Formal Approaches to Social Meaning, Variation and Identity Construction

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Limits of Variability in Language Summer School (Day 3)

Today's class

Goal 1

Social meaning-based theories of social stratification.

- ► How can patterns of social stratification be analyzed as rational language use?

Goal 2

Applying SMG models to novel empirical studies.

- ► Navigating uncertainty. . .

Du tout vs pantoute in Montréal French

(1)   a.   Je sais pas son nom, mais je sais que je l'aime pas du tout.
      'I don't know his name, but I know that I don't like him at all.'

   b.   Cette loi là, je l'ai pas aimé pantoute.
      'That law, I didn't like it at all.'   (#34, F, 37)

- ▶ *Pantoute* most likely comes from the fusion of *pas* 'not' with *en tout* < *n'itout* (normand 'neither').
- ▶ *Du tout/pantoute* appear to have the same syntactic distribution, only social conditioning (Burnett and Tremblay, 2012).

The Montréal 84 corpus (Thibault and Vincent, 1990)

A socially stratified corpus of sociolinguistic interviews with 72 speakers in Montréal in 1984.

- ▶ Interviews last around 80 minutes on average.
- ▶ 60 speakers were also interviewed in 1971.
- ▶ Focus on 56 speakers of the 60 re-interviewed speakers.

Stratification of du tout/pantoute

Education level	du tout	pantoute	Total	% pantoute
High (university)	43	9	54	16.7
Medium	79	44	123	35.8
Low	45	64	109	58.7
Total	267	117	384	30.5

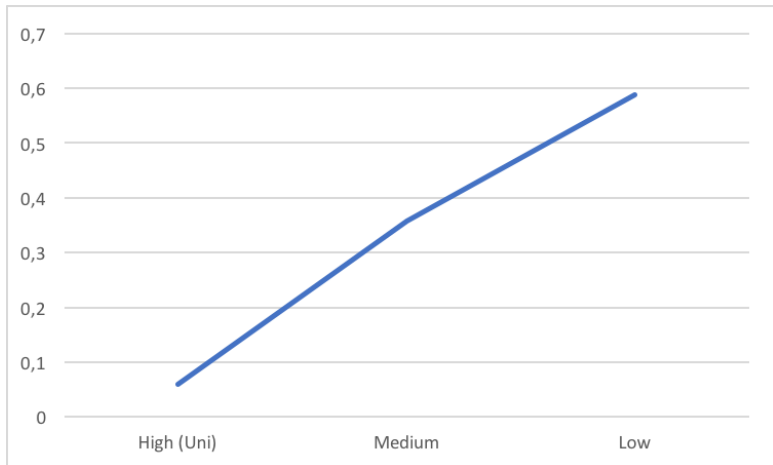Table: Du tout vs pantoute in 56 speakers of Montréal 84

Figure: Prop. *pantoute* by education level in 56 speakers

Two current lines of analysis in variationist sociolinguistics

1. Structure-based analyses (First wave).
2. Meaning-based analyses (Third wave (Eckert, 2012)).

These approaches are often presented as in conflict (but are they, really?...)

Structure based analyses: Theory

- Sociolinguistic variants do not have anything approximating 'meanings'.
- Stratificational differences are created by aspects of speakers' place in the social hierarchy of their speech community (gender, age, social class, ethnicity etc.) and their reasoning about these structures. (See Sali's class)

Structure based analyses: Practice

- A speaker's place in the hierarchy is assessable by objective measures external to the speakers' ideologies.
  - These measures can be more or less sophisticated (ex. Sankoff and Laberge (1978)'s analysis of class effects inspired by Bourdieu and Boltanski (1975)'s *marché linguistique*).
- Fruitfully applied to large-scale studies of stratification (ex. a whole city) (Labov, 1966; Wolfram, 1969; Sankoff and Cedergren, 1972; Trudgill, 1974, and much current work).
  - Short sociolinguistic interviews are sufficient for determining a speaker's place in the external social structure.

Why we like structure-based analyses?

- ▶ Close links with sociology.
- ▶ Large number of diverse speakers gives a clear picture of population level variation and change.

Still a little mysterious. . .

