

Standardization and distance

-Case of Atlas Linguistic of Champagne and Brie (ALCB)-

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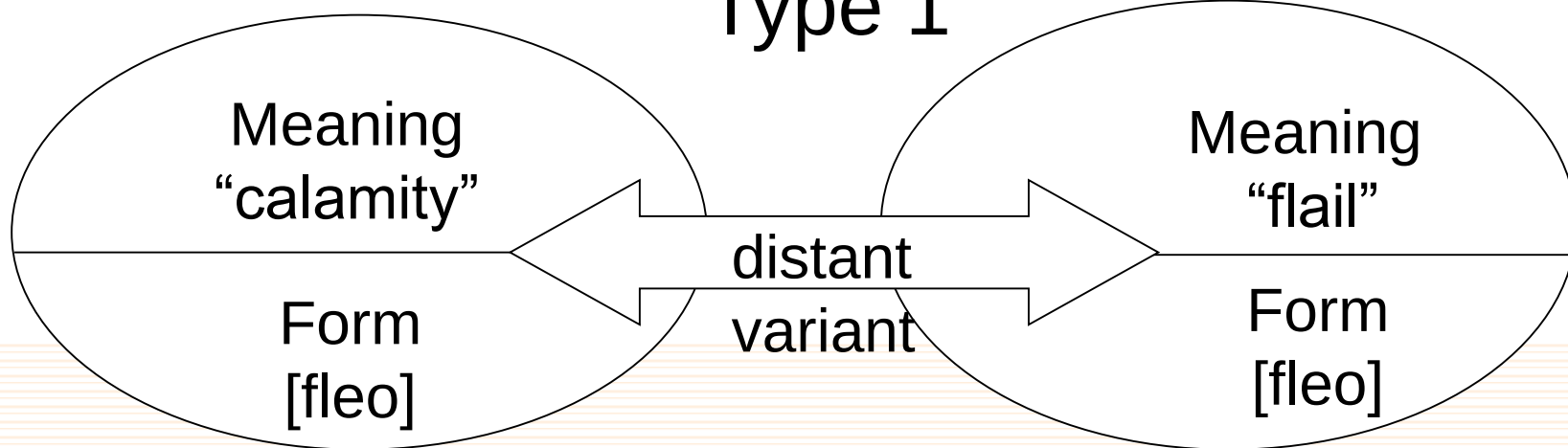
Plan

1. Typology of dialect variation
2. Variation types
3. Ponderation of variants
4. Quantitative analysis
5. Real distance and variant types
6. Grouping of variant types

