

Kristel Van Goethem

F.R.S.-FNRS & Université
catholique de Louvain

kristel.vangoethem@uclouvain.be



A
constructionist
view on
language
innovation.
Some key issues

Introduction

- Googling “key + Greece” on news.google.com:

- (1) **Key issues** separate Greece and creditors (Irishtimes.com, 2015)
- (2) **Key dates** in Greece's funding talks with euro zone (reuters.com, 2015)
- (3) *Même si son discours n'est pas toujours extrêmement précis, si ses raisonnements sont souvent spécieux, Tsipras intéresse et séduit. Et pas que les électeurs grecs ! Depuis une semaine, il fait les gros titres des journaux du monde entier. Car dès dimanche soir, il pourrait devenir une nouvelle **figure clé** de la scène européenne.* (challenges.fr, 2015)
- (4) *Wolfgang Schäuble, le ministre des Finances allemand qui joue un **rôle-clé** dans le feuilleton grec, est un vétéran de la politique respecté, profondément pro-européen mais inflexible sur le respect des engagements et manifestement à bout de patience avec Athènes.* (lepoint.fr, 2015)

Introduction

- Two problematic issues:

1. Specific semantics of 'key' within the compound pattern ('very important')

2. Lack of cohesion attested in 'innovative' uses in English and French:

- (5) *By enacting some of the reforms that the Eurogroup has been demanding, such as privatizing **key state assets** and creating a business-friendly environment, not only can Greece give the economy and job market a boost, but in return the EU may loosen some of its other demands (...) What's more, while **the May 12 deadline is key** to ensuring that Greece gets the last installment of its bailout and avoids a default (...)* (eurasiareview.com, 2015)

- (6) *Dans « Mali, ô Mali », il [Erik Orsenna] aborde notamment les thèmes de l'éducation et de la surnatalité. « **La question de la démographie est absolument clé.** Je le dis aux mamans : deux trois enfants, OK, mais huit, ce n'est pas possible. (...)* » (leparisien.fr, 2014)

Introduction

- Two 'key' research questions:

(1) How to account for the specific semantic meaning within the compound pattern?

→ **Affixoids**

(2) How to account for the lack of 'bonding' of these 'compounds' in innovative language use?

→ **Debonding**

Introduction

- Brief comparison with Modern Greek:

- (1) Morphemes with specific semantics within compounds (affixoids)?

- [Cf. Ralli 2013, *ch. 11*; Dimela 2010]

- *ísia* 'straight'
 - directional adverb in SMG: *éla ísia káto* 'come straight down'
 - intensifying prefixoid *sio-/so-* in Cretan dialect (< *isi* + compound marker): *so-áspros* 'very white'

Introduction

(2) More and less cohesive compounds? Cline between compounds and phrases?

[Cf. Ralli 2013, *ch.12*; Koliopoulou 2009]

➤ Morphological compounds

- *frut-ó-krema* 'fruit cream'

➤ Phrasal compounds

- [N N_{GEN}] *kréma iméras* 'day cream'
- [A N] *psixrós pólemos* 'cold war'

Introduction

- ‘Phrasal-compound-like phrases’
 - Attributive [N N] structures: *léksi kliδί* ‘key word’
 - More syntactic than phrasal compounds
 - Non-head (*kliδί*) may vary and may not agree with the head
 - *Θέσι kliδί* position.NOM.SG key.NOM.SG
 ‘key-position’
 - *Θέσις kliδιά* position.NOM.PL key.NOM.PL
 - *Θέσις kliδί* position.GEN.SG key.NOM.SG
 - But no ‘debonding’ phenomena?
 - **i leksi, opos fenete, kliði tis ipoΘesis ine ...* ‘the word, as it seems, key of the case is...’