Theory: Some cognitive representations must mediate between external social structures and language production, but structure-based approaches generally say little about how this works.

Meaning based analyses: Theory

- ▶ Sociolinguistic variants have 'social meanings', which consist of sets of properties, stances etc. called *indexical fields* (Eckert, 2008).
- ▶ Stratificational differences are created by aspects of these social meanings and speakers' reasoning about them.
  - ▶ Indexical fields are drawn on speaker ideologies (Ochs, 1992; Irvine and Gal, 2009; Silverstein, 2003): subjective ways in which speakers delineate their world.

Meaning based analyses: Practice

Fruitfully applied to small-scale studies of stratification (ex. a school (Eckert, 2000; Bucholtz, 1999; Moore, 2004), a fraternity (Kiesling, 1998), a gang (Mendoza-Denton, 1998), a company (Zhang, 2005)...).

- ▶ Longer periods of (ethnographic) fieldwork are usually required for determining how a speaker views the world and what they are trying to do in it.

Why we like meaning-based analyses?

- ► Close connections with anthropology and ethnography.
- ► Yields a detailed picture of speaker-internal representations and how they relate to identity construction through language.

Still a little mysterious. . .

1. **Theory:** How/whether these fine-grained meaning-based analyses directly 'scale up' to the macro level (Schilling-Estes, 2002; Kendall, 2011, among others).
   - ► It remains an open question whether "the interpretations gleaned through close-up analysis of individual initiative shifts can be generalized in any way to the larger community" (Schilling-Estes, 2002, 382).

2. **Practice:** How to determine (precisely) the content of the indexical fields.

Hypothesis

Structure and meaning analyses are complementary

- **Theory:** Meaning-based approaches give the theory of mental representations missing from structure-based approaches.
- **Theory:** Pertinent aspects of individuals' internal mental representations can be elicited from even very short interviews, provided the right kinds of questions are asked (following Bourdieu and Passeron, 1970; Bourdieu, 1979).
- **Practice:** Game-theoretic models can help us choose between competing analyses of indexical fields.

Plan

Persona construction in interview questions

Bourdieu and Passeron (1970)'s *gérophagie* experiment

Vocabulary questionnaire with students at the Sorbonne (Paris), from different social backgrounds.

Define *gérophagie*.

This word does not exist, but it looks like it ought to.

Bourdieu and Passeron (1970)'s *gérophagie* experiment

Effects of social class on speaker performances

Bourdieu & Passeron observe two styles of answer, correlating with social class.

(2)   Dimensions of privilege
      a.   Upper, middle, working
      b.   Paris, Province

Performance of **honesty, frankness**

(3) 'I don't know'
  a. J'ignore la définition (M, Province, working)
  b. Ne m'évoque rien (F, Province, middle)
  c. *Géro* (peut-être vieux?); *phagie*: acte de manger; donc qui mange les vieux? (sous réserve) (M, Province, middle)

"*Géro (maybe old?); phagie: action of eating; so those who eat old people? (not sure)*"

Performance of erudition/sophistication

(4) a. L'étymologie est celle-ci [...] Donc, la gérophagie est la coutume de manger les vieillards chez certaines peuplades non prométhéenes   (F, Paris, upper)

b. Si *gero* vient de *geras*, le viellard, gérophagie désigne une forme d'anthropophagie orientée par prédilection sur les éléments âgés d'une population X   (F, Paris, upper)

c. Contruit avec l'aoriste de –, se nourrir: le fait de manger des vieillards, moeurs que l'on rencontre dans certaines tribus primitives   (F, Paris, middle)

"Formed with the aorist of 'to feed': the property of eating old people, customs that we find with certain primitive tribes."

(Bourdieu and Passeron, 1970, 148):

> *les étudiants qui ont le passé scolaire le plus "brillant"*
> *[. . .] hésitent moins souvent que les autres à définir le*
> *terme piège et [. . .] c'est la catégorie privilégiée [. . .]*
> *qui produit le plus de définitions imperturbablement*
> *prolixes. . .*

'The students with the most "brilliant" scholastic careers are less hesitant to define the trick term and it's the priviledged category that produces the most imperturbably prolix definitions.'