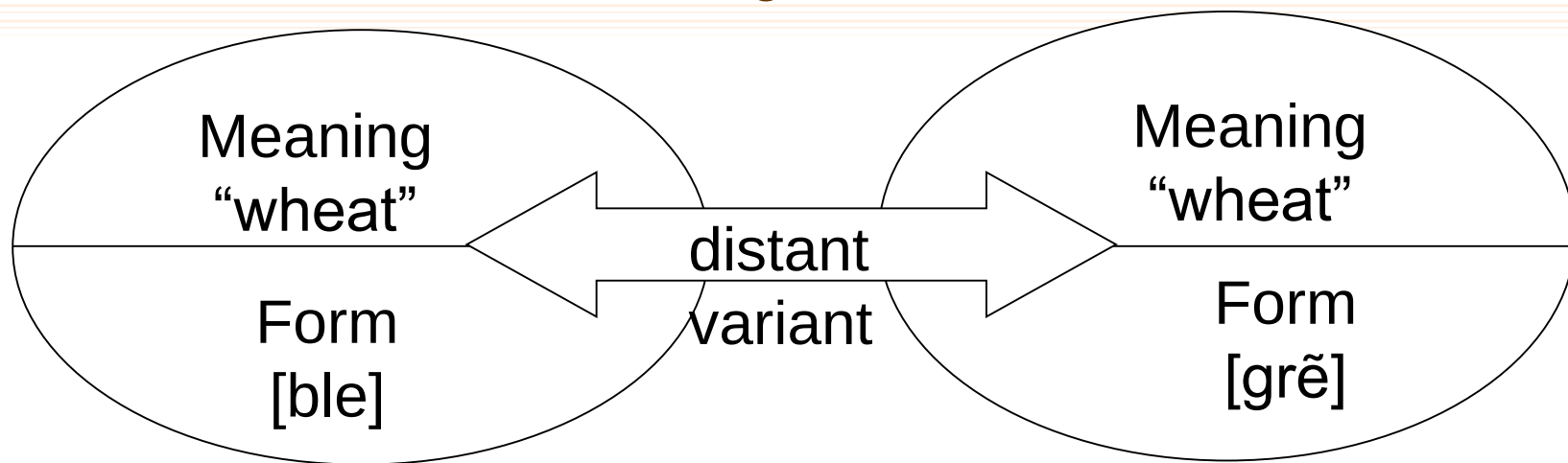
Conclusion

1. Typology of dialect variation

Type 1

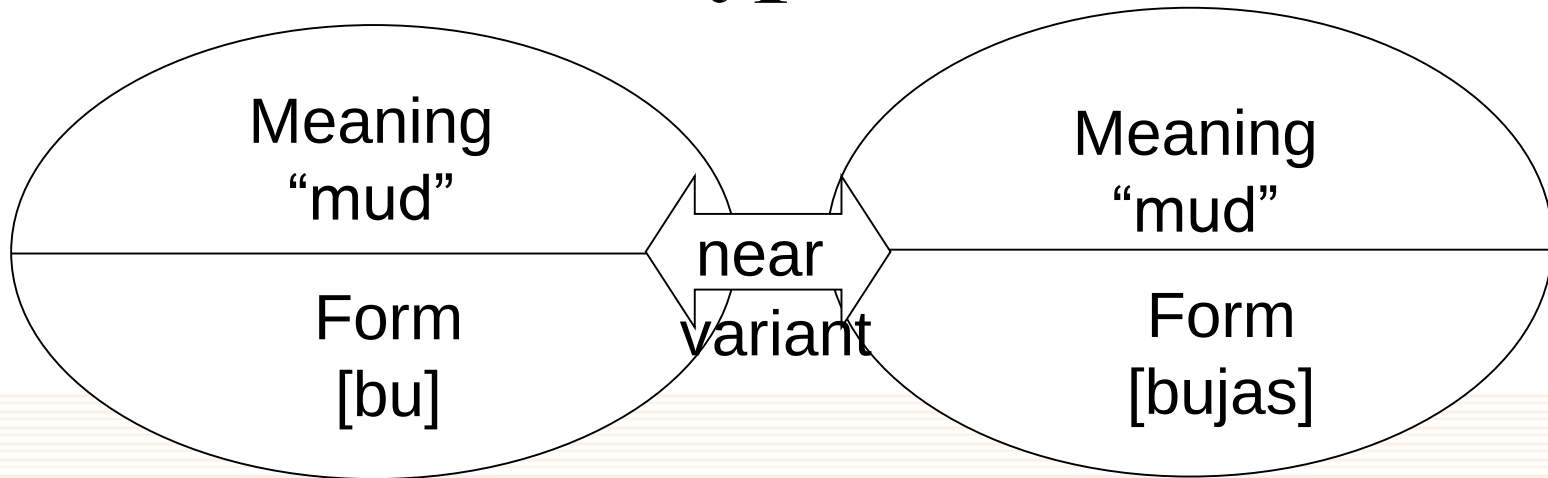


semasiological variation

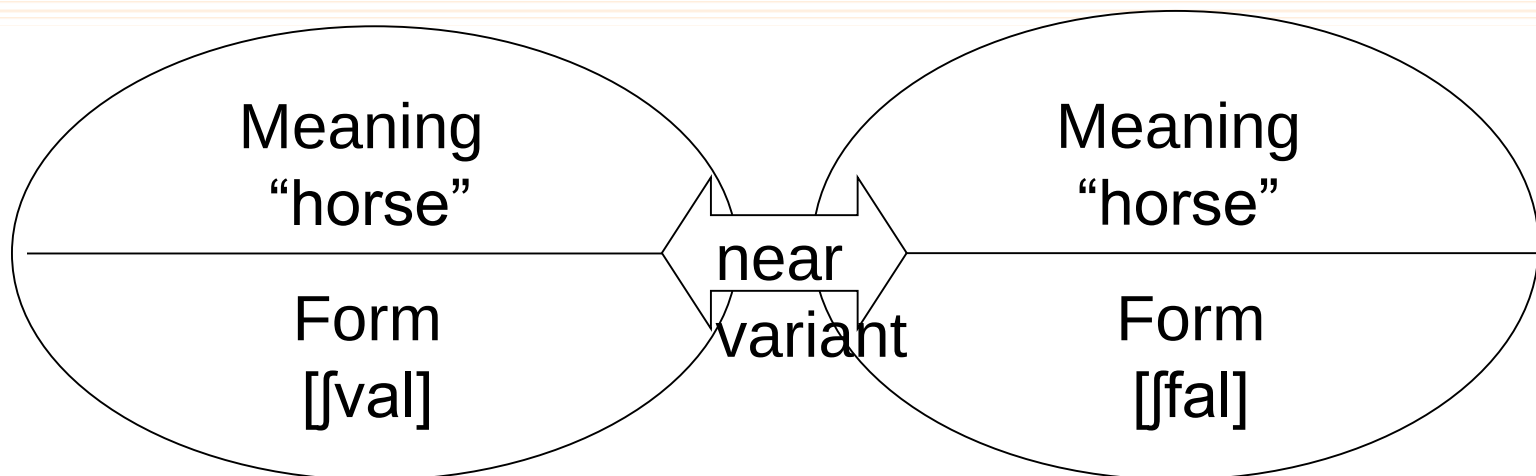


onomasiological variation

Type 2

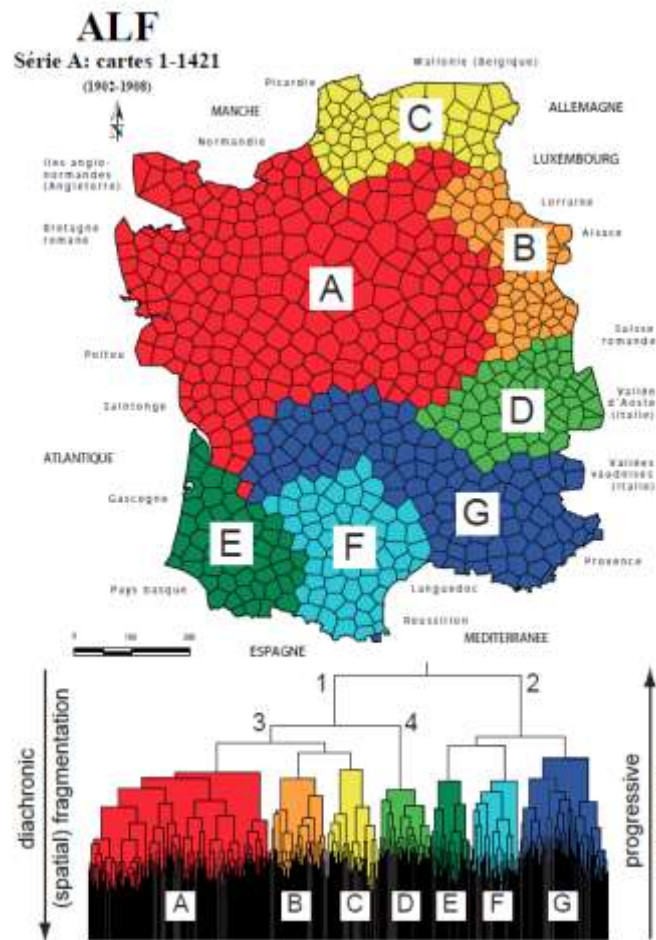


morphological variation



phonological variation

2. Variation types



dendrographic classification of the points of **Atlas Linguistique de France (ALF)** to investigate the similarity among different points.

Hans Gœbl, Dialectometry: theoretical prerequisites, practical problems, and concrete applications, in: *Dialectologia* (2010) 63-77.

Hans Gœbl, *Dialektometrische Studien. Anhand italo-romanischer, rätoromanischer und galloromanischer Sprachmaterialien aus AIS und ALF*, Tübingen (Niemeyer) 1984, 3 vols.