Outline

1. Theoretical framework

- *Construction Grammar*
- *Construction Morphology*
- *Affixoids and debonding*

2. Case study: debonding of French clé

1. Theoretical framework

1.1. Construction Grammar

[cf. Hoffman & Trousdale 2013, *Oxford Handbook of Construction Grammar*]

- A recent usage-based approach to language, language acquisition, and language change
- Language is a hierarchical network of constructions (i.e. conventional form-meaning pairings)
- Constructions are linked to each other by (vertical) inheritance and (horizontal) connectivity relations

1.1. Construction Grammar

- Constructions vary in size, complexity, and level of abstraction:

- Abstract grammatical patterns (schematic cxns):
e.g. transitive [S V O] construction
- Fully idiomatic expressions (substantive cxns):
e.g. *to kick the bucket* 'to die'
- Constructional idioms (semi-schematic cxns):
e.g. [*not X let alone Y*]

(7) *It was all right, if a bit messy, considering that I never ate Greek food before, **let alone** Greek food from an individual who calls himself Jimmy. (Google, 2002)*

- No strict boundary between grammar and lexicon
- Main focus on multi-word sequences with non-predictable (formal and/or semantic) properties

1.1. Construction Grammar

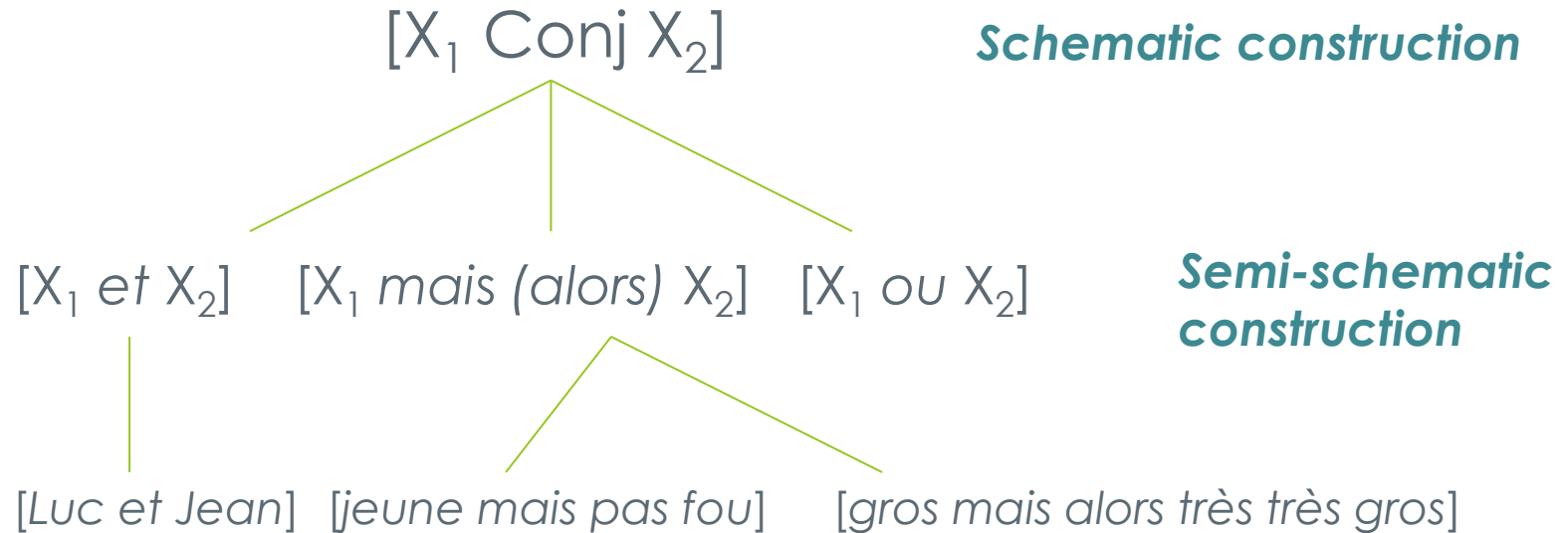
- Example: Coordinative construction with emphatic reduplication (Van Goethem et al. 2013):
 - French $[X_1 \text{ mais alors } X_2] \leftrightarrow \text{'really } X\text{'}$
 - (8) [...] *car la mort de ces 12 personnes montre bien à quel point nous avons un gros, **mais alors** très très gros problème avec l'idée même de ce qu'est la liberté.*
 'lit. a big, but then very very big problem'
 - (9) *Je ne comprends pas les Wallons **mais alors** pas du tout*
 (Corpus Valibel)
 'lit. I don't understand the Walloons but then not at all'

1.1. Construction Grammar

Different levels of abstraction:

- Schematic construction
[X_1 CONJ X_2]
- Semi-schematic construction/constructional idiom
[X_1 *mais alors* X_2]
- 'Unification':
 - [*gros mais alors très très gros*]

The constructional network (‘constructicon’)



