

# Cours de phonologie anglaise

Gustave Eiffel LCA2

Adrien Méli

November 16, 2021

## Contents

Avertissements . . . . .	2
Bases de données . . . . .	2
1.1. Liste de mots . . . . .	2
1.2. Échéances . . . . .	5
Lesson n°1 . . . . .	6
2.1. Administration . . . . .	6
2.2. La représentation des sons . . . . .	6
Lesson n°2 . . . . .	7
3.1. La règle orthographique . . . . .	7
3.2. Homework . . . . .	8
Lesson n°3 . . . . .	9
4.1. Homework: correction . . . . .	9
4.2. Recap from last week . . . . .	10
4.3. Practice . . . . .	10
4.4. Homework . . . . .	10
Lesson n°4 . . . . .	11
5.1. Homework . . . . .	11
5.2. /æ/ in American . . . . .	12
5.3. Les catégories de voyelles . . . . .	14
5.4. Interlude . . . . .	14
Lesson n°5 . . . . .	15
6.1. Correction . . . . .	15
6.2. Warm up . . . . .	15
6.3. Introduction to assimilation . . . . .	16
6.4. Examens de mi-semestre . . . . .	17
Lesson n°6 . . . . .	17
Lesson n°7 . . . . .	18
8.1. Correction de l'examen de mi-semestre . . . . .	18
8.2. Back to assimilation . . . . .	18
8.3. Types d'influence . . . . .	18
8.4. Homework . . . . .	19
Lesson n°8 . . . . .	19
9.1. Energy assimilations . . . . .	19
9.2. Homework . . . . .	21
9.3. References . . . . .	22
Références . . . . .	22

## Avertissements

- Les transcriptions britanniques proviennent du Longman Pronunciation Dictionary (Wells (2008)).
- Les transcriptions américaines sont sujettes à caution. Elles sont récupérées directement du [dictionnaire de Carnegie Mellon University](#), mais l'algorithme que j'ai écrit pour la conversion en IPA est loin d'être entièrement fonctionnel. **Vérifiez-les dans votre dictionnaire de prononciation favori.**
- Les erreurs non repérées, tant sur la forme que sur le fond, sont de mon fait uniquement.
- Envoyez vos questions, suggestions, corrections et autres à l'adresse suivante : `adrienmeli at gmail`

## 1 Bases de données

### 1.1 Liste de mots

Words
watch
chat
hate
body
these
window
shared
pink
mountain
table
loves
push
yummy
thug
swing
fought
shine
jar
look
passes
breakfast
cereal
chocolate
keyboard
shampoo
bath
delicious
horrible
magazine
university
chair
knife
account
cushion

curtain

strong

locked

written

camera

radio

very

thesis

manage

over

jumped

felt

come

back

rare

judge

write

evolution

dark

quack

gone

short

jerk

head quarters

main course

matched pairs

perhaps

broadcast

white pepper

on the house

raise your glass

age

jinx

shake

once

music

ink

lamb

choke

shackle

fern

mustard

purpose

shove

shelf

thank

knight

sword

answer

this shape

these shoes

this unit

unless you

as you see

let you out

would you try

get your bags

import

nature

soldier

patient

nation

pressure

measure

figure

break

vaccine

low

throw

land

foam

spoon

healthy

ten men

fine grade

incredible

red paint

bad guys

eight boys

straight

sustain

work

remind

damp

though

note

scythe

lucky

wall

Meant

Understood

accountable to the data

a cannibal to the data

she makes us slave

she makes us leave

can I pour us both juice

can I pour a spoke juice

The bosses with the antennas.

3

This area is full of bets.

