Discours VALIBEL Variation

UCL Université catholique de Louvain

Towards a Model for Discourse Marker Annotation in spoken French: From potential to feature-based discourse markers

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« Pragmatic markers, discourse markers and modal particles: What do we know and where do we go from here? » Oct. 16-17 2014, Como, Italy

Identifying discourse markers in spontaneous speech

- Common ground:
  - Lack of consensus

    « It has become standard in any overview article or chapter on DMs to state that reaching agreement on what makes a DM is as good as impossible, be it alone on terminological matters » (Degand, Cornillie, Pietrandrea 2013: 5)
  - Lack of satisfying models (see Uygur-Distexhe 2012 and Crible 2014 for exceptions)
  - Proliferation of case studies

➢ Need for contrastive, categorical, onomasiological studies

➢ Towards a comprehensive model of annotation
  - From identification to description in context
  - Corpus-based selective criteria for inclusion/exclusion of DMs

Plan

1. DM Definition
2. MDMA Research group
3. Method : an annotation experiment
4. Results : features and clusters
5. Perspectives

DM definition

What are discourse markers?

"A pragmatic marker* is defined as a ❶ **phonologically short item** that is ❷ **not syntactically connected** to the rest of the clause (i.e., is parenthetical), and has ❸ **little or no referential meaning** but serves ❹ **pragmatic or procedural purposes**" (Brinton, 2008: 1)

DMs "provide **instructions** to the hearer on how to integrate their host utterance into a developing mental model of the discourse in such a way as to make that utterance appear optimally coherent" (Hansen 2006: 25)

- **Multifunctionality** within their "meaning potential" (Aijmer 2013) and in context
- **Metalinguistic** comments on the content/form of the linguistic utterance itself
- **Intersubjectivity** effects on interaction management

Example

… **et** anorexique je ne parvenais pas à le retenir / j'ai / **alors** je pense à quelque ch/ je pensais à anus (rires) / **comme** c'est **quand même** le tube digestif **hein** qui est en bas (rires) **et ça va** depuis lors je n'oublie plus (rires) **et encore** l'autre jour **aussi** un mot / **tiens** je ne sais p/ **tu vois** / si / j'ai / j'oublie certains mots / **'fin** / je retombe dessus après **hein**…

*… **and** anorexic I couldn't memorize it / I / **so** I think of someth/ I thought of anus (laughing) / **since** it's **still** the digestive tube **right** which is at the bottom (laughing) **and it's ok** since then I don't forget anymore (laughing) **and again** the other day **too** a word / **see** I don't kn/ **you see** / yes / I / I forget certain words / **well** / I remember them afterwards **right**…*

ID code: ageJM1; Pseudo: Jeanne; Age: 90; Source: Corpage 2012; Task 1 Line life; Time code: 1:13:10

MDMA Research group

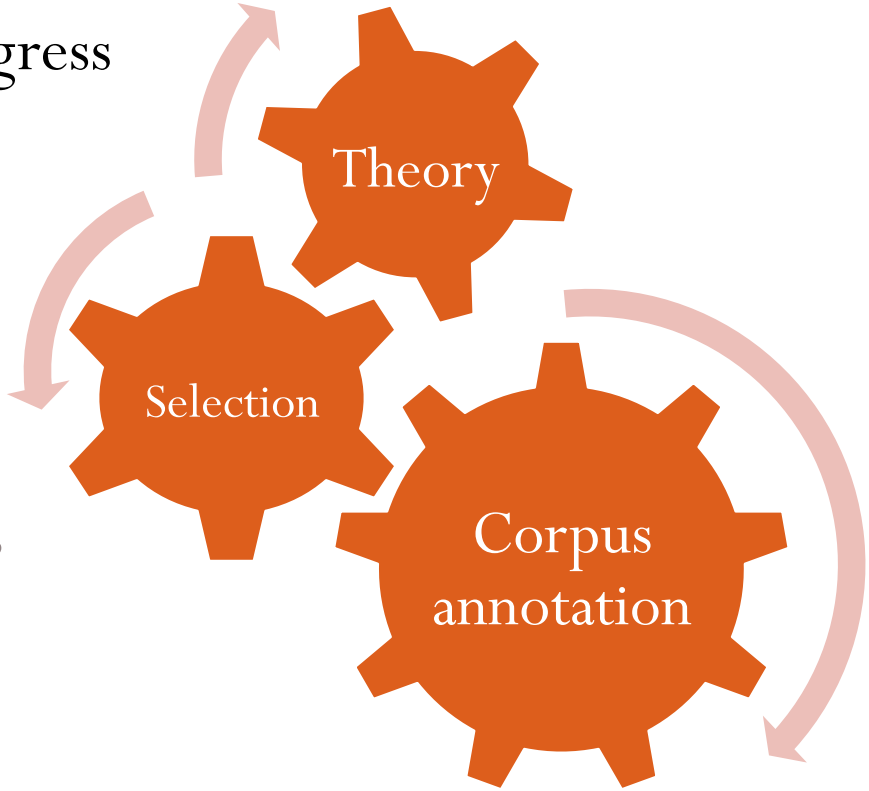
- Check the relevance/reliability of identifying features of DMs
- Towards objective features to be automated (POS-tags, co-occurrence, position)

- Method overview :

1. Intuitive selection of potential DMs
2. Extraction of potential types in balanced corpus FR-BE
3. Elaboration of the coding scheme from theory
4. Annotation and revision of the scheme
5. Statistical analysis of « predictive » parameters

3. Elaboration of the coding scheme from theory

- What to code and how ?
- Selection of parameters to code from existing definitions
- Constant work-in-progress