No.34 averse	shower
avɛʁs	standard form
avaʁs	phonological variants
bɛʁlɛ̃, bʁujɔ̃, dobɛ̃	lexical variants

No.43 boue	mud
bu	standard form
bu:, bo:	phonological variants
bœ:z, buli:	morphological variant
buɤb, gaduj, patuj	synonymous variant
djadu, mɔʁtʃɛ	lexical variants



ALCB (*L'Atlas Linguistique et Ethnographique de la Champagne et de la Brie*), Henri Bourcequot, 1966-93, vol1-3.

Standard form is based on the description in Martinet, A. and H. Walter, 1973: *Dictionnaire de la prononciation française dans son usage réel*, France-Expansion.

3. Ponderation of variants

	standard form	phonological variant	morphological var.	synonymous var.	lexical var.
Case 1	1	2	2	2	2
Case 2	1	2	3	3	4
Case 3	1	2	3	3	10

No.34 averse	category	Case 1	Case 2	Case 3
avεks	standard form	1	1	1
avaɤs	phonological variant	2	2	2
εvaɤs		2	2	2
evɤœf	morphological variant	2	3	3
ʒibule	synonymous variant	2	3	3
uɤej, uɤẽ	lexical variant	2	4	10
do:bẽ		2	4	10

4. Analysis

40 maps of ALCB analyzed

40 maps with various degrees of standardization

Map No.11, 16, 20, 21, 22, 30, 34, 35, 37, 43, 44, 45, 50,
56, 57, 59, 76, 209, 213, 217, 220, 303, 315, 319, 325, 334,
335, 337, 349, 353, 357, 358, 361, 369, 370, 371, 372, 377,
382, 383

No indicated form is 0 valued.

5. Real distance and variant types

Real distance of each point from Paris
Sum of ponderation values for 40 maps

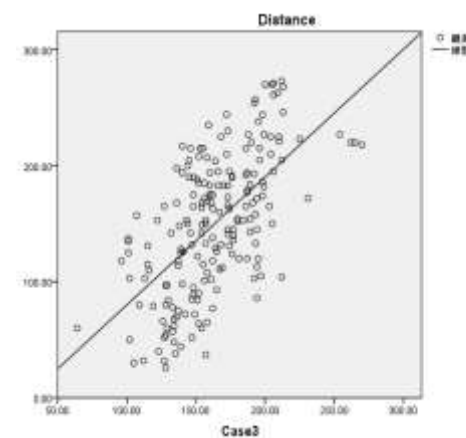
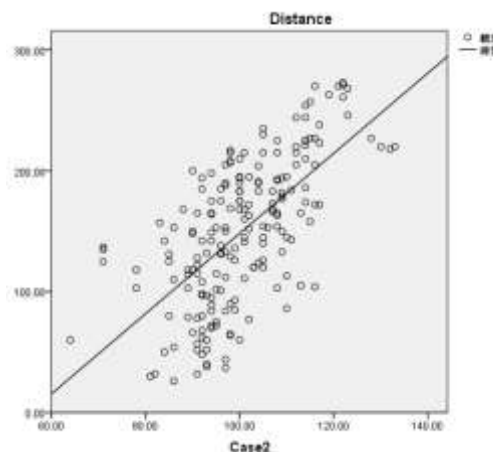
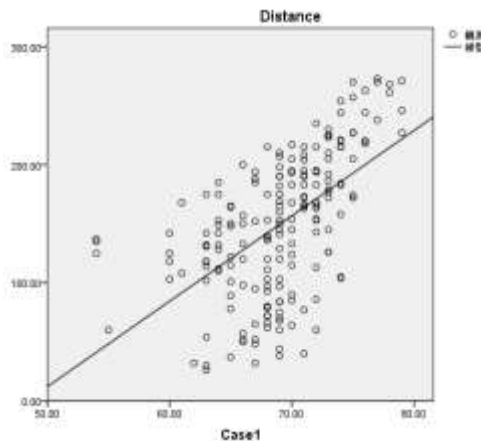
point	distance (km)	Case1	Case2	Case3
1	227	75	128	254
2	220	76	133	265
3	218	76	132	270
4	195	72	102	174
5	183	71	100	166
6	195	70	100	166
....				
192	263	76	119	209
193	270	75	116	200
194	257	75	115	193