1.1. Construction Grammar

‘constructional change’ / ‘constructionalization’
(cf. Hilpert 2013; Traugott & Trousdale 2013)

➤ Example: [*far from* X] construction (De Smet et al. 2015)

- Spatial complex preposition:

[[*far*]_A [*from*]_{Prep} [X]_{NP}]_{AP} ↔ ‘distant from X’

(10) *Green willow is a modern , fresh house set in a wonderful garden near East Preston village, not **far from** the sea.*
(UKCOW2011)

- Adverbial degree modifier (downtoner):

[[*far from*]_{Adv} [X]_{Adj}]_{AP} ↔ ‘not X at all’

(11) *But it is **far from** certain that this means that the public wish to see the strongest and most explicit images available on television (...)* (UKCOW2011)

1.2. Construction Morphology

- Application of Construction Grammar to words (cf. Booij 2010)
- Words (simple/complex) are systematic form-meaning pairings
- Nominal compounding in Germanic languages:
 - $[[a]_{xk} [b]_{Ni}]_{Nj} \leftrightarrow [SEM_i \text{ with relation } R \text{ to } SEM_k]_j$
 - Cf. Dutch *voetbal* 'football', *zwembad* 'swimming pool', *frisdrank* 'lit. fresh drink; soft drink', *het-gratis-wifi-op-de bus-gevoel* 'the free wifi on the bus-feeling'

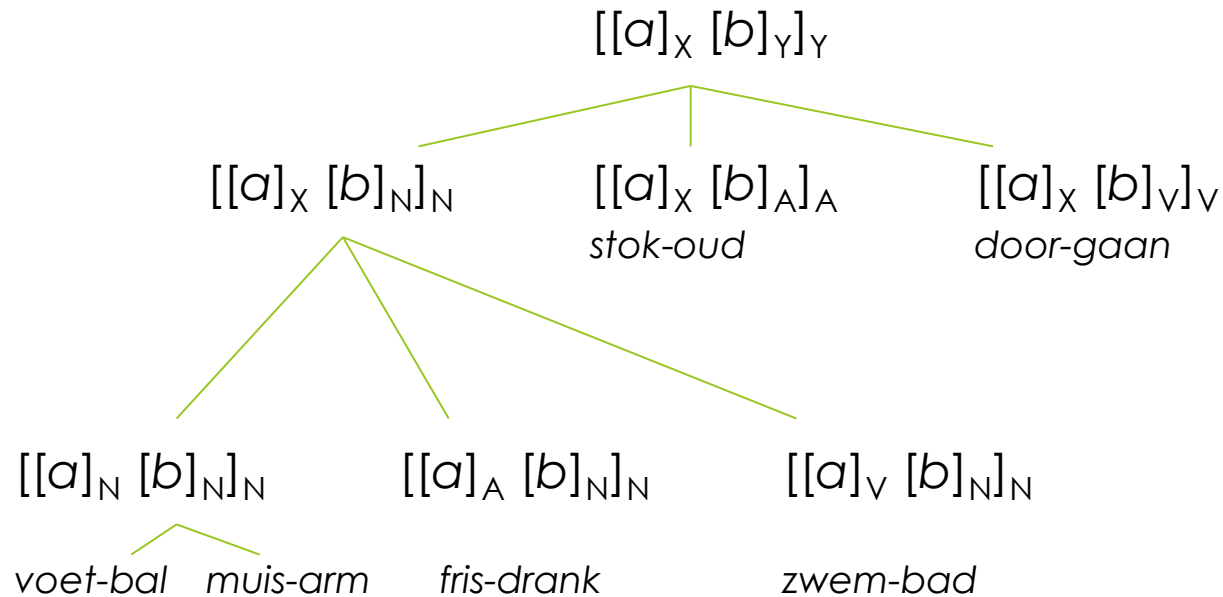
1.2. Construction Morphology

- Advantage: to account for non-predictable form and/or meaning aspects of specific subschemas
 - $[[a]_{N/V \text{ activity}} [b]_{N \text{ body part}}]_N \leftrightarrow \text{'(physical disorder of) body part b caused by (excessive) activity a'}$
 - Non-predictable semantics: 'physical disorder', 'excessive'
 - Productive word pattern in Dutch:

cf. *voetbalknie* 'lit. football knee', *tenniselleboog* 'lit. tennis elbow', *muisarm* 'lit. mouse arm', *ipad-schouder* 'ipad shoulder', *whatsApp-vinger* 'WhatsApp finger', ...

