

Meaning-Based Approaches to Social Stratification

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Introduction

'Scaling up' meaning-based analyses

Explore how we can give social meaning-based analyses of patterns of social stratification (inter-speaker variation) in large sociolinguistic corpora.

- (1) a. Je sais pas son nom, mais je sais que je l'aime pas **du tout**.
b. Cette loi là, je l'ai pas aimé **pantoute**.

(#34, F, 37)

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

Two current lines of analysis in variationist sociolinguistics

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

Structure based analyses

- 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.
- 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).

Large number of diverse speakers gives a clear picture of population level variation and change.

Still a little mysterious...

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

- 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.
- 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)...).

Yields a detailed picture of speaker-internal representations and how they relate to identity construction through language.

Still a little mysterious...

How/whether these fine-grained meaning-based analyses directly 'scale up' to the macro level.

Observation by Bourdieu and Passeron (1970); Bourdieu (1979)

Aspects of individuals' internal mental representations that mediate between external social structures and linguistic performances can be elicited from even very short interviews, provided the right kinds of questions are asked.

1. A study of responses to the ideologically loaded survey question:
 - (2) Qu'est-ce que c'est bien parler? Mal parler?
'What is speaking well? Speaking badly?'.
Question (L-11/12) (Thibault and Vincent, 1990)
2. Construct a measure of speakers' values from the answer to (2) which can provide a basis for a meaning-based analysis of variation at the macro-level.

1. Introduction
2. Bourdieu and Passeron (1970)'s gérophagie experiment
3. 'Bien parler' in Montréal 84
4. Du tout/pantoute in Montréal 84
5. Conclusion
 - Vais/vas/m'as in Montréal 84

Bourdieu and Passeron (1970)'s gérophagie experiment

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.

Effects of social class on speaker ideologies

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

- (3) Dimensions
 - a. Upper, middle, working
 - b. Paris, Province

- (4) '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)

- (5) Performance of **erudition/sophistication**
- 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)

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 Montréal 84

Bien parler in the Montréal 84 corpus

Study of answers to the question (6) in 56 speakers in the Montréal 84 corpus of spoken Montréal French (Thibault and Vincent, 1990).

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

- Subset of reinterviews that answered (6).
- Answers expressing stances related to six properties.

(7) **Status, solidarity**, wholesomeness, depth, eurocentrism, localness.

Expression of status: articulate and educated

- (8) a. Mal parler ça serait: déformer les: déformer les sons. Le "oué" puis le "moé" puis le: "on:" puis le: du: le "garâge" 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)
- b. Comme disait Boileau: "Ce qui est conçu clairement les mots pour le dire viennent aisément." Mais il faut quand même avoir une formation de langue pour être capable de penser comme ' faut. (#73, M, prof. lib.)

- (9) 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 cé: c'est complet. (#83, M, blue col.)

- (10) 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)

(other in Appendix...)

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

Assess speakers' values based on their expressed stances

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/pantoute in Montréal 84

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

Two basic groups of speakers

- Status(-Solidarity) speakers are significantly different ($\chi^2 \approx 66.79$; $p < 0.01$)
- Status and Status-Solidarity speakers are not significantly different from each other. ($\chi^2 \approx 0.54$; $p = 0.46$).
- Solidarity and other speakers are not significantly different from each other ($\chi^2 \approx 2.2$; $p = 0.13$).

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

Conclusion

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

- (11) a. Je **vais** te dire quelque chose.
b. Je **vas** te dire quelque chose.
c. **M'as** te dire quelque chose.

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

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

Merci!

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Social Meaning Games (Burnett, 2017)

A formalization of the *Third Wave* approach to variation in terms of **Iterated Best Response** Bayesian signalling game models.