Results

Correlations :

Actual distance and Case1, Case2, Case3
all significant at the threshold of 1 %

Real distance vs Case 1	Real distance vs Case 2	Real distance vs Case 3
Pearson's correlation coefficient = .566**	Pearson's correlation coefficient = .642**	Pearson's correlation coefficient = .609**



6. Grouping of variant types

Cluster analysis of Case 1, Case 2, Case 3

Grouping is based upon 194 points

Cluster analysis

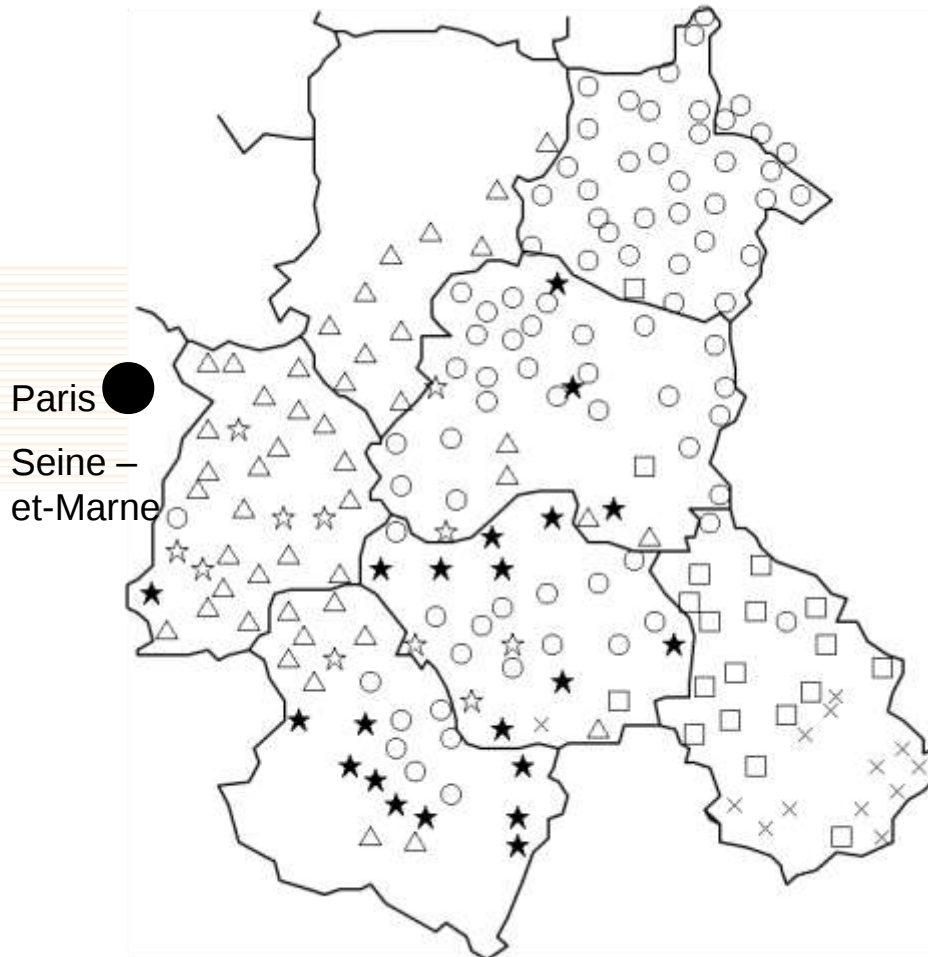
PASW Statistics 18 release 18.0.0 (2009)