1
Do you have any pots in the house?
4
We trucked across Wisconsin.
5
Senior citizens living on the black.
2
The Express Way is jammed salad.
2

NULL

## 1.2 Échéances

Échéances	Instructions
27/09/2021	Transcrire les mots suivants : “fought, shine, jar, look, passes”
04/10/2021	Transcrivez les mots suivants. Quels sont ceux dont les voyelles ne respectent pas la règle orthographique ?
11/10/2021	Find 5 words not mentioned in class featuring historically assimilated sound (hint: yod-coalescence). Find 5 sentences likely to feature assimilations in connected speech. Mention the direction of these potential assimilations.
11/10/2021	Transcrire les listes de mots de la leçon n°3.
25/10/2021	Examen de mi-semestre (1h)
22/11/2021	Faire le travail de la leçon n°8
13/12/2021	Examen de fin de semestre (1h)
hurdle	
democrat	
country	
value	
normal	
wages	
capture	
changing	
narrow	
government	
sorry	
one	
science	
national	
structure	
building	
prosecution	
familiar	
jumper	
achievement	

## 2 Lesson n°1

### 2.1 Administration

#### 2.1.1 Présentation

- La phonétique (1CAE301) compte pour 20% de l'UE 301 au Semestre 1.

#### 2.1.2 Échéances

Échéances	Instructions
27/09/2021	Transcrire les mots suivants : “fought, shine, jar, look, passes”
25/10/2021	Examen de mi-semestre (1h)
13/12/2021	Examen de fin de semestre (1h)

#### 2.1.3 Éléments pratiques

- Centralisez vos notes.
- Les transcriptions de référence proviennent du *Longman Pronunciation Dictionary* (Wells (2008))
- Les transcriptions du *English Pronouncing Dictionary* (Jones et al. (2011)) sont aussi acceptées.
- [adrienmeli.xyz](http://adrienmeli.xyz)

## 2.2 La représentation des sons

### 2.2.1 l'API

La représentation des sons se fait avec les symboles de l'alphabet phonétique international (API) (“the International Phonetic Alphabet, or IPA”).

[IPA Chart](#)

### 2.2.2 Les sons de l'anglais

Les sons de l'anglais sont bien sûr moins nombreux que ceux de la liste établie dans l'API.

Ces symboles sont supposés connus...

### 2.2.3 Exercice

Words
watch
chat
hate
body
these
window
shared
pink
mountain
table
loves
push

	V C-r C/#	V C-r V	V <r> C/#	V <r> V
<a>	mat	mate	mar	mare
<e>	pet	Pete	her	here
<i>	sit	site	fir	fire
<o>	not	note	or	ore
<u>	cut	cute	purr	pure
<u2>	put			

	V C-r C/#	V C-r V	V <r> C/#	V <r> V
<a>	mat	mate	mar	mare
<e>	pet	Pete	her	here
<i>	sit	site	fir	fire
<o>	not	note	or	ore
<u>	cut	cute	purr	pure
<u2>	put			

yummy  
thug  
swing  
fought  
shine  
jar  
look  
passes

### 3 Lesson n°2

#### 3.1 La règle orthographique

Outre la détermination du schéma accentuel des mots, un autre enjeu est la détermination de la **qualité des voyelles**.

Nous appellerons “règle orthographique” le tableau de correspondance entre orthographe et prononciation ci-dessous. Nous dirons que les voyelles orthographiques apparaissant dans les contextes décrits dans ce tableau, et se prononçant comme indiqué dans ce tableau, suivent la règle orthographique.

Ce tableau est **fondamental**.

Quelle(s) voyelle(s) ce tableau ne présente-t-il pas ?

/NA/	/mæt/	/mɛɪt/	/mɑː/	/meə/
/NA/	/pet/	/pi:t/	/hɜː/	/hɪə/
/NA/	/sɪt/	/sɑɪt/	/fɜː/	/'faɪ.ə/
/NA/	/nɒt/	/nəʊt/	/ɔː/	/ɔː/
/NA/	/kʌt/	/kju:t/	/pɜː/	/pɜə/
/NA/	/put/			

<a>	/mæt/	/mert/	/mɑːr/	/mer/
<e>	/pet/	/pi:t/	/hər/	/hɪr/
<i>	/sɪt/	/sart/	/fɜː/	/'faɪ.ər/
<o>	/nɑ:t/	/nout/	/ɔːr/	/ɔːr/
<u>	/kʌt/	/kju:t/	/pɜː/	/pjər/
<u2>	/pʊt/			

- /ɔɪ/
- /aʊ/
- /uː/
- /ə/

### 3.1.1 Exercice

Words
breakfast
cereal
chocolate
keyboard
shampoo
bath
delicious
horrible
magazine
university