Gérophagie-type questions allow us to observe a link between aspects of the external social structure (parents' background, place) and how speakers want to be perceived by their listener (honest, sophisticated).

Bien parler in the Montréal 84 corpus

Study of answers to the question (5) in 56 speakers in the Montréal 84 corpus of spoken Montréal French (Thibault and Vincent, 1990).

(5)   Qu'est-ce que c'est bien parler? Mal parler?
        'What is speaking well? Speaking badly?'

- ▶ Subset of reinterviews that answered (5).
- ▶ Answers expressing stances related to six properties.

(6)   Status, solidarity, wholesomeness, depth, eurocentrism, localness.

Expression of status: articulate and educated

(7) a. Mal parler ça serait: déformer les: déformer les sons. Le "oué" puis le "moé" puis le: "on:" puis le: du: le "garage" puis le: tu-sais puis tout ça: Tout: tout déformer ni-plus-ni-moins. Ou encore: mal: mal conjuguer ou mettre tout plein d'anglicismes dans: dans les phrases.

(#112, F, white collar)

stigmatized prononciations/conjugations, anglicisms

b. Bien c'est beau. Quelqu-un qui parle bien. <oui> On voit quelqu-un qui a de l'instruction: on le voit tout-de-suite. <oui> Par son expression. Par les mots qu'ils vont dire. (#44, F, white col.)

education-orientation

Expression of solidarity: understandable and unpretentious

(8) a. Bien parler pour moi c'est que quelqu-un d'autre me comprenne. Si la personne m'a compris, j'ai bien parlé.

(#6, M, techn.)

b. c'est parler une langue, surtout le français, puis d'être: compris par l'autre. <hum> Point. Pour moi c'est ça. <Puis:> Que ça soit mal là , qu'il-y-ait' des "criss" ou "tabarnak" là -dedans ça pour moi c'est pas grave. Du moment que le: l'interlocuteur puis l'autre se comprennent, pour moi ça: c'est complet.

(#83, M, blue col.)

Being understood is most important.

Expression of both status and solidarity

(9) Bien parler pour moi c'est de pouvoir: employer des: des termes relativement justes puis de pouvoir exprimer sa pensée: [. . .] puis: que les gens puissent te com: le comprendre mais: avec un vocabulaire aussi qui: qui soit acceptable. Je dis pas de choisir des grands mots puis tout ça mais que: qu'au moins: ça puisse se tenir un peu.

(#25, M, prof/managerial)

Being understood is important, but don't make too many mistakes.

Wholesomeness

*Ah bien quand tu sacres c'est: quand tu cries
'bord-en-bord de la rue "Mon enfant de chienne.": je
pense que: c'est pas un compliment pour la mère.
<humhum> Puis: tu-sais-je-veux-dire: il-y-en-a bien
d'autres (rire) tu-sais. S: je peux pas tout' dire ça.
C'est enregistré hein? (rire) <(rire)> Mais: tu-sais: je
le sais pas: "Mon bâtard.": puis et-caetera tu-sais
<humhum> avec des sacres au bout de t ça,
je-veux-dire c'est quand même pas du respect ça
pour: l'être humain là.* (#7, F, white col.)

Don't swear or be disrespectful.

Depth

Disons que bien parler c'est: c'est d'arriver à : à exprimer ce qu'on pense de façon nuancé. Ah: [. . .] C-est-à-dire avoir le vocabulaire pour exprimer la: la: la pensée qu'on a. Mais ça encore c'est: c'est relatif. C'est: c'est relié aussi à chaque groupe d'âge. Regarde les adolescents puis c'est "mouan" mais c'est parce-qu'il-y-a au: ils ont aussi la pensée qui est pas très (rire) nuancé des fois à cet âge là.

<div align="right">

(#54, F, univers.)

</div>

Speaking well is thinking well and having the vocab to express one's thoughts.