Ward Method, Square Euclidean distance

Points of each group are plotted on the map

6. 1. Case 1

×	1.92
□	1.80
★	1.74
○	1.72
△	1.68
☆	1.60

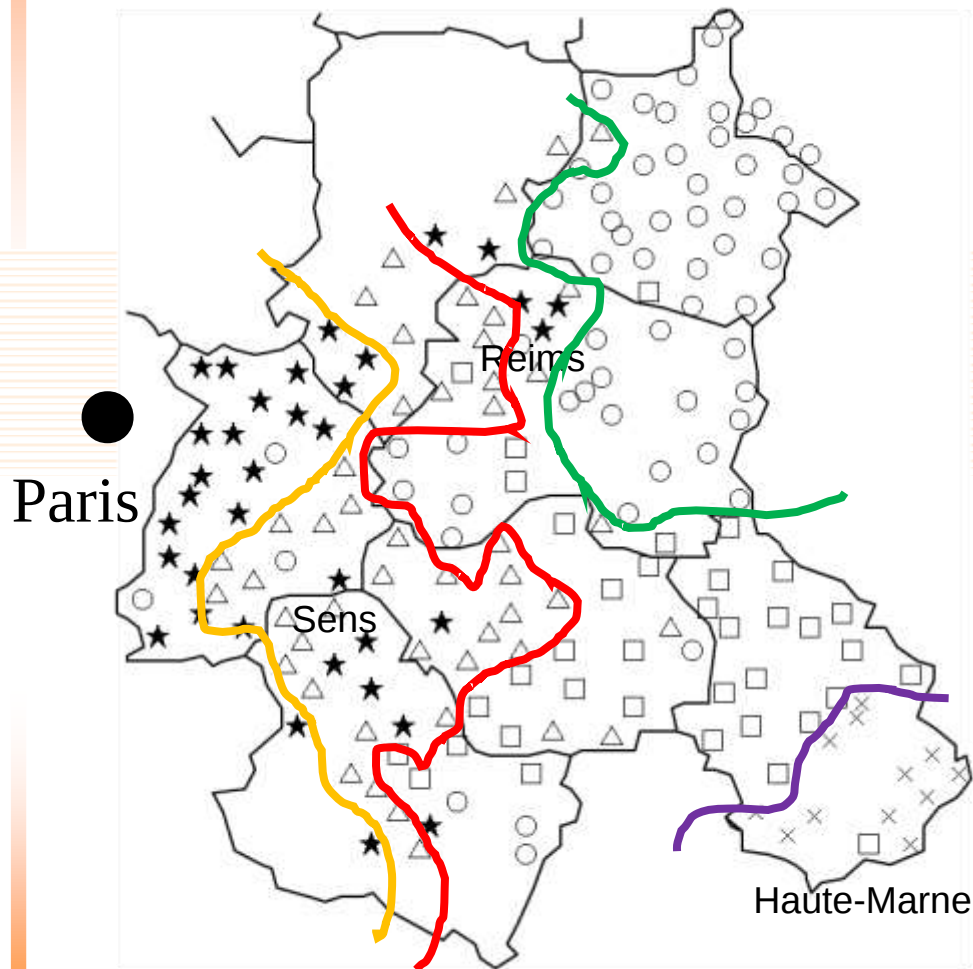


standard form ☆
near Paris region

slight variants △
also near Paris

$1 \leq \text{value} \leq 2$

6. 2. Case 2



×	2.96
○	2.71
□	2.51
△	2.41
★	2.17

standard form ★
near Paris, some regional towns

variants

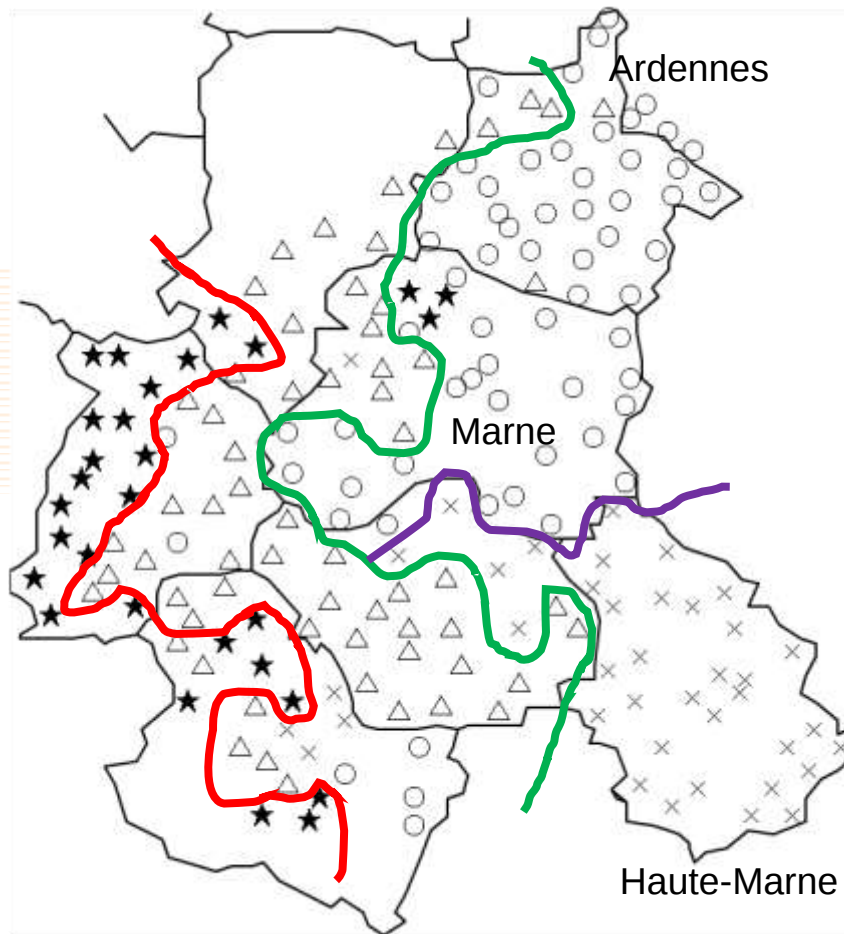
△ near Paris

□ ○ from center to periphery

× most distant from standard form

$1 \leq \text{value} \leq 4$

6. 3. Case 3



○	4.71
×	4.32
△	3.82
★	2.98

standard ★

near Paris, regional
towns

slight variant △

near Paris

strong variant ○

Ardennes, Marne

most distant variant ×

Haute-Marne isolated

$1 \leq \text{value} \leq 10$

Conclusion

1. Obvious significant correlation between actual distance and linguistic farness of dialect forms
2. Significance of the distinction between morpho-phonological variants and lexical variants: Ardennes and Marne VS Haute-Marne
3. Efficiency of multivariate analysis even in the regions near capital Paris.

References

- Bourcelot, Henri. *L'Atlas Linguistique et Ethnographique de la Champagne et de la Brie (ALCB)*, Editions du C.N.R.S., 1966-2012, vol.1-4.
- "L'Atlas linguistique et ethonographique de la Champagne et de la Brie et les limites linguistiques", *Langue française* 9, 1971, 82–92.
- Goebl, Hans. "Analyse dialectométrique des structures de profondeur de l'ALF", *Revue de Linguistique Romane*, 66, 2002, 5-63.
