neighbouring word, we call this an instance of assimilation.**
- **Assimilation is something which varies in extent according to the speaking rate and style; it is more likely to be found in rapid, casual speech and less likely in slow, careful speech.**

Remember

- **Generally speaking, the cases that have most often been described are all assimilation affecting consonants.**

Assimilation

- When two words are combined, the first ends with a single final consonant (C_f) and the second of which starts with a single initial consonant (C_i), we can construct a diagram:

.... C_f C_i



Word 
boundary

We can see two kinds of assimilations.

Kinds of Assimilation

1) Regressive assimilation:

the first consonant is affected by the second.

e.g. *that person* [ðæp pɜ:sn]

2) Progressive assimilation :


the second consonant is affected by the first.

e.g. *cats* [kæts] *dogs* [dɒgz]

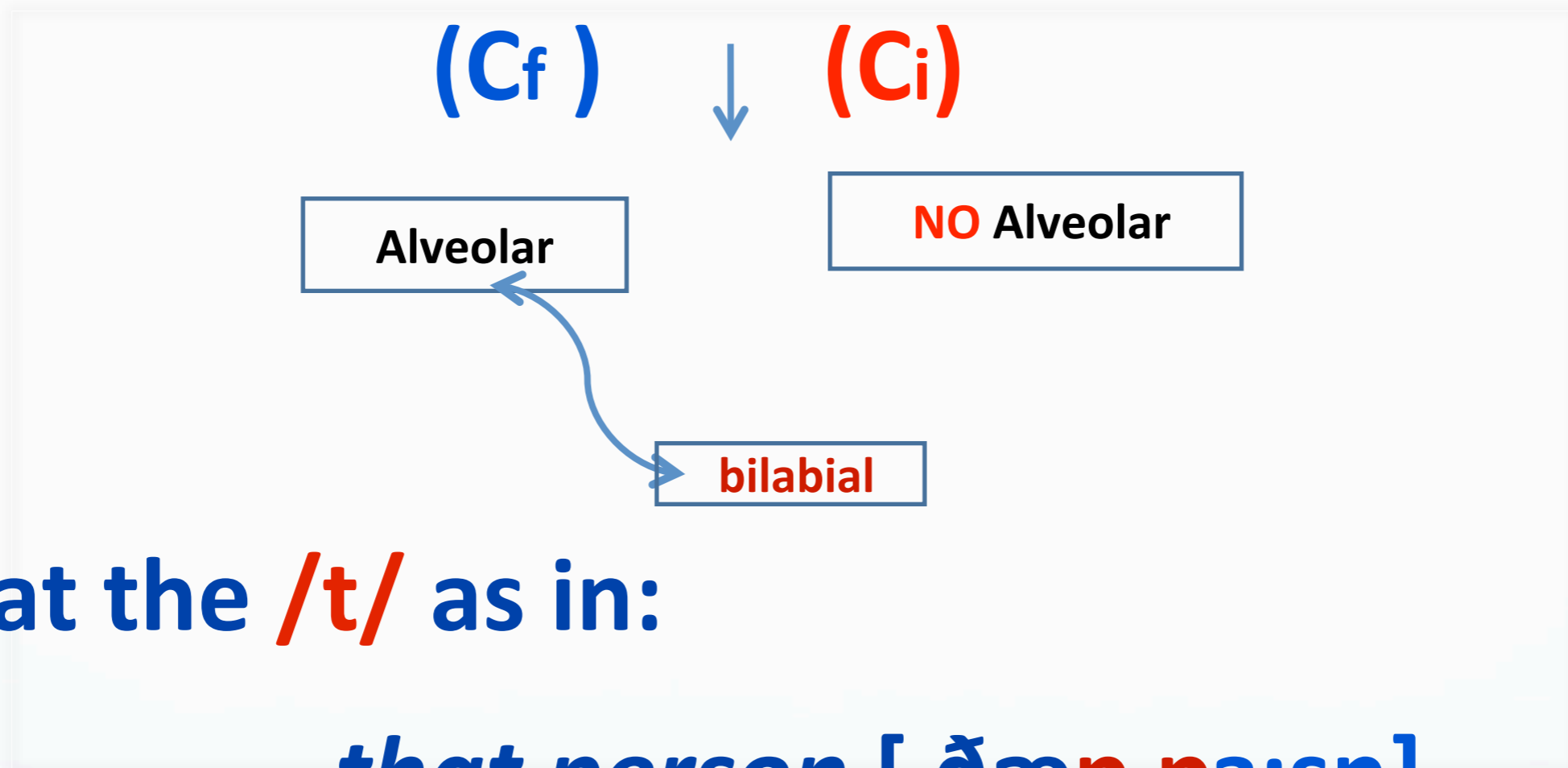
Differences in Assimilation

- **Philologists have seen that main differences between consonants are of 3 types:**
 - 1) Differences in place of articulation**
 - 2) Difference in manner of articulation**
 - 3) Difference in voicing**

Assimilation of Place

- It occurs where a final consonant (C_f) with **alveolar place of articulation** is followed by an initial consonant (C_i) with a place of articulation that is not alveolar.
- Then, the **alveolar** is changed to **bilabial**. 

The alveolar: /t/-1



Look at the /t/ as in:

that person [ðæp pɜ:sɪ]

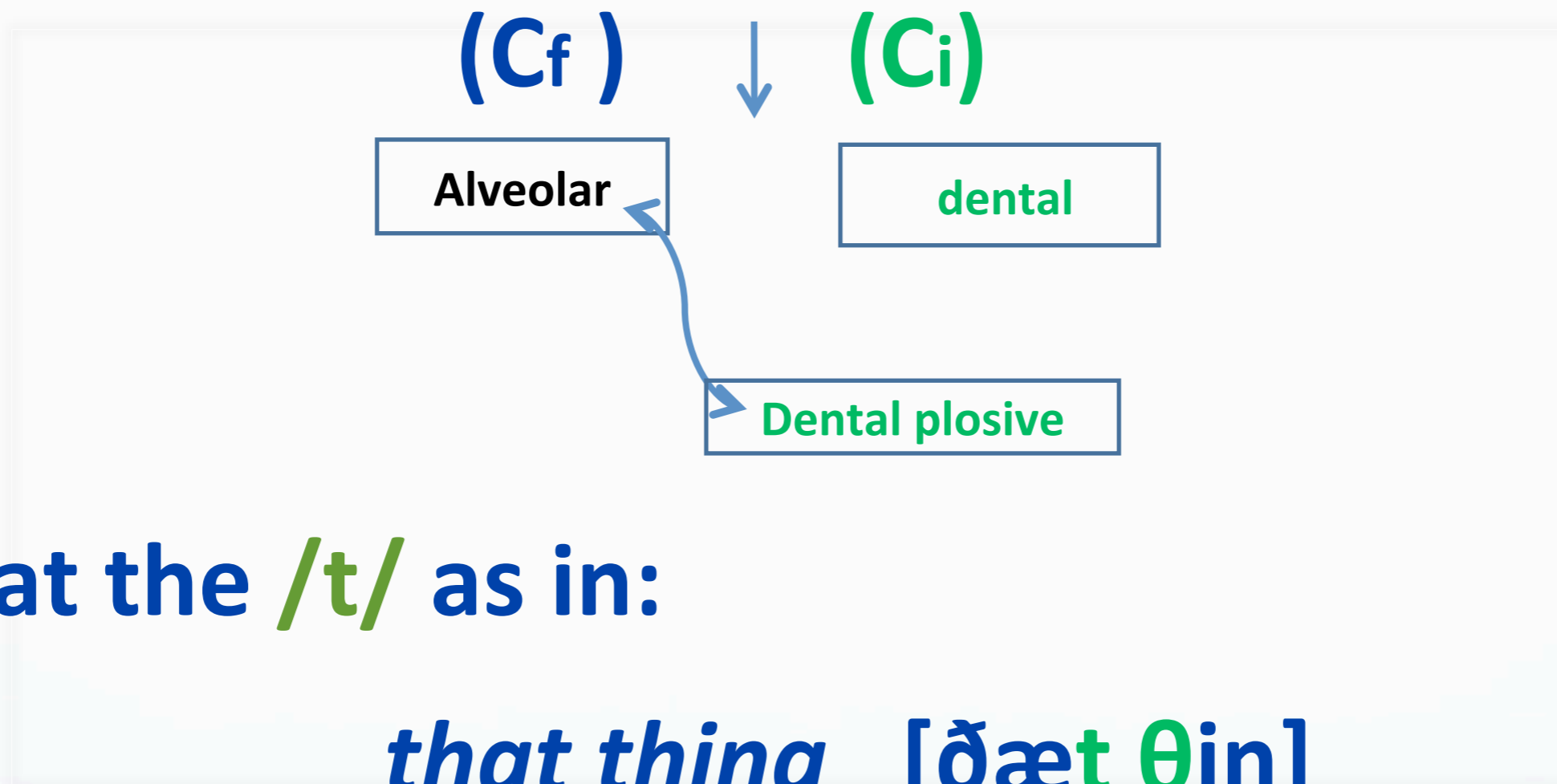
light blue [laip blu:]