Eurocentrism (also depth)

Vous allez sur la rue là , "Les Hostie de criss", vous l'entendez combien de fois? Bon. C'est tU beau ça, c'est tU joli ça? <( )> C'est tU nécessaire? <Non> Bien c'est parce-qu'ils ont pas de vocabulaire, c'est le premier mot qui leur vient à I: à l'idée là. <oui> Ils ont pas de vocabulaire. Un Français dirait pas ça. Vous entendez pas un Français dire "Criss d'Hostie", jamais de la vie, il va employer des mots bien plus fins que ça lui.   *(#76, M, prof. lib)*

French people would never say bad things like Québécois

Localness

Interviewer: D-après vous ça serait quoi: bien parler, quelqu-un qui parle bien?
Speaker: Ah bien français de France mais: moi (rire) Je suis pas: je suis pas un Français de France. (rire)
(#27, M, blue collar)

I'm not a French person.

Link between external structure and identity construction

Educ. Level	STATUS	SOLIDARY	# speakers
High (Uni)	18 (78%)	12 (52%)	23
Medium	10 (62%)	7 (43%)	16
Low	7 (41%)	11 (64%)	17
Total	35	19	56

Table: Expressions of status vs solidarity stances, by education level

Speakers' performed personae

Assess speakers' values based on performances of status/solidarity

Divide the 56 speakers studied into 4 groups:

- Status-oriented speakers.   mentioned status only
- Solidarity-oriented speakers.   mentioned solidarity only
- Status/solidarity-oriented speakers.   mentioned both
- Other speakers.   mentioned neither

Du tout vs pantoute in Montréal 84

SPEAKER	Du tout	Pantoute	% Pantoute
STATUS	139	21	13
STATUS-SOLIDARITY	65	13	16
SOLIDARITY	46	69	60
OTHER	17	14	45

Table: Distribution of *du tout/pantoute* in 56 speakers of *Montréal 84*.

Statistical Analyses

Generalized linear mixed effects models in R using the lme4 package (Bates et al., 2014).

Fixed effects

1. Speaker's performed persona (status, solidary, status/solidary, other).
2. Speaker gender (F, M).
3. Speaker age (over/under 45).

Random effect

Speaker identity (53 speakers).

Results

	Estimate	Std. Error	z value	Pr($> |z|$)	
(Intercept)	-3.2548	1.0158	-3.204	0.001355	**
Status-solidarity	0.7376	1.0667	0.691	0.489277	
Solidarity	3.7490	1.0958	3.421	0.000623	***
Other	3.8816	1.4901	2.605	0.009188	**
Gender (M)	0.3173	0.8609	0.369	0.712461	
Age (Young)	-0.8277	0.8981	-0.922	0.356779	

Intercept: Status oriented older female

Results

Two basic groups of speakers

- ▶ Status speakers are significantly different from solidarity/other.
- ▶ Status and Status-Solidarity speakers are not significantly different from each other.
- ▶ Solidarity and other speakers are not significantly different from each other.

- ▶ We are now in a position to develop a meaning-based analysis of *du tout/pantoute* variation.

Modeling in SMGs

+ status (competent)	+ solidarity (friendly)
-status (incompetent)	-solidarity (aloof)

Table: 4 property universe for *du tout/pantoute*

Hypothesis

Speakers try to construct their preferred persona.

- ▶ When personae are equivalent, they alternate between preferred personae: $P(\cdot)$.

Speaker	Preferred personae
Status	{+status, +solidarity}
	{+status, -solidarity}
Solidarity	{+status, +solidarity}
	{-status, +solidarity}
Stat-Sol	{+status, +solidarity}
Other	{+status, +solidarity}
	{+status, -solidarity}
	{-status, +solidarity}
	{-status, -solidarity}

Table: Preferred personae

Persona selection $P(\cdot)$

Persona selection functions are relativized to a parameter $1 > x > 0.5$, expressing how great their preference is.

	Snob	Cool guy/gal	Asshole	Doofus
Speaker	{+stat, -sol}	{+stat, +sol}	{-stat, -sol}	{-stat, +sol}
Status	x/2	x/2	(1-x)/2	(1-x)/2
Stat-Sol	(1-x)/3	x	(1-x)/3	(1-x)/3
Solidarity	(1-x)/2	x/2	(1-x)/2	x/2
Other	0.25	0.25	0.25	0.25

Table: Persona selection $P(\cdot)$

Taking into account persona selection

(10) $P(m) = \sum_{p \in \text{PERS}} P(p) \times P_S(m|p)$

The probability that S will use a message is the sum of the probability that S selects a persona p times the probability that S will use m to construct p.