### 3.1.2 Écriture des symboles

- Les lettres doivent être formées à la façon des caractères d'imprimerie, pas des caractères manuscrits.
- Attention aux symboles suivants : /ə ɔ ɪ ʊ ɜ æ ɒ ɪ ʒ θ ð ʒ/
- Distinguez :

- /ɪ i/
- /ə a/
- /æ ɑ a/
- /z ʒ/
- /ʒ ʒ/
- /θ ə ɔ/
- /ʊ u/
- /s ʃ/
- /ɒ ɔ a/

- /f/ n'a pas de hampe descendante.
- /v/ s'écrit comme un /b/ sans hampe montante.
- **Il n'y a ni majuscules ni ponctuation dans les transcriptions.**
- Les lettres < c o q x y > sont elles aussi inutilisées.



Échéances	Description
04/10/2021	Transcrivez les mots suivants. Quels sont ceux dont les voyelles ne respectent pas la règle orthographique ?

## 4 Lesson n°3

### 4.1 Homework: correction

Parmi les mots suivants, quels sont ceux dont les voyelles ne respectent pas la règle orthographique ?

#### Words

chair  
knife  
account  
cushion  
curtain

strong  
locked  
written  
camera  
radio

#### Words

very  
thesis  
strong  
manage  
over

these  
jumped  
felt  
come  
back

#### Words

rare  
judge  
write  
bath  
evolution

dark  
quack  
gone  
short

jerk

---

## 4.2 Recap from last week

The tables defining the basic spelling rules **must be known by heart**.

## 4.3 Practice

---

### Words

shackle  
fern  
mustard  
purpose  
shove

shelf  
thank  
knight  
sword  
answer

---

## 4.4 Homework

---

### Words

age  
jinx  
shake  
chair  
once

music  
ink  
lamb  
choke

---

---

### Words

straight  
sustain  
work  
remind  
damp

though  
note  
scythe  
lucky

wall

---

---

**Words**

these  
figure  
break  
vaccine  
low

throw  
land  
foam  
spoon  
healthy

---

## 5 Lesson n°4

### 5.1 Homework

---

**Words**

age  
jinx  
shake  
chair  
once

music  
ink  
lamb  
choke

---

---

**Words**

straight  
sustain  
work  
remind  
damp

though  
note  
scythe  
lucky  
wall

---

### Words

these  
figure  
break  
vaccine  
low  
throw  
land  
foam  
spoon  
healthy

## 5.2 /æ/ in American

We follow Labov (2010).

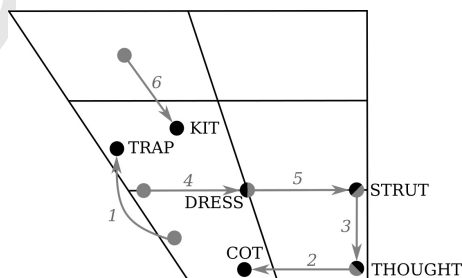
Images are from [wikipedia](https://en.wikipedia.org/wiki/Northern_Cities_Shift)

### 5.2.1 An example of sound changes: the NCS

The Northern Cities Shift is a rotation of short vowels taking place in the Inland North, a territory comprising 34 million speakers.



Map of the Inland North



The Northern Cities Shift

Assumed order of the rotation:

1. General raising and fronting of /æ/ (“bat”)
2. Fronting of /ɒ/ (“got”)
3. Lowering of /ɔ:/ (“bought”)
4. Backward shift of /e/ (“bet”) towards /ɪ/

5. Backing and rounding of /ʌ/

6. Backing of /ɪ/ (“bit”)

This rotation of short vowels is a remarkable development, given the relative stability of the English short vowel system from old English up to the twentieth century (p.112).

No other dialect shows such a generalized tensing and raising (p.113).

### 5.2.2 Let’s focus on /æ/

While *a* is raised and fronted in particular context by almost all speakers of North American English, a historical process in this particular area has eliminated all **contextual conditions** (p.114).

All other dialects with short-*a* raising will differentiate prenasal vowels from others (p.113).