meat pie [mi:p pai]

The alveolar: /t/-2

2) Before a dental consonant, /t/ will change to a dental plosive.

The alveolar : /t/ -2



Look at the /t/ as in:

that thing [ðæt θiŋ]

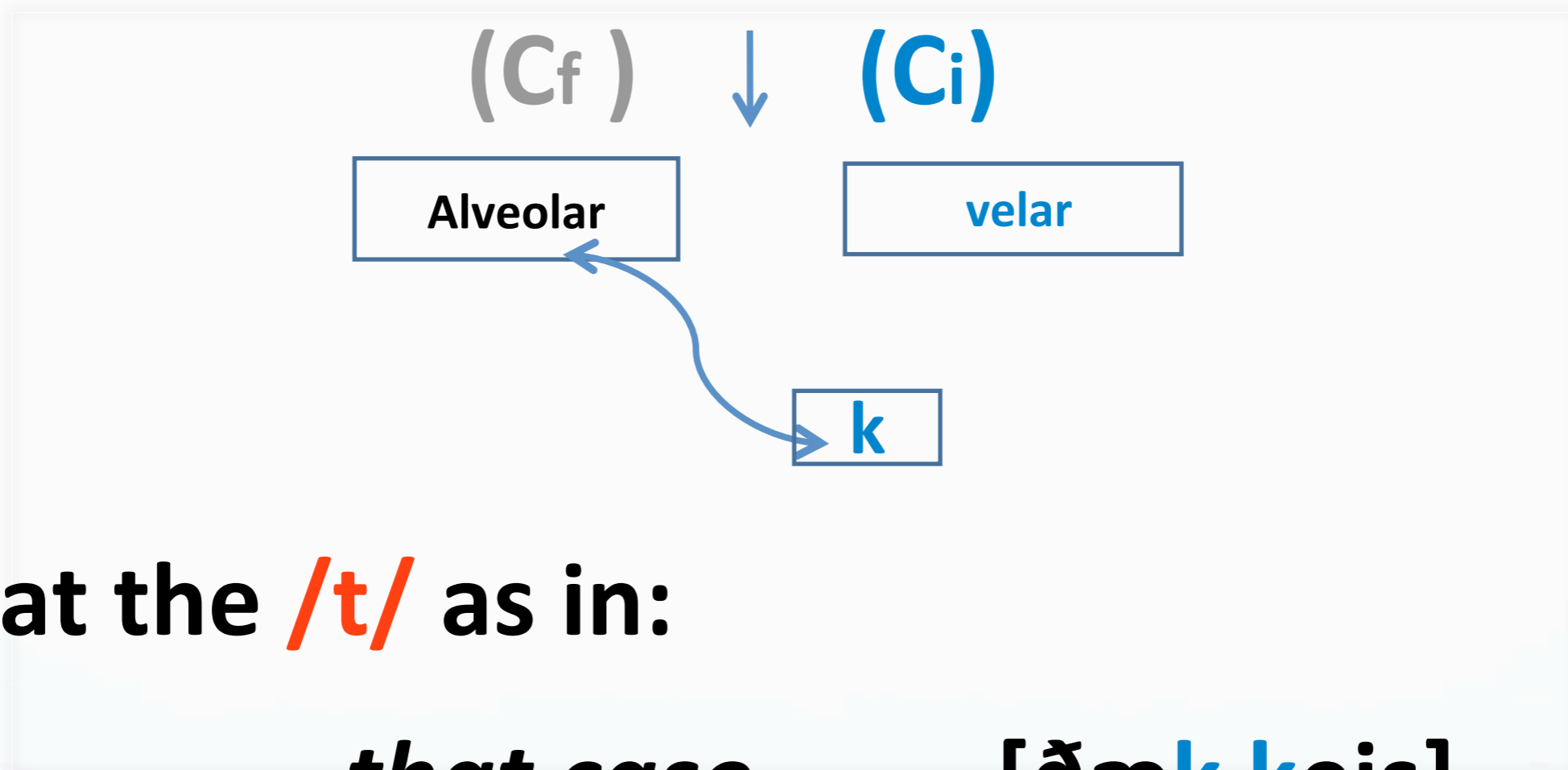
get those [get ðʒuz]

