Pilot study: Zero liaison through PFC corpus

by Veronica Alejandro

problem description

- zero liaison
  - absence of a liaison in nasal vowel liaisons
  - proposed by Sampson, Rodney.
- third pattern rather than the two patterns we typically think of in liaison
- used the PFC corpus to see if this third pattern arises

a. –Ṽ (ZERO-liaison)	:	productive, default	(*mignon*)
b. –ṼN	:	non-productive, minor rule	(*mon*)
c. –VN	:	non-productive, suppletive	(*bon*)

previous work

- oral critical review + class reading:

   Rodney, Sampson. Liaison, nasal vowels, and productivity.
- **claim**: Zero-liaison is "established, or on the way to becoming established, as the default arrangement" for liaison
  - inspiration for pilot study
- no corpus used; participant study but cited in PFC studies
- used list of tested words in my study

   fin, souverain, lointain, mignon, malin, and *hautain*
- previous work on PFC corpus:

   Durand, Jacques. French liaison in the light of corpus data.
- Durand has more publications working with PFC corpus
- mentions that prenominal adjectives appear 'in large numbers in the base, but only rarely in liaison'
  - I encountered this as well, making it difficult to observe zero liaison if there weren't many in the first place
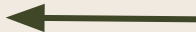
data: what is the PFC corpus?

- Phonologie du français contemporain (PFC) corpus
    - Phonology of contemporary French
- more than 50 surveys (francophone countries) documenting more than 400 native speakers
- different portal for schwas and liaisons; categorized by country, region, speech type, etc.
- also includes transcriptions

PFC liaison coding system
- Field 1:
  o 1 = one syllable
  o 2 = two syllables or more
- Field 2: is drawn from the set {0, 1, 2, 3, 4} where:
  o 0 = absence of liaison
  o 1 = liaison enchaînée (forward linked liaison)
  o 2 = liaison non enchaînée (liaison consonant present but not forward linked)
  o 3 = uncertainty
  o 4 = 'epenthetic' liaison
- Field 3: indicates the phonetic nature of the consonant when the liaison is realized (z, t, p, n, etc.)
- Field 4: indicates either that a forward linked liaison is preceded by a slight pause, a hesitation (h), or that the liaison is present before a consonant initial word (C).
- Field 5: is used only for liaison after underlying nasal vowels to indicate whether the liaison in [n] is preceded by an oral vowel (VO) or by a nasal vowel (VN).

the coding system for the corpus

Recherche dans la base PFC - Liaisons
PFC database liaison search

[Enquêtes] [Transcriptions] [Liaisons] [Schwas] [Base HPOL] [Logout]

◀ Site PFC » PFC Site ◀ Début » First ❓ Aide » Help

| Votre recherche ici Your search here | 🔍 Recherche   Search |

Recherche dans la transcription :

(⦿ Tous les mots/All of these words | ◯ Un de ces mots/Any of these words | ◯ Cette phrase/This phrase)

Recherche dans tous les champs (transcription, enquêtes, régions, etc.)

Tous les mots/All of these words :

Un de ces mots/Any of these words :

(or at least [   ] of the words)

Cette phrase/This phrase :

☐ Match whole field only

Aucun de ces mots/None of these words :

(must have at least one of the above)

⦿ Allow stemming (bridge matches bridging, bridges etc too)
◯ Exact word matching

A gauche de la liaison :

(⦿ All / ◯ Any / ◯ Phrase / ◯ Whole Field / ◯ Field ending with)

Mot de la liaison :

(⦿ All / ◯ Any / ◯ Phrase / ◯ Whole Field) ◯ Field ending with)

A droite de la liaison :

(⦿ All / ◯ Any / ◯ Phrase / ◯ Whole Field / ◯ Field ending with)

Type de discours : ☐ Liste de mots ☐ Texte lu ☐ Conversation guidée ☐ Conversation libre

Syllabes du mot liaisonant/Liaison word syllables: ☐ 1 syll. ☐ 2 syll.s ☐ 3+

Présence/absence de liaison: ☐ Liaison présente ☐ Liaison absente ☐ Liaison incertaine

Consonne de liaison/Liaison consonnant: ☐ Z ☐ T ☐ N ☐ R ☐ P ☐ K ☐ Hésitation

Voyelle nasale/orale: ☐ Voyelle nasale ☐ Voyelle orale

Partie du discours/Part of Speech: ☐ ADJ ☐ ADV ☐ DET:ART ☐ DET:POS ☐ KON ☐ NAM ☐ NOM ☐ NUM ☐ PRO:DEM ☐ PRO:IND ☐ PRO:PER ☐ PRP ☐ PRP:det ☐ VER:cond ☐ VER:impf ☐ VER:infi ☐ VER:pper ☐ VER:ppre ☐ VER:pres

Zones: ☐ France ☐ Afrique Subsaharienne ☐ Canada ☐ Belgique ☐ Suisse

Regions: ☐ Afrique subsaharienne ☐ Alberta ☐ Aquitaine ☐ Bourgogne ☐ Bretagne ☐ Canton de Vaud ☐ Centre ☐ Genève ☐ Ile de France ☐ Languedoc-Roussillon ☐ Lorraine ☐ Maghreb ☐ Maurice - Ile de la Réunion ☐ Midi-Pyrénées ☐ Neuchâtel ☐ Normandie ☐ Provence Cote d'Azur ☐ Pyrénées Atlantiques ☐ Québec ☐ Rhône Alpes ☐ Wallonie