4 types of short-*a* systems originating from upstate New-York:

1. *The nasal system*: allophonic tensing of /æ/ before nasal consonants, and nowhere else (New England)
2. *The nasal system with the broad-a pattern*: “aunt”, “can’t”, “half”, “past” (newer settlers)
3. *The split short-a system*: tensing in syllables closed by voiced stops, voiceless fricatives and front nasals — along with many grammatical and lexical specifications (cf. “mad”, “bad”, “glad” vs. “sad” and “dad” in Philadelphia).
4. *The Celtic substrate*: speakers of Hiberno-English, where short *a* is low front or low entral.

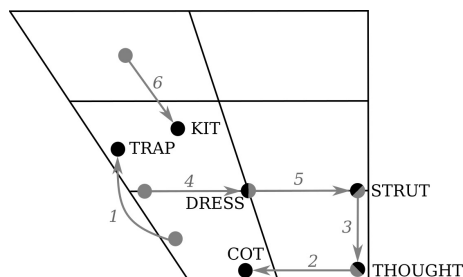
This of course leads to misunderstandings. . .

### 5.2.3 NCS-induced misunderstandings

The following examples show what non-NCS speakers understood.

- Correct the examples to what was actually meant.
- Say which step of the NCS these misunderstandings were caused by (1/2/3/4/5/6).

This area is full of bets.  
Do you have any pots in the house?  
We trucked across Wisconsin.  
Senior citizens living on the black.  
The Express Way is jammed salad.



### 5.2.4 Other misunderstandings

Can you formulate *why* the following misunderstandings happened, using phonetic concepts?

Meant	Understood
accountable to the data	a cannibal to the data
she makes us slave	she makes us leave
can I pour us both juice	can I pour a spoke juice

### 5.3 Les catégories de voyelles

Essayez d'établir une typologie des 20 voyelles de la *RP*.

- checked steady-state vowels: /ɪ e æ ʊ ʌ/ & /ə/ (!!)
- Free steady-state: /iː aː ɔː uː ɜː/
- Diphthongs:
  - centring: /ɪə ʊə/
  - closing:
    - \* Fronting: /eɪ aɪ ɔɪ/
    - \* Backing: /əʊ aʊ/

Il manque une voyelle... Laquelle ?

/ɛː/, ou /æɛ/

### 5.4 Interlude

#### Words

sorry  
one  
science  
national  
structure  
building  
prosecution  
familiar  
jumper  
achievement

#### Words

hurdle  
democrat  
country  
value  
normal  
wages  
capture  
changing  
narrow  
government

---

## 6 Lesson n°5

### 6.1 Correction

---

#### Words

sorry  
one  
science  
national  
structure  
building  
prosecution  
familiar  
jumper  
achievement

---

---

#### Words

hurdle  
democrat  
country  
value  
normal  
wages  
capture  
changing  
narrow  
government

---

### 6.2 Warm up

---

#### Words

example  
frequency  
closure  
articulation  
appropriate  
regional  
accent  
century  
provide  
artificial

---

---

Words
threaten
approval
company
footage
journey
union
popular
growth
country
promise

---

### 6.3 Introduction to assimilation

Assimilation is a type of coarticulation . It is the alteration of a speech sound to make it more similar to its neighbours. In English, assimilation mostly affects Place of Articulation.

It is a result of **phonetic conditioning**. Phonetic conditioning is a term used to cover the way in which speech segments are influenced by adjacent segments, causing phonemes to vary in their realisation according to phonetic context. Assimilation is one of three main types of conditioning, along with allophonic variation and elision.

#### 6.3.1 Historical assimilation

---

Words
import
nature
soldier
delicious
patient
nation
pressure
measure

---

These words feature instances where /j/ was **coalesced** to /ʃ/ a few centuries ago. In terms of place of articulation, /ʃ/ as a post-alveolar fricative is half-way between alveolar fricative /s/ and palatal approximant /j/. Both segments saw their place of articulation shift under their reciprocal influence.