(Schourup 1999, Schiffrin 1987, Brinton 2008…)

4. Annotation and revision of the scheme

- **Syntax**
- **Semantics**
- **Co-text**
- **Degree of certainty**

TEXT L Left context	ITEM 'token' Search item	CONTEXT R Right context	Certainty	Certainty MEAN	SYNTAX Category	Position	Turn	Mobility	Optionality	SEMANTICS Coded meaning	Contextual m	Procedurality	LEXICAL Cooccurrenc	PROSODY Pause
ben oui enfin bon	disons que	je (bruits de voix) / je	1	2,25	VP	INIT	other	yes	yes	Énoncer un propc	no	procedural	left	no
10 ouais ageNM1 $	donc	euh // moi j'ai retrou	3	3,00	CONJ	PRE	initial	no	yes	Exprime la consé	yes	procedural	right	no
ilrMF0 mm ilrCP1	moi	il y a il y a plusieurs	1	1,75	PRON	PRE	initial	no	yes	Pronom personne	yes	concept-proced	no	no
rite // $ et alors là	aussi	/ on se rend compte a	1	2,00	ADV-P	INIT	other	no	yes	Exprime l'idée qu	yes	procedural	left	right
i / parce que oui /	ma foi	/ on r/ on réfléchit pl	2	2,50	NP	PRE	other	yes	yes	pour appuyer, as	yes	procedural	left	leftright
e créer euh ilrMF0	mm	ilrCP1 un document c	2	2,25	PART	AUTON	Turn	N/A	N/A	S'emploie pour m	no	procedural	no	no
ation `fin (si j' $ ai	bien	compris $) CG et sur	1	1,00	ADV-P	END	other	no	no	En rapport avec c	yes	conceptual	no	no
sur la nationalité	aussi	y a les [deux $ (inauc	1	1,25	ADV-P	END	other	no	yes	Exprime l'idée qu	yes	procedural	no	no
ilcMF0 mm ilcDA1	mais	la hiérarchie doit rép	3	2,25	CONJ	INIT	initial	no	yes	1) "Mais" coordo	yes	procedural	no	no
its bilingues peu/	parce que	ils ont devant eux des	3	2,50	CONJ	END	other	no	yes	marque une relat	yes	procedural	no	no
de voir les choses	euh	sa sa euh il y a une c	3	2,50	PART	END	other	yes	yes	Hésitation: 1) Ret	yes	procedural	right	no
(00:00:30:59) DIR	hein	$ / si encore vous rep	3	2,75	PART	?	initial	no	yes	Enoncé en réactic	no	procedural	no	right
nd compte / même	avec	les gosses / hein / $ c	1	1,25	PREP	END	other	no	no	Marque l'accomp	no	procedural	right	no
ein sur Macintosh	et cetera	$ / oui hein ces derni	1	1,50	ADV-P	POST	other	no	yes	Au terme d'une ér	yes	procedural	leftright	right

4. Annotation and revision of the scheme

- **Syntax** :
  - Category

« *ben* ***c'est-à-dire que*** *bon comme bon quand je suis …* » [« that is to say »] ➔ VP

  - Position in the utterance (Lindström 2001)

« *si j'ai* ***bien*** *compris* » [« correctly »] ➔ middle field

  - Position in turn
  - Mobility

« *il y avait d'autres problèmes* ***non*** *mais c'est vrai* » [« no but »] ➔ no

4. Annotation and revision of the scheme

- **Syntax**
- **Semantics** :

  - Procedurality

*« non mais **faut dire qu**' en fait il a réfléchi »* [« the thing is » VS. « we need to say that »] ➔ conceptual-procedural

  - Coded meaning

*« j'aimerais **bien** travailler dans ce genre de matériel »* ➔ yes

4. Annotation and revision of the scheme

- **Syntax**
- **Semantics**
- **Co-text** :
  - Co-occurring DM
  - Pauses

4. Annotation and revision of the scheme

- **Syntax**
- **Semantics**
- **Co-text**
- **Degree of certainty** :

« *hmm* ***oui*** *je pensais que on fait avec ça* » ➔ 2, 3, 1, 1 ➔ 1,75 (mean)

4. Annotation and revision of the scheme

- **Syntax** :
  - Category : VP, clause, NP, adv …
  - Position in utterance : pre-field, initial, middle, end, post-field
  - Position in turn : initial, medial, final, autonomous
  - Mobility : yes / no
  - Optionality : yes / no
- **Semantics** :
  - Procedural meaning : procedural, conceptual, conc-proc
  - Prototypical meaning or not : yes / no
- **Co-text** :
  - Co-occurrence : no / left / right / both
  - Pause : no / left / right / both
- **Degree of certainty** : 1 – 3