- Dalbera, Jean-Philippe, "Linguistic Atlases: Objectives, Methods, Results, Prospects", *Corpus-Based Perspectives in Linguistics*, KAWAGUCHI et al. (eds.) , Amsterdam & Philadelphia, John Benjamins, 2007, 39–54.
- Kawaguchi, Yuji, "Suffixe –ette (< lat. –itta) en Champagne et en Brie à la lumière des Atlas Linguistiques", *Zeitschrift für romanische Philologie* 110(3–4), 1994, 410–431.
- "Is it possible to measure the distance between near languages? A case study of French dialects", *Langue proches–Langues collatérales*, Paris, L'Harmattan, 2007, 81–88.
- "How Can We Depict Standardization in the Linguistic Atlas? Case Study of Champagne and Brie (ALCB)", *Philologica Jassyensia* 24.2, 2017, 237-250.
- Kawaguchi, Yuji and Fumio Inoue. "Japanese Dialectology in Historical Perspectives", *Nouveaux regards sur la variation diatopique*, n° thématique conçu par M.R. Simoni-Aurembou, *Revue belge de philologie et d'histoire* 80, 2002, 801-829.
- Martinet, André and Henriette Walter. *Dictionnaire de la prononciation française dans son usage réel*, 1973, France-Expansion.
- Yarimizu Kanetaka, Kawaguchi Yuji and Ichikawa Masafumi. "Multivariate Analysis in Dialectology – A Case Study of the Standardization in the Environs of Paris-", *Linguistic Informatics, -State of the Art and the Future- The first international conference on Linguistic Informatics*, Yuji Kawaguchi et al. eds., John Benjamins, 2005, 99-119.

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