In historical assimilation, the **citation form** features the assimilated sounds (*e.g.* /sj/ → /ʃ/). This is **not** the case in connected speech:

#### 6.3.2 In connected speech

##### 6.3.2.1 Citation forms

---

IPA
/hed 'kwɔ:t.əz/

---



/mem kɔ:s/  
 /mætʃt peəz/  
 /pə.'hæps/  
 /'brɔ:d.kɑ:st/  
 /wɔ:t 'pep.ə/  
 /ɒn ði: haʊs/  
 /reɪz jɔ: gla:s/

**6.3.2.2 Assimilation in connected speech** In connected speech, syllable-final alveolars tend to assimilate and adopt the place of articulation of the succeeding phoneme:

- “head quarters” → /heg 'kwɔ:təz/
- “main course” → /meɪn 'kɔ:s/
- “broadcast” → /brɔ:ɡkɑ:st/

## 6.4 Examens de mi-semestre

### 6.4.1 Programme

- Tous les symboles de l’Alphabet Phonétique International utilisés pour la transcription de l’anglais, y compris les symboles d’accentuations primaire et secondaire
- Principes fondamentaux de l’accentuation (nécessité d’un accent primaire, pas de /00-/ en début de mot, pas de syllabes accentuées consécutives)
- Principes fondamentaux de l’assimilation par voisement ou lieu d’articulation.
- **RECOMMANDÉ** : connaître les principaux lieux d’articulation des consonnes (*bilabial, alveolar, post-alveolar, palatal, velar, glottal*).

### 6.4.2 Modalités

- Mots à transcrire en alphabet phonétique après avoir été prononcés par le professeur.
- Mots en alphabet phonétique à déchiffrer et écrire en anglais.

## 7 Lesson n°6

### Words

ten men  
 incredible  
 red paint  
 bad guys  
 eight boys

### Words

this shape  
 these shoes  
 this unit  
 unless you  
 as you see

let you out  
would you try  
get your bags

---

## 8 Lesson n°7

### 8.1 Correction de l'examen de mi-semestre

### 8.2 Back to assimilation

#### 8.2.1 Directions of assimilation

Consider:

- “ten men”
- “happens”
- “raise your glass”

Can you categorize those assimilations?

- Regressive/lagging assimilation
- Progressive/leading assimilation
- Reciprocal assimilation

### 8.3 Types d'influence

Trouvez les endroits où peuvent se produire des assimilations, et tentez de les classer :

wet blanket
statement
night cap
weed killer
horseshoe
newspaper
have to
join the army
fail the test

#### 8.3.1 The three types

1. place assimilations
2. energy assimilations
3. manner assimilations

#### 8.3.2 Place assimilations

Cf. most previous examples.

By far the most common type of assimilation in English.

#### 8.3.3 Manner assimilations

In English, it is usually a form containing a fricative which is replaced by a nasal or a lateral.

Another example: “*till they meet again*”.

### 8.3.4 Energy assimilations

These involve a reduction of the fortis/lenis contrast (voiced/voiceless).

In English, EA:

- only goes from lenis to fortis, never the other way round (“*back door*” or “*not bad*”)
- is rare in stressed syllables, *cf*:
  - “*have to*”, “*used to*”, where EA has now become compulsory.

## 8.4 Homework

Identify the connected speech assimilations likely to occur in the following sequences:

it was spectacular
of course
if she chooses to wait
the waiter’s forgotten us
Helen could have talked to him
as she sometimes did

## 9 Lesson n°8

### 9.1 Energy assimilations

... In English, EA:

- is frequent in unstressed contexts: “*it was spectacular*”, “*of course*”, “*if she chooses to wait*”, “*the waiter’s forgotten us*”...

#### 9.1.1 Correction of the homework

Word	Stress	Received Pronunciation
it was spectacular	//	/ɪt wɒz spek.ˈtæk.jəl.ə/
of course	//	/ɒv kɔːs/
if she chooses to wait	//	/ɪf ʃiː ˈtʃuːz.ɪz tuː weɪt/
the waiter’s forgotten us	//	/ðiː NA fə.ˈɡɒt.ən ʌs/
Helen could have talked to him	//	/ˈhel.ən kʊd hæv NA tuː hɪm/
as she sometimes did	//	/æz ʃiː ˈsʌm.taɪmz dɪd/

- only goes from lenis to fortis, never the other way round (“*back door*” or “*not bad*”)
- is rare in stressed syllables, *cf*:
  - “*have to*”, “*used to*”, where EA has now become compulsory.
- word-internal EAs with free variations: “*absurd*”, “*obsession*”, “*absorb*”...