Kappa-scores from 0,75 to 0,82

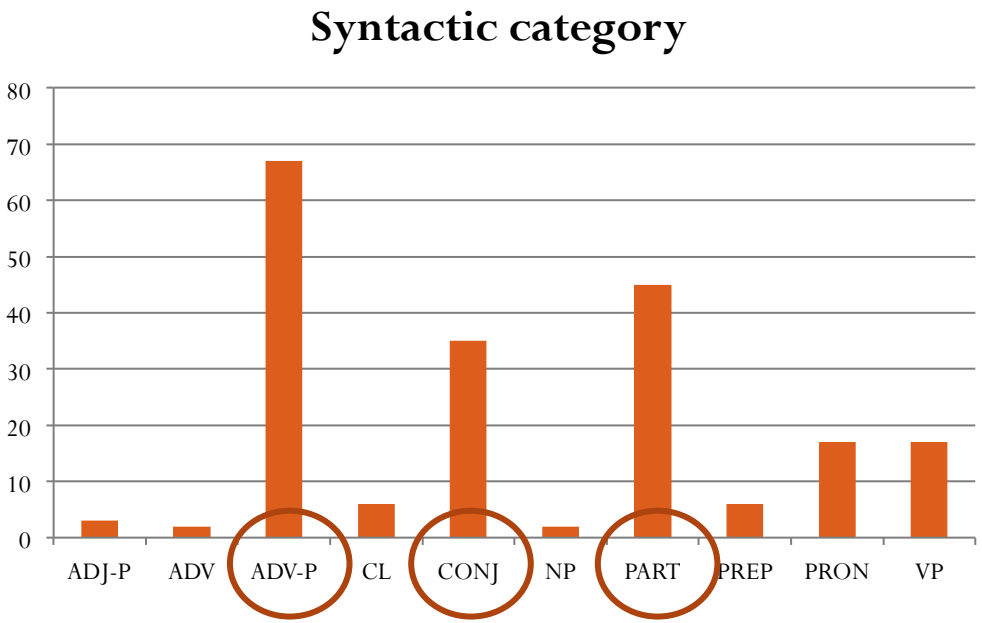
From theory to data and back again

- Corpus-based annotation scheme, moulded by the annotation experiment
- Scope over both DM tokens and their non-DM forms
- Qualitative alternative to kappa-scores

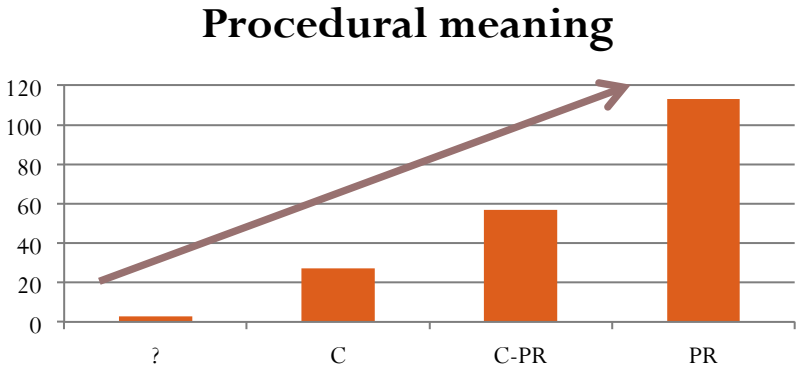
Statistical processing :

- Relative relevance of variables
- Clusters of co-occurring features

Overall distribution of some parameters

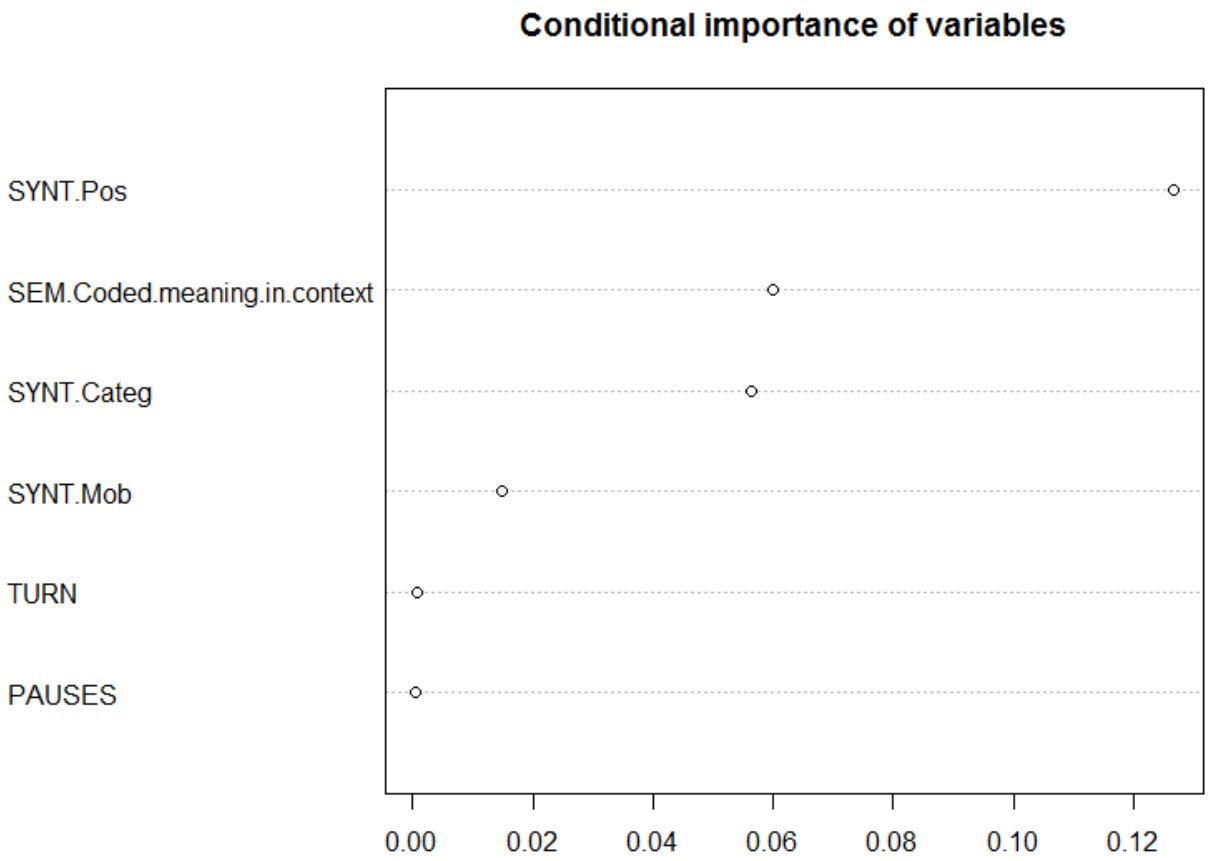


Degree of certainty (mean score)	% of tokens
1 - 1,25	34 %
1,5 - 2,5	46,5 %
2,75 - 3	19,5 %