1. Two players: S(peaker), L(istener)
2. A set of properties/stances \mathbb{P} .

$$(12) \quad \mathbb{P} = \{+\text{status}, -\text{status}, +\text{solidarity}, -\text{solidarity}\}$$

3. The PERSONAE generated by \mathbb{P} are the largest consistent sets of properties.

$$(13) \quad \begin{aligned} &\{+\text{status}, +\text{solidarity}\} \\ &\{+\text{status}, -\text{solidarity}\} \\ &\{-\text{status}, +\text{solidarity}\} \\ &\{-\text{status}, -\text{solidarity}\} \end{aligned}$$

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 hypothesize that the speaker has (relatively) few prior assumptions about their listener beliefs.

{+stat., +sol.}	{+stat., -sol.}	{-stat., +sol.}	{-stat., -sol.}
0.25	0.25	0.25	0.25

Table 6: L has uniform prior beliefs ($\Pr(P)$).

Speaker values (μ)

Inter-speaker differences are reflected in how often they will play a persona.

Proposal

μ is a probability distribution over personae P encoding how often S selects P .

- S puts more probability mass on their preferred personae than on their non-preferred personae.

Preferred personae

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}

The function μ is relativized to a parameter $1 > x > 0.5$, expressing how great their preference is.

Speaker	$\mu(\{+st, +sol\})$	$\mu(\{+st, -sol\})$	$\mu(\{-st, +sol\})$	$\mu(\{-st, -sol\})$
Status	$x/2$	$x/2$	$(1-x)/2$	$(1-x)/2$
Stat-Sol	x	$(1-x)/3$	$(1-x)/3$	$(1-x)/3$
Solidarity	$x/2$	$(1-x)/2$	$x/2$	$(1-x)/2$
Other	0.25	0.25	0.25	0.25

Table 7: Speaker values $\mu(P)$

Possible indexical fields

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

How S chooses a variant

(14) Eckert-Montague Field Formation

[·] maps each variant to the set of personae containing at least one stance in its Eckert field.

(15) Conditionalization

$$Pr(P|m) = \frac{Pr(\{P\} \cap [m])}{Pr([m])}$$

(16) Speaker Utility for Constructing P using m

$$U_S(m, P) = \ln(Pr(P|m)) - C(m)$$

(17) Speaker Likelihood to Construct P using m

$$P_S(m|P) = \frac{\exp(\alpha \times U_S(m, P))}{\sum_{m'} \exp(\alpha \times U_S(m', P))}$$

Incorporating persona selection

S's probability of using a variant m is the sum of the probabilities that S selects a persona and then uses m to construct that persona.

$$(18) \quad p_S(m) = \sum_P \mu(P) \times P_S(m|P)$$

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

- Raising or lowering α only affects hypothesis D.

Speaker	A	B	C	D	Actual
Status	0.1	0.3	0.5	0.01	0.13
Stat-Sol	0.07	0.495	0.97	0.01	0.16
Solidarity	0.5	0.7	0.9	0.495	0.6
Other	0.5	0.5	0.5	0.495	0.45

Hypothesis A

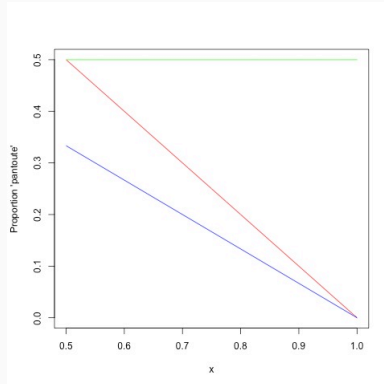


Figure 1: Status (red), Stat-Sol (blue), Solidarity (green) by x

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 l: à l'idée ça. <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, 70)

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> (le téléphone sonne) 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, 37)

disons que bien parler c'est: c'est d'arriver à: à exprimer ce qu'on pense de façon nuancée. 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) nuancée des fois à cet âge là. (#54, F, 30)

1. D-après vous ça serait quoi: bien parler, quelqu'un qui parle bien?
2. Ah bien français de France mais: moi (rire) Je suis pas: je suis pas un Français de France. (rire)

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