cut through [kʌt θru:]

The alveolar: /t/-3

3) Also, before a **velar** consonant, the /t/ will become /k/.

The alveolar: /t/-3



Look at the /t/ as in:

that case [ðæk keis]

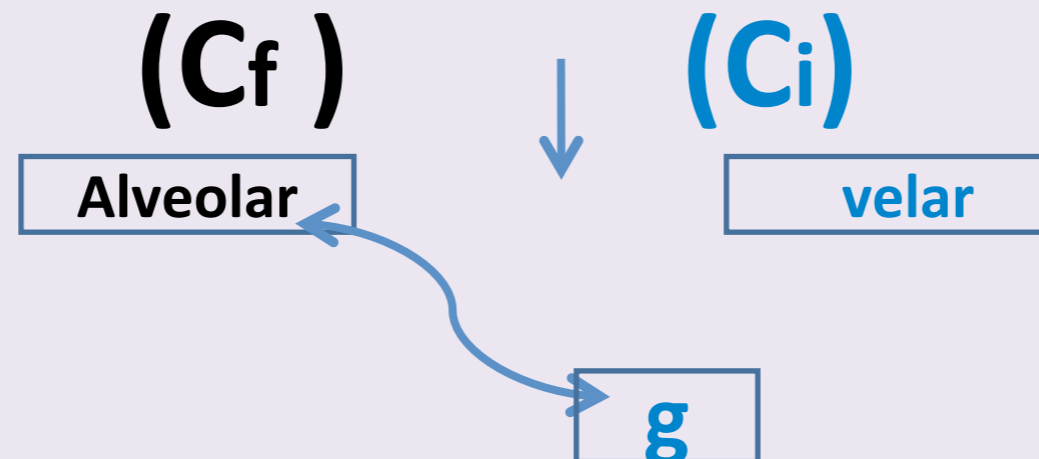
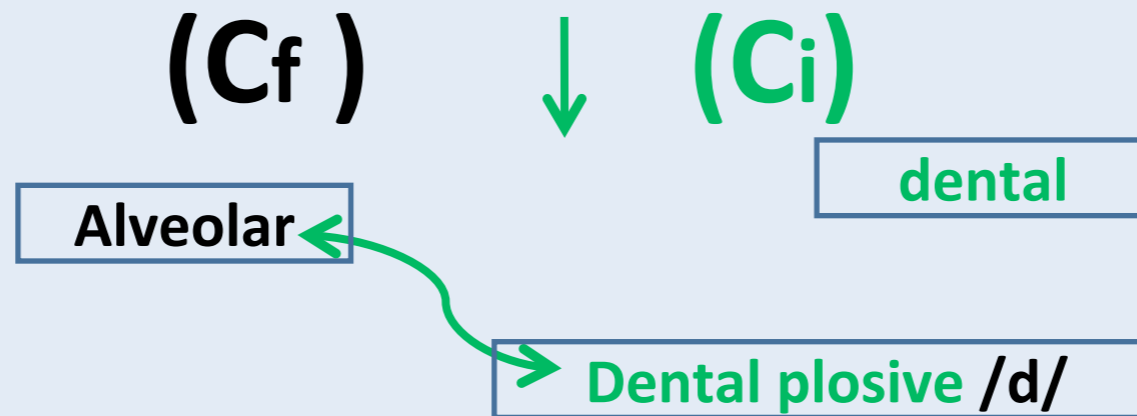
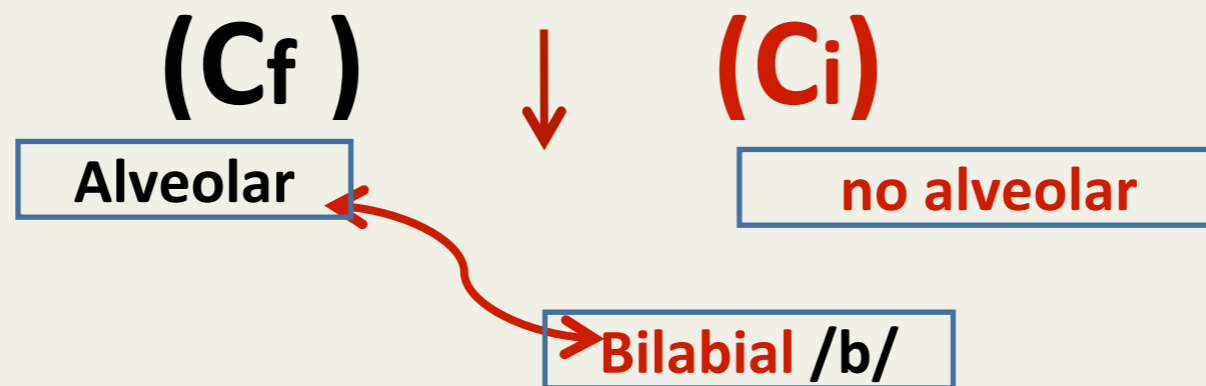
bright colour [braik kʌlɜː]

quite good [kwaiɪk gud]