- Both DMs & non-DMs

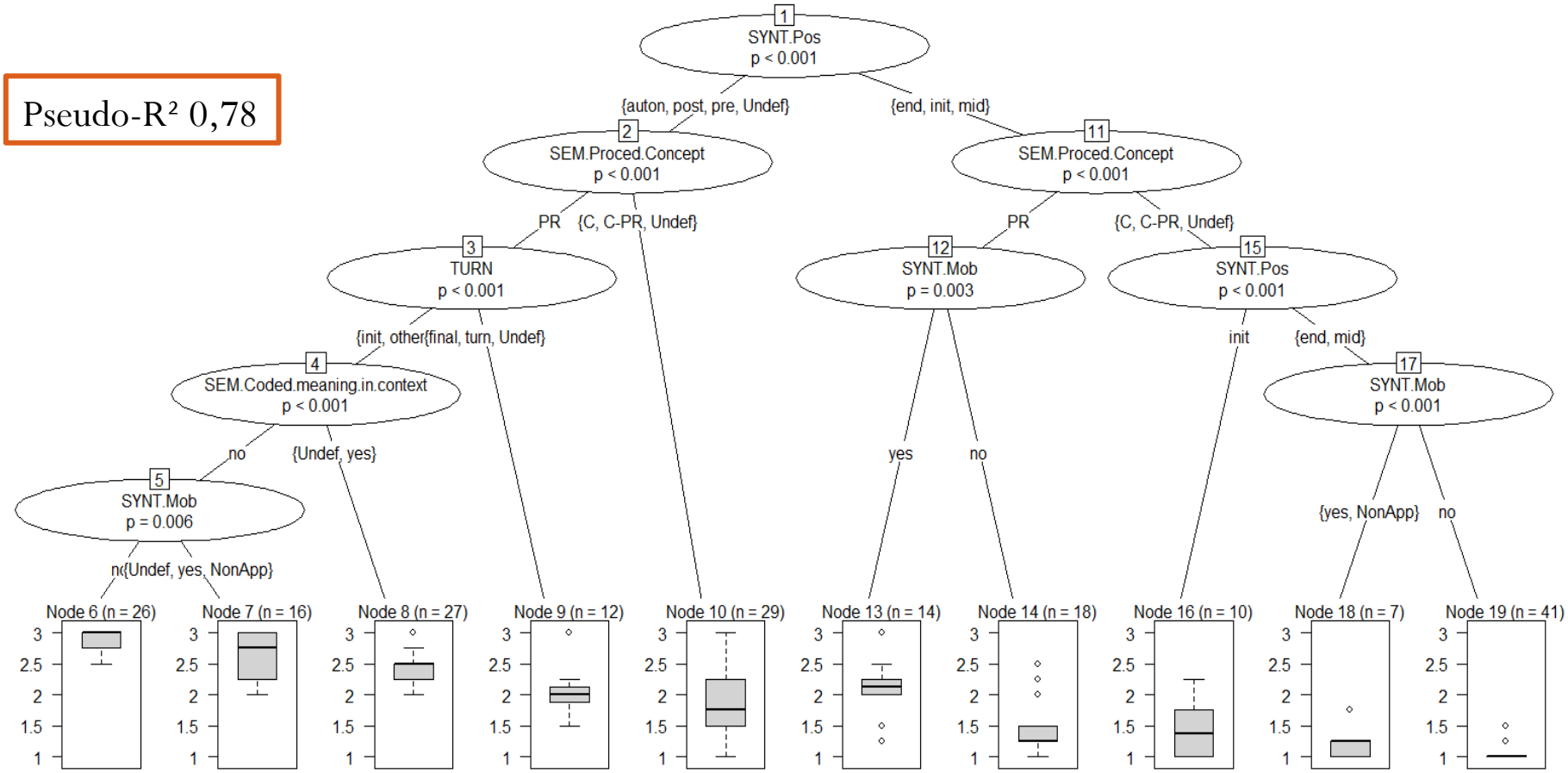
Ranking the variables



Procedurality removed because circular

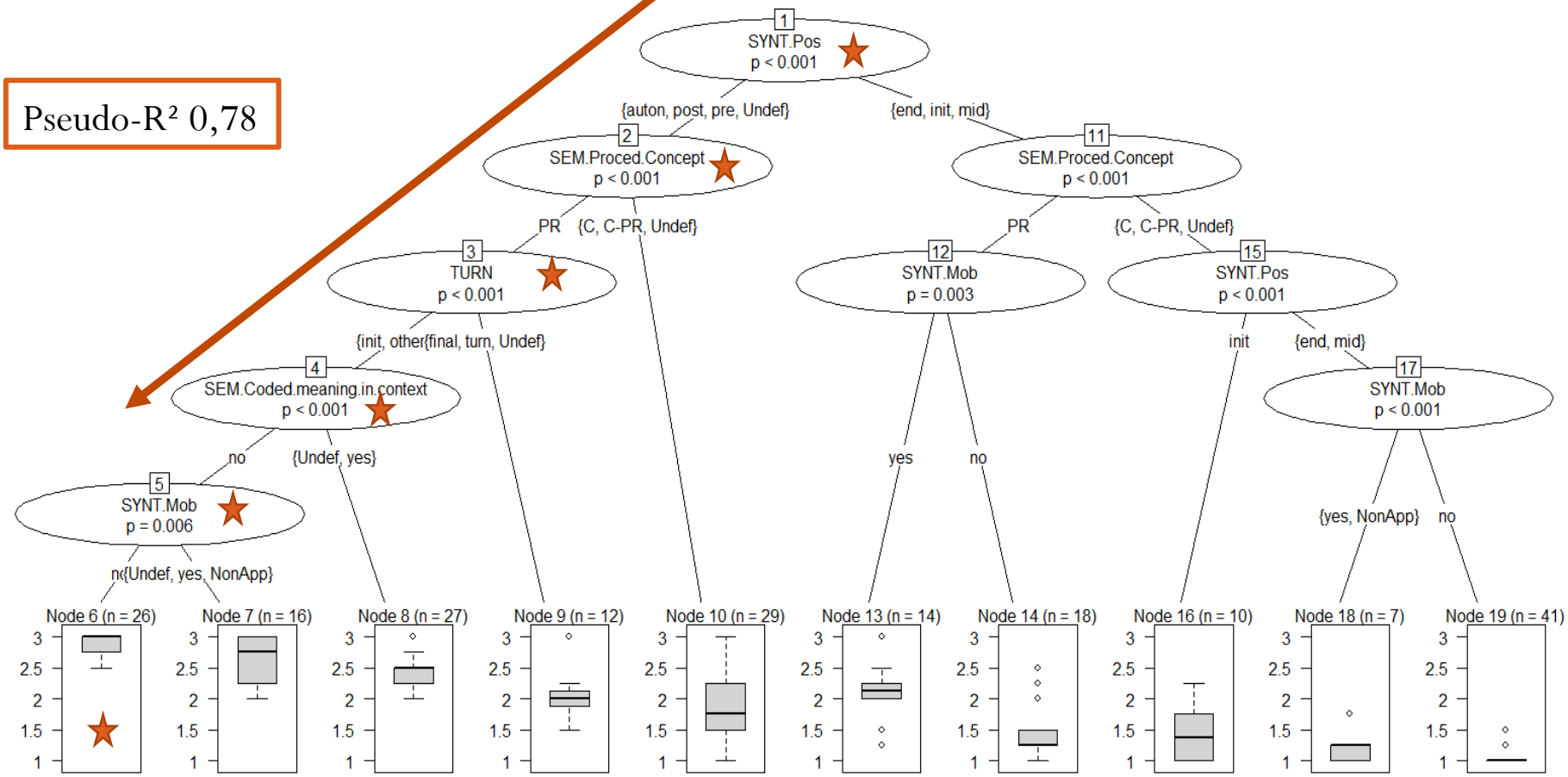