Listener prior beliefs (Pr)

The speaker makes a hypothesis about what their listener thinks about them before they say anything.

- ▶ In *Montréal 84*, the interviewers are strangers to their interviewees.
- ▶ We might make the idealization that the speaker has (relatively) few prior assumptions about their listener beliefs.
- ▶ Can we do better than this?

Snob	Cool guy/gal	Asshole	Doofus
{+stat, +sol}	{+stat, -sol}	{-stat, +sol}	{-stat, -sol}
0.25	0.25	0.25	0.25

Table: L has uniform prior beliefs ($Pr(P)$).

How can we figure out what the indexical fields are?

Hypotheses	m	Eckert Field
A. ± status	du tout	{+status}
	pantoute	{-status}
B. status & solidarity	du tout	{+status, -solidarity}
	pantoute	{-status, +solidarity}
C. ± solidarity	du tout	{-solidarity}
	pantoute	{+solidarity}
D. neutral & -status	du tout	{+status, -status}
	pantoute	{-status}

Hypothesis A: [du tout] = {+status} , [pantoute] = {-status}

- Status and status-solidarity speakers pattern together. ✓

Figure: P(pantoute) by value of x

Hypothesis B: [du tout] = {+stat, -sol} , [pantoute] = {-stat, +sol}

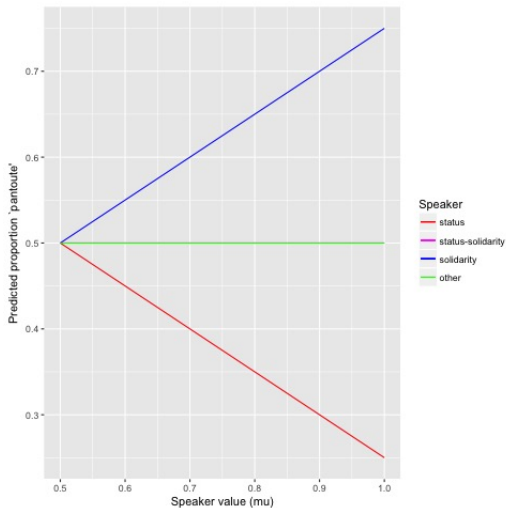- Other and status-solidarity speakers pattern together. ×

Figure: *P*(pantoute) by value of *x*

► Solidarity and stat. -solidarity speakers pattern together. $\times$
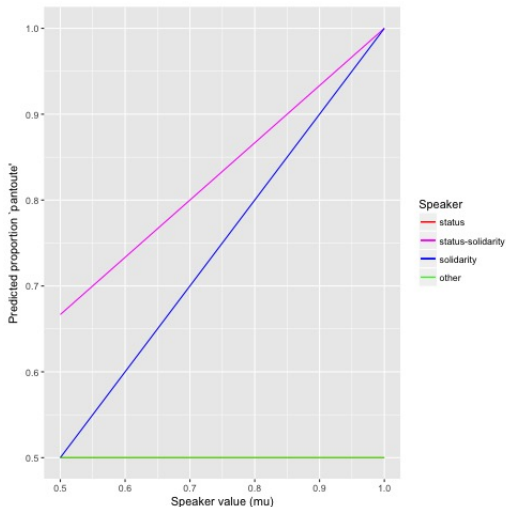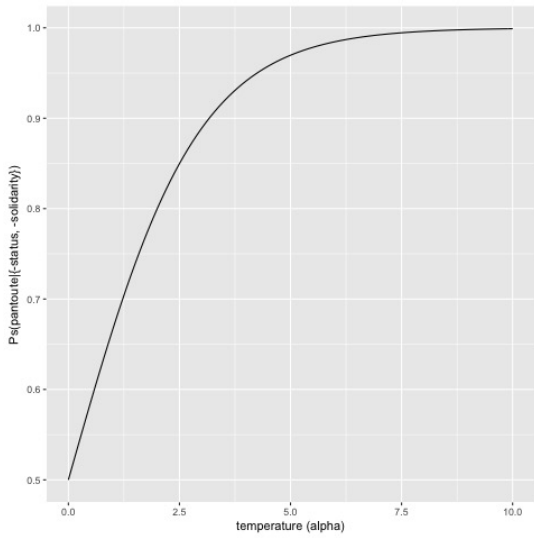

Figure: P(pantoute) by value of x

(11)   Hypothesis D:

        a.   [du tout] = {+status, -status}

        b.   [pantoute] = {-status}

(12)   a.   *pantoute* indexes -status.   informative

        b.   *du tout* is neutral with respect to status.