(Cf. Karsdorp & Hüning 2012)

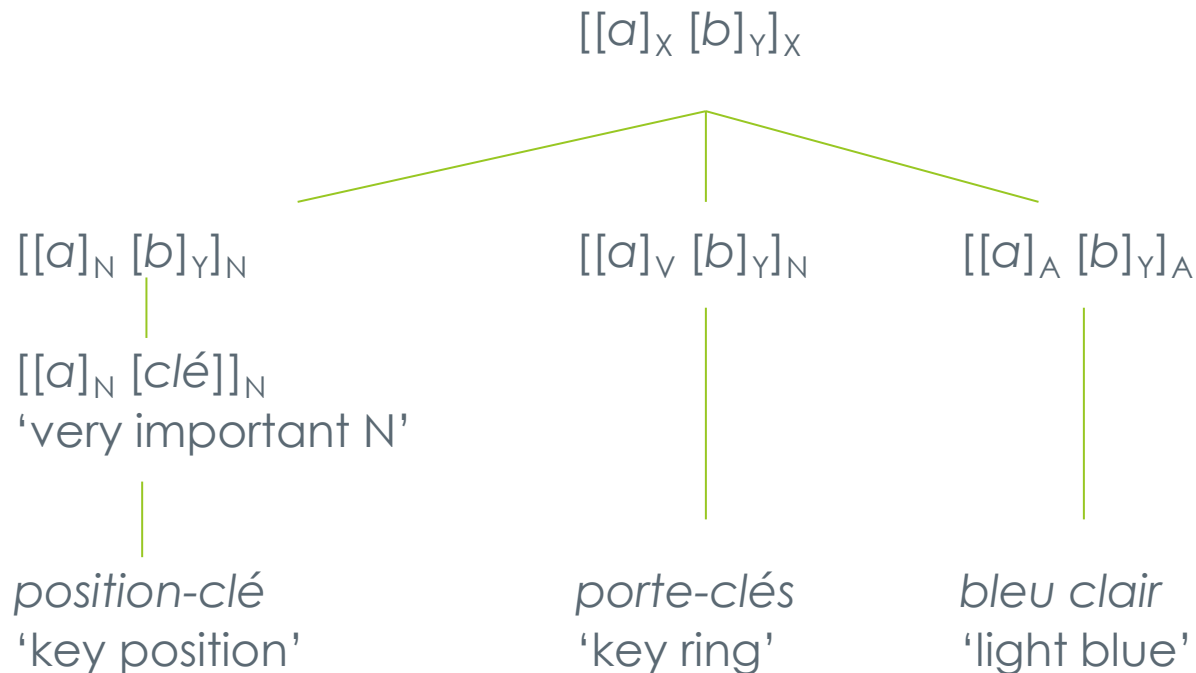
Compounding in Construction Morphology



1.3. Affixoids

- Morphemes that occur as lexemes but that have a specialized meaning when embedded in compounds (Booij 2010: 57)
- Compounding – derivation cline
- Affixoids as parts of constructional idioms
- Examples :
 - Dutch *reus* ‘giant’ > *reuzegezellig* ‘very cosy’
 → [[*reuze*] [*Adj*]]_{Adj} ↔ ‘very Adj’
 - French *clé* > *position-clé* ‘very important position’
 → [[*N*] [*clé*]]_N ↔ ‘very important N’

[[N][clé]]_N in the constructional network



1.4. Debonding

- “a composite change whereby a bound morpheme in a specific linguistic context becomes a free morpheme” (Norde 2009: 186)
- Cline from morphological to syntactic constructions
- Parameters:
 - *Severance*: bound morpheme > free morpheme
 - *Scope expansion*: scope over N > scope over NP
 - *Recategorization*: N > Adj
 - *Flexibilization*: attributive > predicative use

2. Case study: debonding of French *clé*

Cf. Amiot & Van Goethem (2012); Van Goethem (2015)

2.1. Examples *(GlossaNet, 2011)*

➤ **Severance:**

- (12) *Son annonce était diffusée depuis une ferme de Stratham, dans le New Hampshire, un Etat traditionnellement clé pour les primaires américaines.*
 '(...) a traditionally key State in the U.S. primaries'

➤ **Scope expansion:**

- (13) *Le Sénat irlandais a voté aujourd'hui un projet de loi de finances-clé devant permettre l'application du vaste plan de sauvetage international de l'Irlande (...).*
 '(...) a key financial reform proposal (...)'