Predict DM status on feature patterns

Pseudo-R^2 0,78



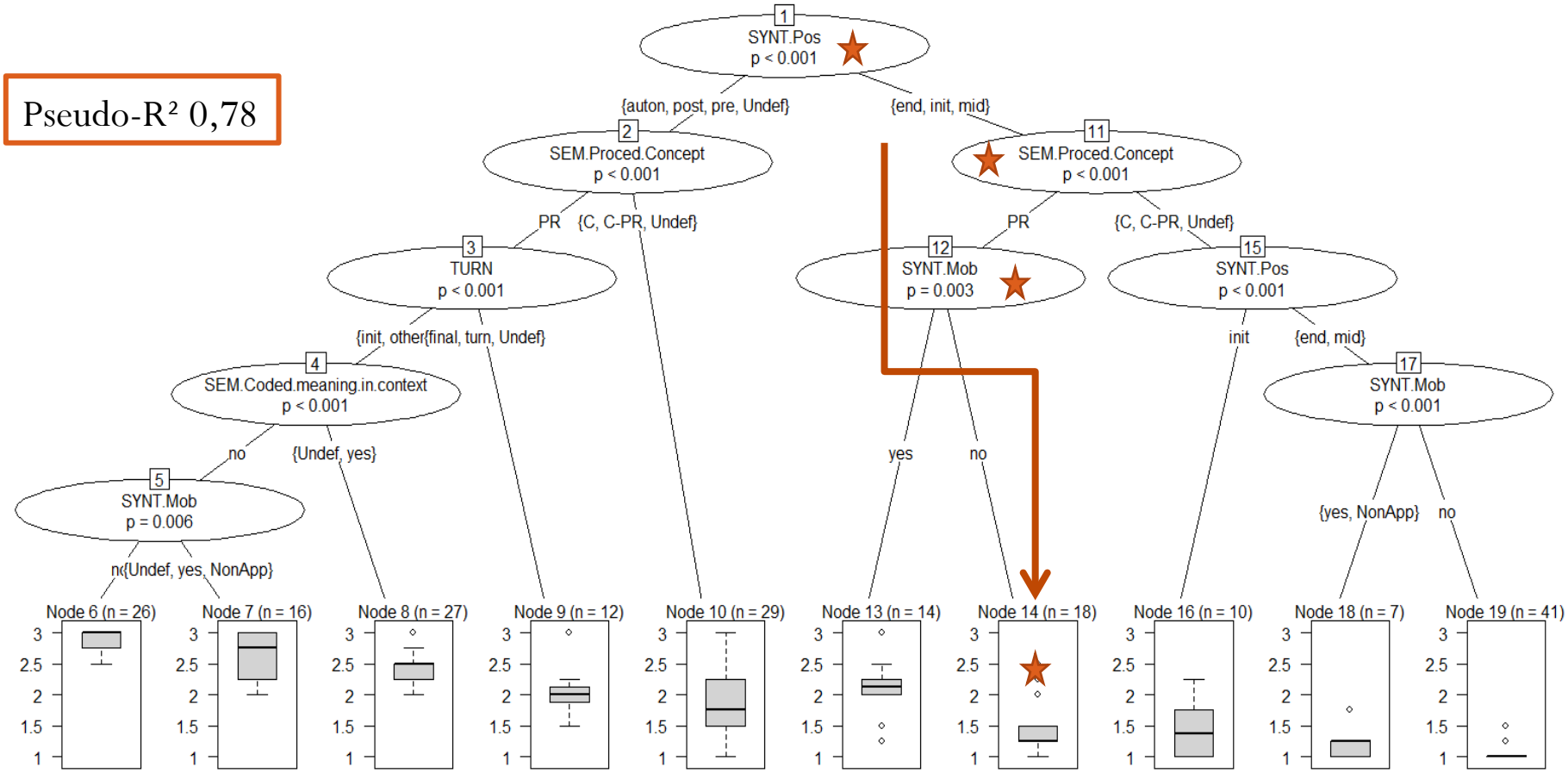
Predict DM status on feature patterns

Pseudo-R^2 0,78



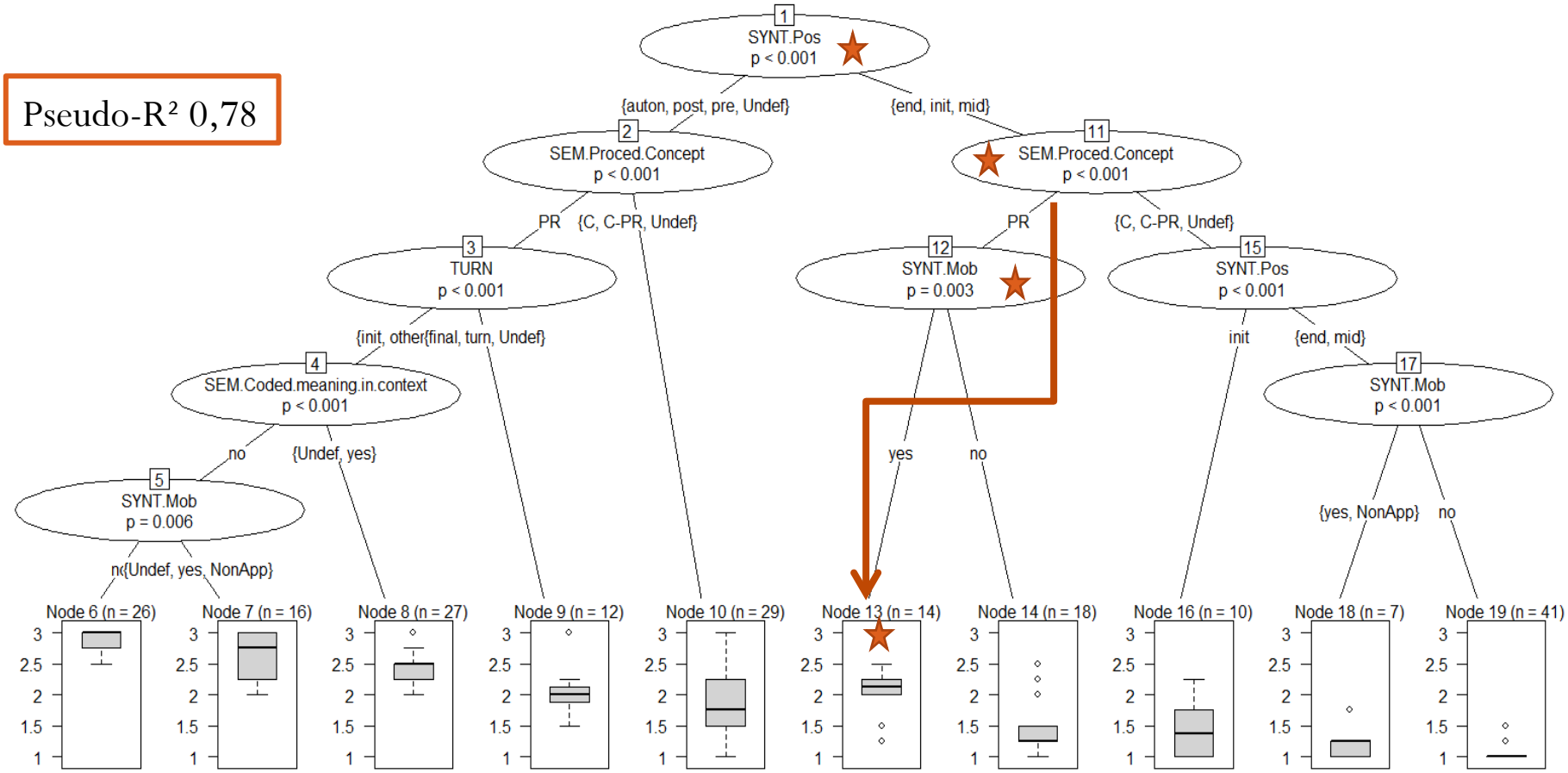
Predict DM status on feature patterns

Pseudo-R^2 0,78



Predict DM status on feature patterns

Pseudo-R^2 0,78



Confirmed vs discarded DMs

Typical features of confirmed DMs :