Enquêtes: ☐ Abidjan ☐ Aix-Marseille ☐ Aveyronnais à Paris ☐ Bamako ☐ Bar-sur-Aube ☐ Biarritz ☐ Bordeaux ☐ Brécey ☐ Brunoy ☐ Burkina Faso ☐ Cameroun ☐ Chlef ☐ Dijon ☐ Domfrontais ☐ Douzens ☐ Gembloux ☐ Genève ☐ Grenoble ☐ Guadeloupe ☐ Ile de la Réunion ☐ Lacaune ☐ Liège ☐ Louisiane ☐ Lyon ☐ Marseille Centre Ville ☐ Martigny ☐ Martinique ☐ Nantes ☐ Neuchâtel ☐ Nouvelle Calédonie ☐ Nyon ☐ Ogéviller ☐ Oraison-Manosque ☐ Paris Centre ville ☐ Peace River ☐ Puteaux-Courbevoie ☐ RCA Bangui ☐ Roanne ☐ Rodez ☐ Rouen ☐ Saguenay ☐ Salles-Curan ☐ Sénégal Dakar ☐ Toulouse ☐ Tournai ☐ Trois-Rivières ☐ Université Laval (Québec) ☐ Vallée de l'Arve ☐ Vendée

Locuteur Sexe: ☐ M ☐ F

analysis: successes + failures

- two methods
    1. searching liaison words from Sampson's study; only successful with *fin*
    2. searching by 'nasal vowel' tag and finding less common words (so no *un*, *mon*, *bon*) then searching for all liaisons (absent *and* present) with that word
- searched all regions; all speech/discourse types (free, guided, text)
- additional constraint for (2)
    more than one syllable; eliminate more common words known to be realized in liaison (talked about in Sampson)
- total words found with method (2):
    bien, certain, and *aucun*
    all mentioned in Sampson's study

method one:
liaison words from Sampson study

- *fin, souverain, lointain, mignon, malin, and hautain*
- Only got results for *fin* ; all were liaison absente

[ ] indicates absent liaison

La recherche pour *@cg_imm fin* a trouvé 5 réponses

Exporter toutes les réponses au format ⬇ CSV

Info	👤 Locuteur	🌐 Enquête	← Contexte Gauche	🏹 Liaison Écoute	Contexte droit →	L1	L2	L3	L4	L5
10517	11amg1	Douzens	MG: A la fin	fin [ ] ouais 🔊	ouais E: quand il vous parlait à la fin10h Il a il a un fort accent du du centre aussi du Yorkshire là-haut	1	0			
17578	13aog1	Marseille Centre Ville	G1: en plus il y a les quatrième année là qui auront20 eu les11x exa/ leurs11z exams euh fin	fin [ ] euh 🔊	euh	1	0			
33266	61acm1	Domfrontais	CM: j'étais muet parce que j'arrivais pas10 à m'exprimer à part10 à la fin	fin [ ] où 🔊	où je retrouve ma voix	1	0			
33968	13aog1	Marseille Centre Ville	G1: à la fin comme on avait quand même faim pendant20 une heure et demi tu sais10 on a demandé un peu de pain10 à la fin	fin [ ] il 🔊	il fait10h 'ah on n'a plus de pain'	1	0			
47519	cqacp1	Université Laval (Québec)	P: Puis10 à la fin	fin [h] au 🔊	au moment de \e'dition la personne tu sais des gens	1	0	h		

[h] indicates hesitation

method two:
'nasal vowel' tag

bien	*certain*	*aucun*
○ 244 responses total ○ 138 absent liaisons ○ ~ 57% of responses were zero liaison ○ overwhelmingly zero liaison	○ 7 responses total ○ 0 absent liaisons ○ as expected per Sampson's study some (outside l'Hexagone) were realized as oral vowels	○ 6 responses total ○ 1 absent liaisons ○ ~ 17% of responses were zero liaison ○ as expected

implications + going back to Sampson

- Sampson outlined two lists of words in already-established patterns:
  - **nasal vowel + linking consonant**
    - 1(a) un, aucun, non, en, on, rien, bien, mon, ton, son, commun
  - **oral vowel + linking consonant**
    - 1(b) bon, -ien / -yen (e.g. ancien, moyen), -ain (e.g. vain), -ein (e.g. plein)
- *bien* and *aucun* in 1(a), *certain* in 1(b)
- with *bien*, we see a pattern of zero-liaison instead of a nasal vowel + linking consonant
  - most of responses were free conversation, an informal environment; most liaisons are realized at a formal register
  - *bien* is a filler word (thus not used as a prenominal adjective)
- thus, results for *bien* could be skewed by these confounding factors or it could be a zero liaison
  - but Sampson notes little change in liaison realization for these categories of words

setbacks

- PFC corpus
  - coding system needs improvement
    - **ex.** when working with 'liaison absente' tag, little information about the liaison word; makes it very tedious
  - audio recordings often do not work
  - difficult to obtain an account/login system does not work
  - missing information or sometimes wrong ?
- perhaps a more controlled study is better
  - with corpus: little control for environment, education, etc. so difficult to see a pattern of zero-liaison that is not due to an informal register, other confounding factors; not enough data to study this phenomenon
  - participant study: create a formal environment to ensure zero-liaison arises

moving forward

- to improve my study:
    - go back to *bien* and consider only *bien* as a prenominal adjective (difficult since audio is often missing, thus difficult to determine context)
- do we see the same pattern with zero liaison being the default in L2 speakers as we do with L1?
    - potentially easier to do a participant study due to availability of L2 French speakers on campus
    - see what L2 speaker's sense of liaison is
- other projects concerning liaison and corpus studies
    - or see what patterns arise without necessarily looking for them
- hard to find a balance when studying zero-liaison
    - formal vs. informal setting, corpus or participant study, etc.
- more to explore in terms of realizing the nasal vowel liaison: oral vs. nasal
    - noticed a mix of oral and nasal vowels when realizing some of the liaisons, could be due to diff. factors ?