2.1. Examples *(GlossaNet, 2011)*

➤ Recategorization:

- (14) (...) *il est difficile de prouver que des investisseurs ont acheté telle action à tel moment parce qu'ils avaient reçu une information "clé et confidentielle".*
 '(...) a « key and confidential » information'

➤ Flexibilization:

- (15) *Les Français et les Allemands sont les principaux créanciers de la Grèce et leur participation au plan voulu par l'Union Européenne est clé.*
 '(...) their participation to the plan advanced by the European Union is key'
- (16) (...) *il est clé d'avoir un programme de sécurité sociale pour les personnes pauvres (...).*
 '(...) it is key to have a social security program for the poor (...)'

2.2. A debonding cline

- Noun-adjective cline; gradual debonding:
 - Compound > attributive use > predicative use
 - [N *clé*] > [NP *clé*] / [N Adv *clé*] > [N *est clé*] > [*il est clé*]
- Very recent innovation, difficult to find diachronic support
- Synchronic support:
 - Frequency of the different constructions
 - Degree of acceptability
 - Scale from 1 (not acceptable) to 5 (fully acceptable)
 - Geographic variation?

2.3. Frequency (*GlossaNet*, 2011)

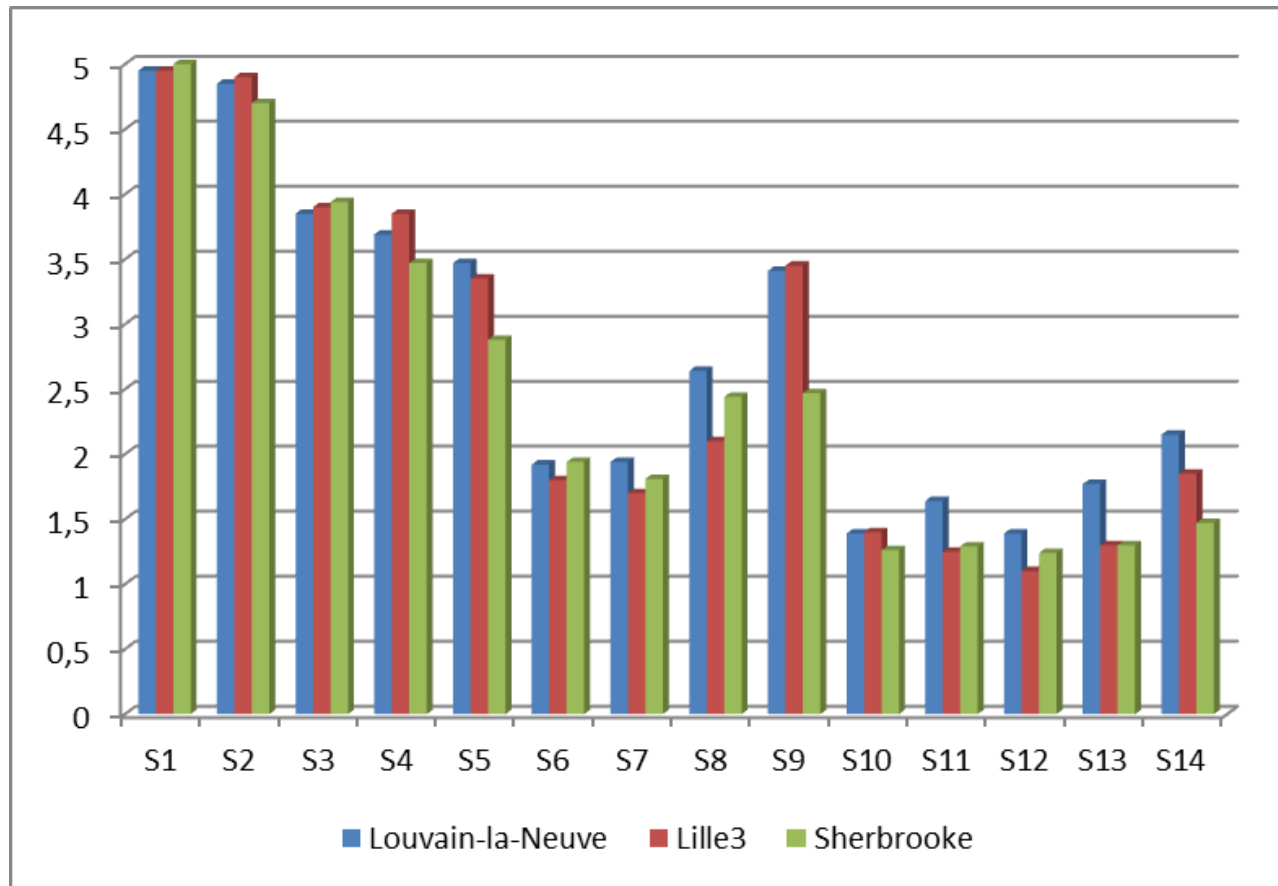
Construction	n	%
[clé] _N	538	53,8 %
[N(-)clé] _N	441	44,1 %
[clé] _{Adj}	21	2,1 %
• Scope expansion • Coordination with Adj • Adverbial modification	(14) (2) (1)	} 17/21 (81%)
• Predicative use	(4)	} 4/21 (19%)
Totals	1000	100,0%