- Conjunctions > particles > adverbs
- Pre-field
- Not coded meaning
- Procedural meaning

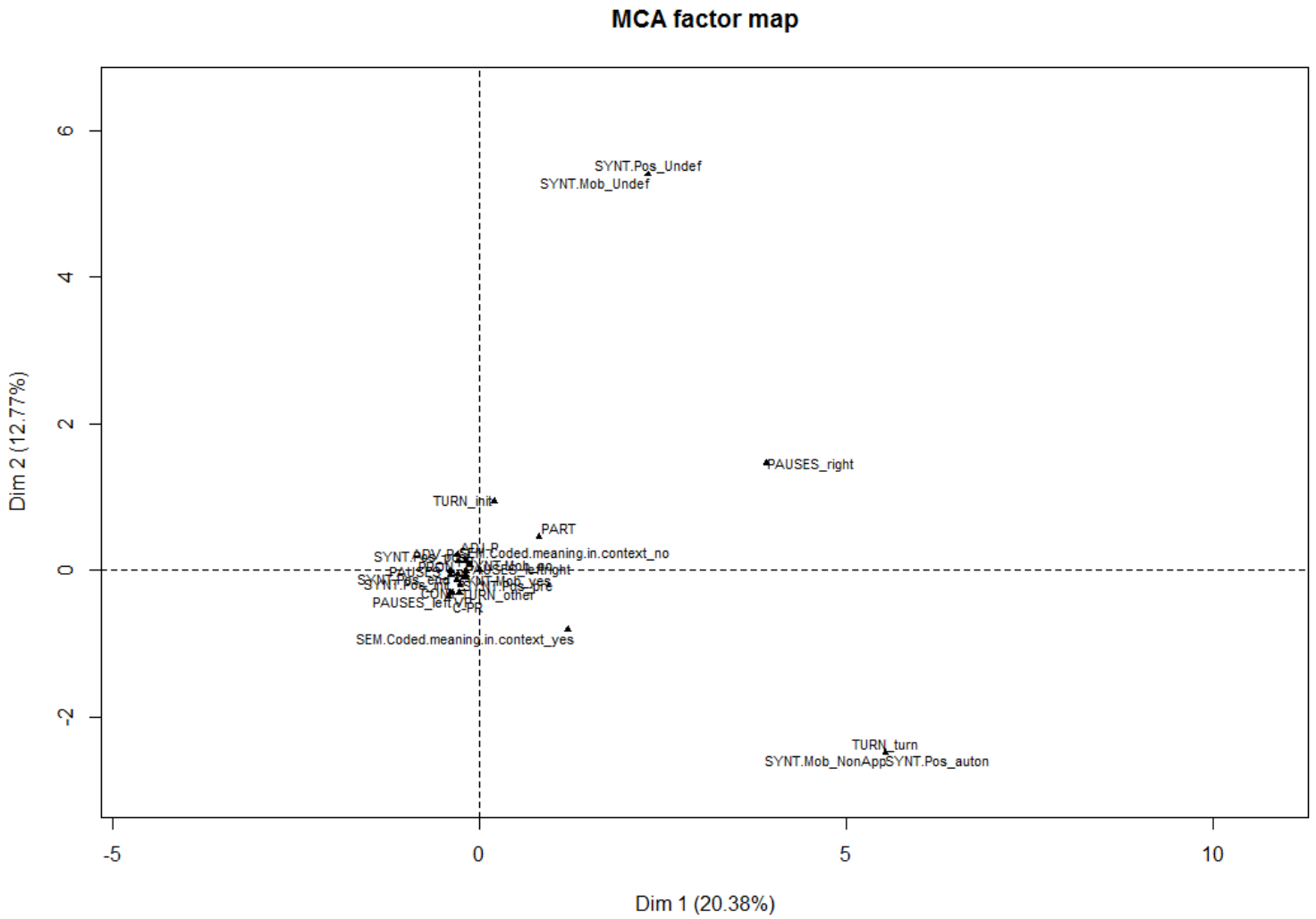
et alors c' est très compliqué de pouvoir régler ces problèmes ***donc*** *c' est même je dirais c'est presque plus du français*

Typical features of discarded DMs :