- Informativity plays a big role in determining the speaker's production probability.
- Raising or lowering λ affects the predictions of hypothesis D.

Hypothesis D: [du tout] = {+status, -status} , [pantoute] = {-status}

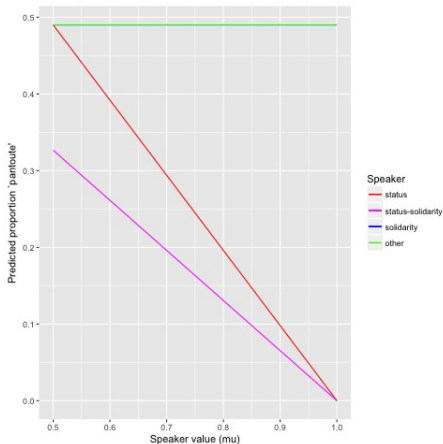▶ Status and status-solidarity speakers pattern together. ✓

Figure: P(pantoute) by value of x, $\lambda = 6$

Predictions (Prop. pantoute; $x = 0.9, \lambda = 6$)

Speaker	A	B	C	D	Actual
Status	0.1	0.3	0.5	0.098	0.13
Stat-Sol	0.07	0.5	0.97	0.065	0.16
Solidarity	0.5	0.7	0.9	0.49	0.6
Other	0.5	0.5	0.5	0.49	0.45

Conclusion

The only indexical fields which correspond to the data (under some x and λ) are:

- **A:** [du tout] = {+status} , [pantoute] = {-status}
- **D:** [du tout] = {+status, -status} , [pantoute] = {-status}

Proposal

Meaning-based analyses of social stratification can be naturally applied to the analysis of macro-level patterns, if we take advantage of latent ideological corpus data.

- ▶ We can extract a valuable missing link between external social structures and language use from large stratified corpora, provided certain kinds of ideologically loaded questions are asked.

This study highlights the complementary (rather than competitive) relationship between First and Third waves of variationist sociolinguistics.

Going forward. . .

The 'bien parler' measure can be useful in developing meaning-based analyses of a wide range of variables in *Montréal 84*.

Vais/vas/m'as in Montréal French

(13)   a.   Je **vais** te dire quelque chose. . .
            'Standard/Parisian'

        b.   Je **vas** te dire quelque chose. . . 'Normand/Canada'

        c.   **M'as** te dire quelque chose. . .   'Canada'

          'I'll tell you something. . .'

M'as is a reduction of *m'en vas* (Mougeon et al., 1987).

(Mougeon et al., 1987; Wagner and Sankoff, 2011, a.o.)

EDUCATION	Vais	Vas	M'as	% Vais	% M'as
HIGH	126	413	9	22.9	1.6
MEDIUM	50	495	109	7.6	16.7
LOW	40	404	161	6.6	26.6

Table: Distribution of *vais/vas/m'as* in 56 speakers of *Montréal 84*.

Vais/vas/m'as

Speaker	Vais	Vas	M'as	% Vais	% M'as
Status	49	437	0	10	0
Status-Solidarity	59	356	0	14	0
Solidarity	12	396	279	2	41
Other	96	123	0	44	0

Table: Distribution of *vais/vas/m'as* in 56 speakers of *Montréal 84*.

Next class

Another empirical study

Variation and change in grammatical gender in French.

(14)   Grammatical gender
       a.   La parole est à Madame le ministre.   Masculine
       b.   La parole est à Madame la ministre.   Feminine

- ▶ How game-theoretic models can help us understand the actuation and progression of linguistic changes.

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