/d/- 1,2,3

- **In similar contexts:**
 - **/d/ would become b, d, and g.**

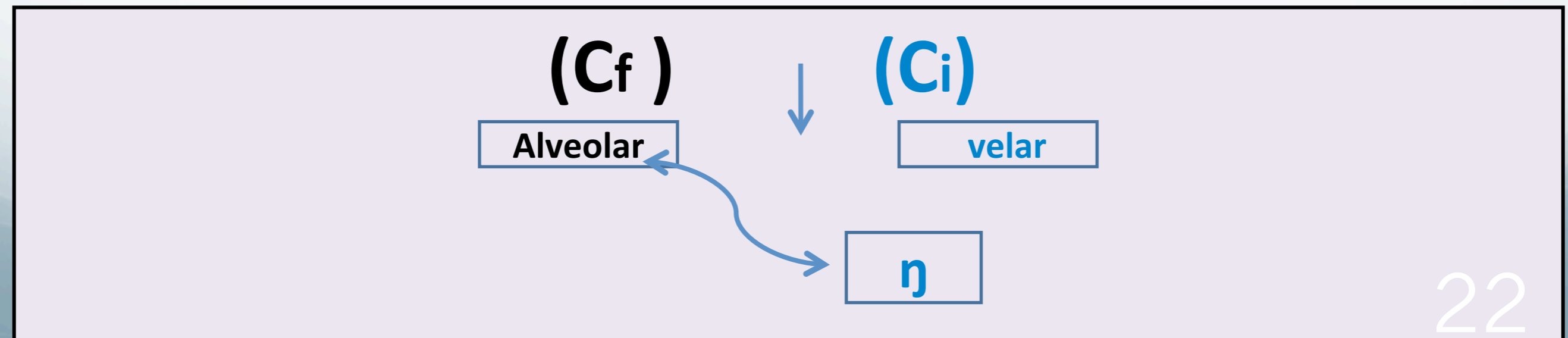
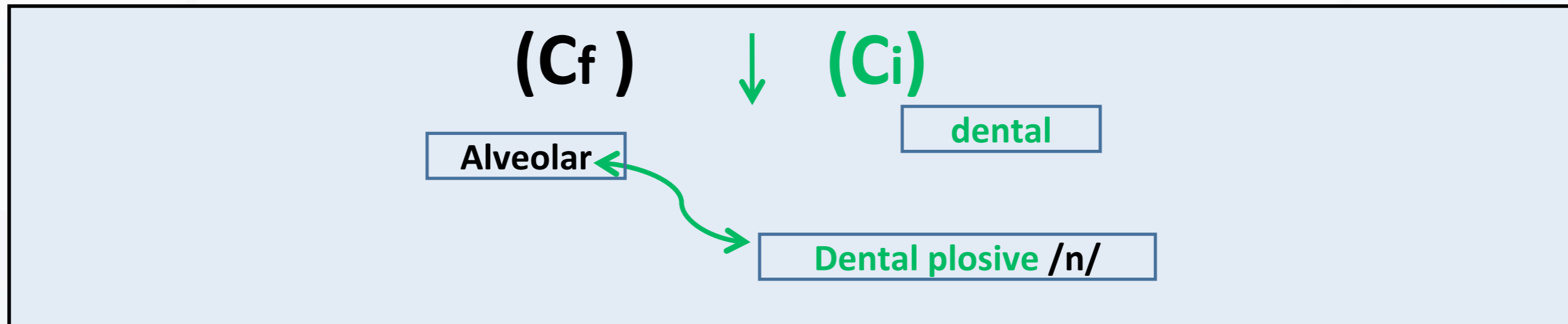
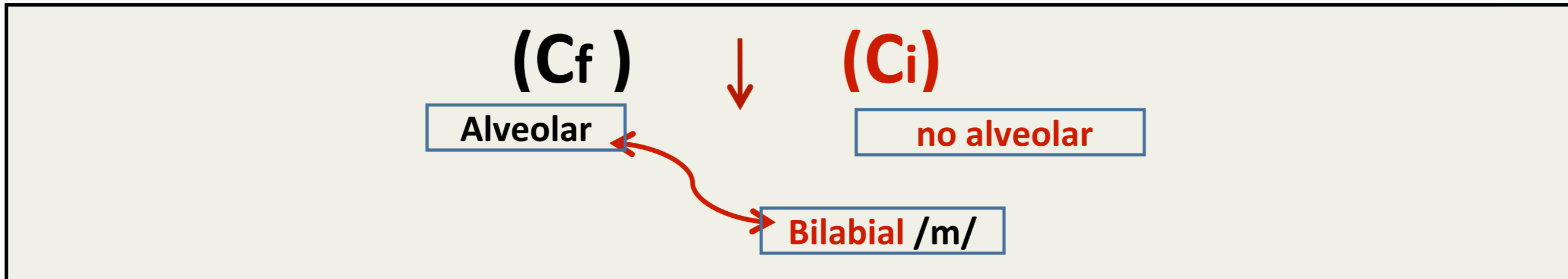
The alveolar: /d/-1,2,3



/n/ - 1,2,3

- **In similar contexts:**
 - **/n/ would become m, n, and ŋ.**

The alveolar: /n/-1,2,3



Assimilation of Place

- The other alveolar consonants /s/ and /z/ behave differently, the only noticeable change being that /s/ becomes /ʃ/ and /z/ becomes /ʒ/ as in:

this show [ðɪʃ ʃu:]

those years [ðəʒuʒ jɪz]

Remember

- It is important to note that the consonants that have undergone assimilation have **not** disappeared.