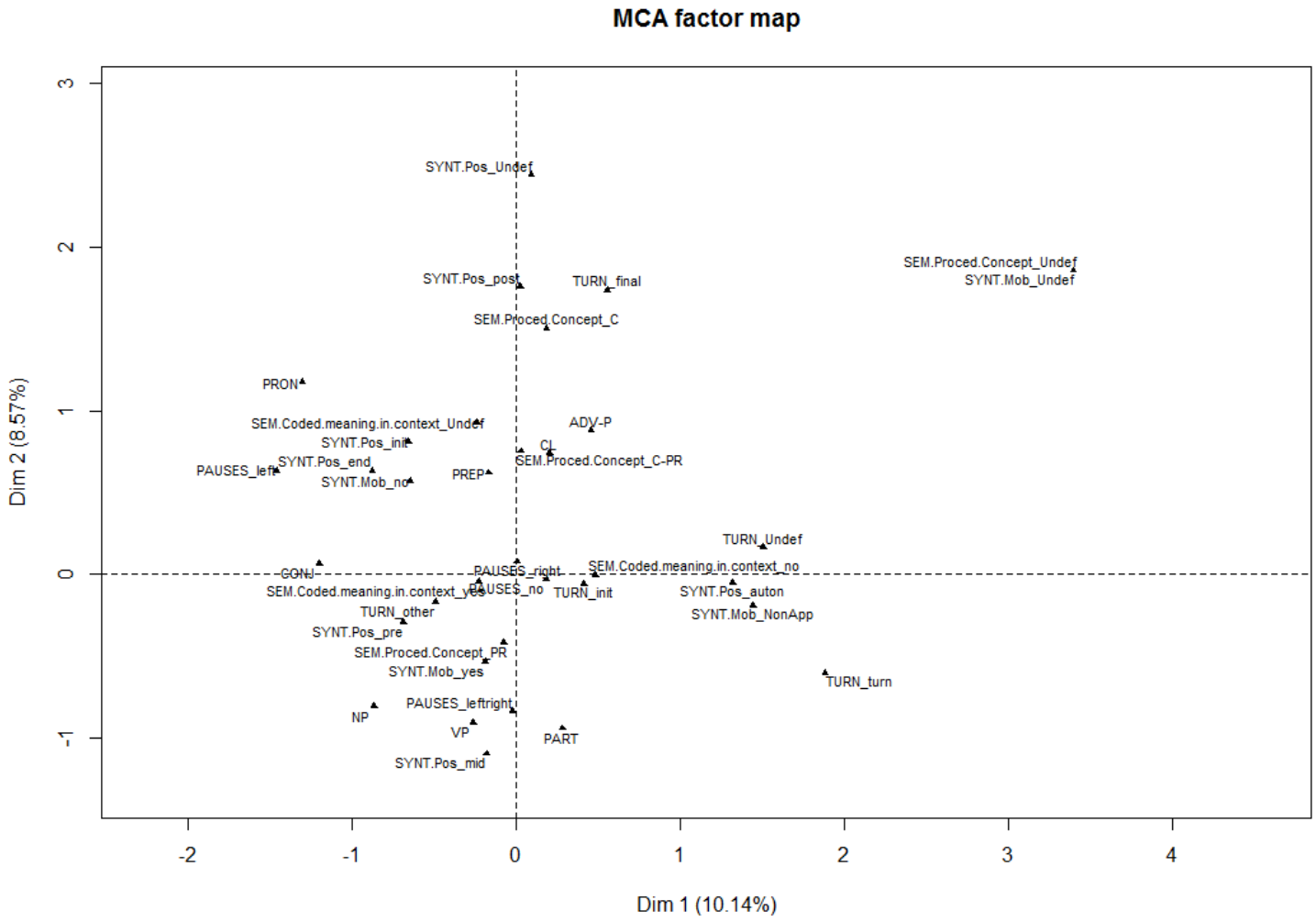
- Adverbs > pronouns > VP
- Middle field, end field
- Coded meaning
- Conceptual-procedural

j' aimerais ***bien*** *travailler dans ce genre de matériel*

High-profile clusters of features



Borderline clusters of features



Borderline cases

From 1.5 to 2.5 (included) degree of certainty

- Other PMs ?
  - Modal adverbs : *vraiment, encore, bien sûr*
  - Response markers : *c'est ça, c'est juste, oui, non, voilà*
  - Hesitation particles : *euh*

- Typical features :
  - Autonomous position
  - Procedural meaning

Conclusion : a confirmatory method for operational annotation scheme

- Novelty of the approach to both DMs and their propositional (non-DMs) equivalents
- Provides corpus-based validation of the annotation model and its parameters
- Visualization of clusters of co-occurring features

DMs profiling

- Corpus-based profiles of typical features
  - Intuition-based potential DMs either confirmed or discarded
  - Borderline cases : different types of pragmatic markers

- Overall, syntactic position stands out as most predictive
  - Pre-field, i.e. not integrated : main difference with MPs

Perspectives

- Functional annotation (forthcoming)
  - same method but for confirmed and potential DMs only (>1,5)
- Test-bed for application of our corpus-based scheme to other data types :
  - Other corpora, genres, languages, modalities
- Semi-automatic annotation ?
  - Surface features : more objective
  - Still difficult to automate

References

Aijmer, K. 2013. *Understanding pragmatic markers. A variational pragmatic approach*. Edinburgh University Press.

Bolly, C. & Crible, L. (submitted). « From context to functions and back again: disambiguating pragmatic uses of discourse markers ». Paper submitted to the 14th International Pragmatics Conference (IPrA), July 26-31, Antwerp, Belgium.

Brinton, L. 2008. *The comment clause in English: Syntactic origins and pragmatic development*. Cambridge : CUP.

Crible, L. 2014. « Selection and functional description of discourse markers in French and English: Towards crosslinguistic and operational categories for contrastive annotation ». Paper presented at the International Workshop "Pragmatic Markers, Discourse Markers and Modal Particles: What do we know and where do we go from here?" October 16-17, Como, Italia.

Degand, L., Cornillie, B., Pietrandrea, P. 2013. *Discourse markers and modal particles. Categorization and description*. Amsterdam : John Benjamins.

Hansen, M.-B. M. 2006. « A dynamic polysemy approach to the lexical semantics of discourse markers (with an exemplary analysis of French *toujours*) ». In K. Fischer (ed.), *Approaches to discourse particles*. Amsterdam : Elsevier. 21-41.

Lindström, J. 2001. « Inner and outer syntax of constructions: the case of the *x och x* construction in Swedish ». Paper presented at the 7th International Pragmatics Conference, July 9-14, Budapest, Hungary.

Uygur-Distexhe, D. 2012. « *Lol, mdr* and *ptdr*. An inclusive and gradual approach to discourse markers. » *Linguisticae Investigationes* 35/2, 389-413.


THANK YOU
D1
D2
-1 * Certainty
-1.0
-1.5
-2.0
-2.5
-3.0
1.0
0.5
0.0
-0.5
-1.0
-0.5
0.0
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