Word	Stress	Received Pronunciation
absorb	/01/	/əb.ˈsɔːb/

obsession	/010/	/əb.'seʃ.ən/
absurd	/01/	/əb.'sɜ:d/

Energy assimilation is also the process which explains the pronunciation of certain infamous morphosyntactic suffixes...

### 9.1.1.1 Morphosyntactic suffixes

#### 9.1.1.1.1 <-(e)d> Explain the pronunciations of:

- “tagged”, “tacked”, “buzzed”, “cursed”, “played”, “chafed”, “loved”.

Word	Stress	Received Pronunciation
tagged	/1/	/tægd/
tacked	/1/	/tækt/
buzzed	/1/	/bʌzd/
cursed	/1/	/kɜ:st/
played	/2/	/ˌpleɪd/
chafed	/1/	/tʃeɪft/
loved	/1/	/lʌvd/

Can the suffix be pronounced differently? How and where?

#### 9.1.1.1.2 <-(e)s> Explain the pronunciations of:

- “shoves”, “freckles”, “books”, “shrimps”, “bags”, “stubs”, “whiffs”

Word	Stress	Received Pronunciation
shoves	/1/	/ʃʌvz/
freckles	/10/	/ˈfrek.əlz/
books	/1/	/bʊks/
shrimps	/1/	/ʃrɪmps/
bags	/1/	/bægz/
stubs	/1/	/stʌbz/
whiffs	/1/	/wɪfs/

Can the suffix be pronounced differently? How and where?

### 9.1.2 Elision

Sometimes in connected speech, phonemes are elided, *i.e.* deleted, to make articulation easier.

Examples: “tasteless”, “mind-bogling”

Historically, elision is a very common phenomenon:

- “cupboard”, “talk”, “comb”, “gnome”, “whistle”...

Word	Stress	Received Pronunciation
cupboard	/10/	/ˈkʌb.əd/
talk	/1/	/tɔ:k/
comb	/1/	/kəʊm/

gnome	/1/	/nəʊm/
whistle	/10/	/'wɪs.əl/

### 9.1.3 Liaison

The converse of elision is liaison.

Regardless of the rhoticity of a given accent of English, a **linking /r/** is often added as a link across word boundaries (also called *sandhi r*).

- “sooner” vs. “sooner or later”
- “sure” vs. “sure enough”
- “the sofa in the catalogue”
- “my idea of heaven”
- “we saw a film”
- “via Australia”

Word	Stress	Received Pronunciation
sure enough	//	/ʃʊ: ɪ. 'nʌf/
the sofa in the catalogue	//	/ði: 'səʊf.ə ɪn ði: 'kæt.ə.lɒg/
my idea of heaven	//	/maɪ aɪ. 'dɪə ɒv 'hev.ən/
we saw a film	//	/wi: sɔ: eɪ fɪlm/
via Australia	//	/'vaɪ.ə ɒ. 'streɪl.i.ə/

(All this chapter was inspired by Collins and Mees (2013))

## 9.2 Homework

Transcribe the following words.

Can you infer a rule regarding the suffixes and the stress patterns?

### Words

discussion  
publicity  
republic  
magnify  
nourish

division  
capacity  
terrific  
crucify  
abolish

### Words

onion  
clarity  
cubic

specify  
extinguish

Spaniard  
opportunity  
microscopic  
personify  
speciality

---

### 9.3 References

Collins, B. and I. Mees (2013). *Practical Phonetics and Phonology: A Resource Book for Students*. Routledge English language introductions. Routledge. ISBN: 9780415506496. URL: <https://books.google.de/books?id=faVJTQIw9eQC>.

## 10 Références

### References

Collins, B. and Mees, I. (2013). *Practical Phonetics and Phonology: A Resource Book for Students*. Routledge English language introductions. Routledge.

Jones, D., Roach, P., Setter, J., and Esling, J. (2011). *Cambridge English Pronouncing Dictionary*. Cambridge University Press.

Labov, W. (2010). *Principles of linguistic change: cognitive and cultural factors*, volume 3. Wiley-Blackwell, Oxford.

Wells, J. (2008). *Longman Pronunciation Dictionary*. Pearson Longman, London.