Remember

- Assimilation of place is **only** noticeable in **this regressive assimilation of alveolar consonants.**

Assimilation of Manner

- It is less noticeable, and is **only** found in the **most rapid and casual speech**; generally speaking, the tendency is again for **regressive assimilation** and the change in manner which makes less obstruction to the airflow.

Cont.

- It is thus possible to find cases where a final **plosive** becomes a **fricative** or a **nasal**.
- E.g.

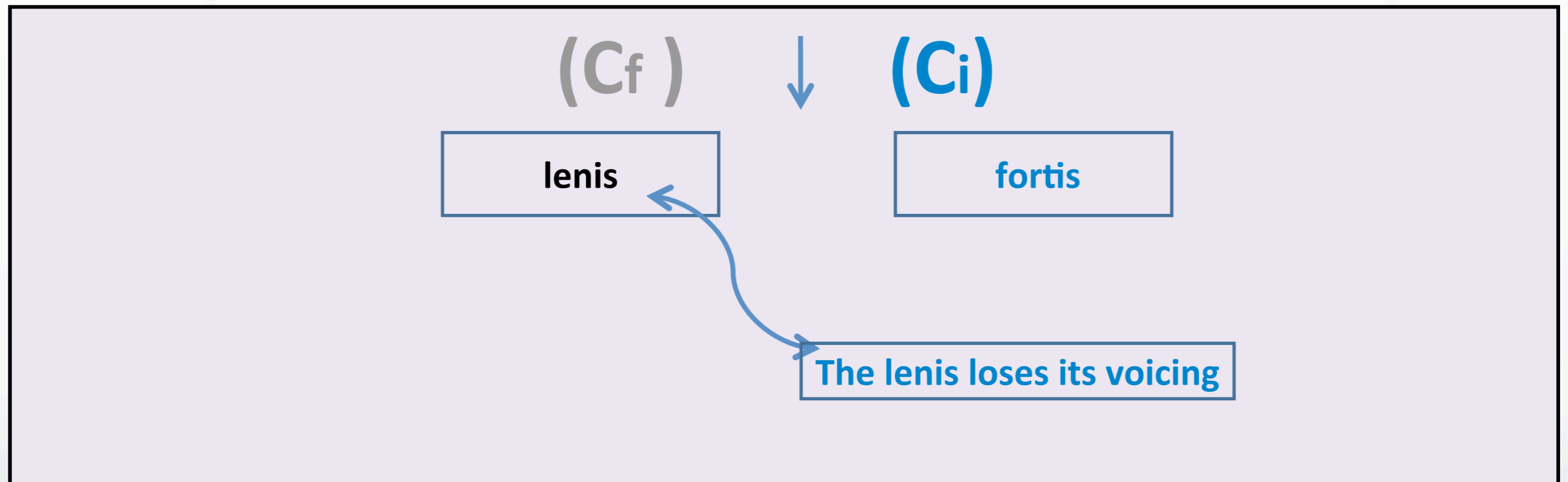
that side [ðæs said]

good night [gun nait]

Assimilation of Voicing

- **Assimilation of voicing is also found but only in a limited way.**
- **Only regressive assimilation of voicing is found across word boundaries, and then the only type.**

The assimilation of voicing



Fixed cases of assimilation

- **If in a syllable-final consonant cluster a nasal consonant precedes a plosive or a fricative in the same morpheme, the place of articulation of the nasal is always determined by the place of articulation of the other consonant.**

- **Thus:**

bump **[bʌmp]**

tenth **[tenθ]**

hunt **[hʌnt]**

bank **[bæŋk]**

- It could be said that assimilation had become “**fixed**” as part of the phonological structure of English syllables, since exceptions are non-existent.

- **Another examples of fixed forms of assimilation:**

cats [kæts]

dogs [dɒgz]

jump [dʒʌmp]

runs [rʌnz]

Pat's [pæts]

Pam's [pæmz]