2.4. Acceptability

(Belgian French, LLN, 2011, 66 students)

	Mean	Median	S.D.	
1. C'est la clé du succès	4.95	5	0.27	
2. C'est un secteur clé pour l'économie	4.80	5	0.61	
3. C'est un secteur clé et crucial	3.85	4	1.06	attributive
4. C'est un secteur économique clé	3.69	4	1.22	
5. C'est un secteur vraiment clé	3.47	4	1.21	
6. C'est un secteur plus clé que celui de l'économie	1.92	2	0.93	
7. C'est le secteur le plus clé de l'économie	1.94	2	1.05	
8. Ce secteur est clé pour l'économie	2.64	3	1.16	predi- cative
9. Ce secteur est vraiment clé pour l'économie	3.41	4	1.11	
10. Il est clé de participer au projet	1.39	1	0.70	
11. Il est clé que tout le monde participe au projet	1.64	1	0.83	
12. C'est clé dans le succès	1.39	1	0.89	
13. Cela est clé	1.77	1	1.01	
14. C'est vraiment clé	2.15	2	1.19	

2.5. Geographic variation



2.5. Geographic variation

- France (Lille, 20 students)
 - Results comparable to Belgian French
 - Slightly more positive attitude towards the attributive uses
 - More negative attitude towards the predicative uses
- Quebec (Sherbrooke, 34 students)
 - Most conservative attitude
 - Instead of English influence, we notice a more protective attitude
 - Illustration (language specialist at Radio Canada, 2009):

Cette mesure est-elle vraiment clé?

« Le mot clé peut être employé en apposition, avec ou sans trait d'union, pour parler d'une chose très importante. On peut dire, par exemple : Un poste-clé, des mots-clés, un témoin-clé, etc. En revanche, **le mot clé ne peut pas être utilisé comme épithète ni comme attribut**. Ici, il aurait mieux valu dire : Cette mesure est-elle vraiment essentielle, vitale, indispensable, déterminante, capitale, etc. Et bien sûr, on pouvait dire : Cette mesure est-elle vraiment une mesure-clé. »

2.6. A constructional account

- Multiple inheritance:

The way in which this grammatical knowledge is organized is as a TAXONOMIC HIERARCHY (Croft, 2001, p. 25), which connects constructions at different levels of schematicity. In this hierarchy, each construction is an instance of a more schematic construction **where typically, constructions are linked to more than one parent construction**, and the more specific constructions inherit properties from the more general constructions, via a “downward spreading of facts” (Hudson, 2007, p. 21). This is called MULTIPLE INHERITANCE. »

(Trousdale & Norde 2013: 35)

2.6. A constructional account

2 phases in the ‘constructionalization’ of $[[N] [clé]]$:

1. Creation of a morphological semi-schematic construction

$[[X]_N [clé]_N]_N \leftrightarrow$ ‘very important X’

2. Multiple inheritance

Morphological construction

$[[N] [N]]_N$
position-clé

Syntactic construction

$[[N(P)] [A(P)]]_{NP}$
position (vraiment) importante



$[[N] [clé]]_{N/NP}$
position vraiment clé

2.6. A constructional account

- Result: hybrid construction
 - Frequent adverbial modification (*position vraiment clé*)
 - Resistance towards predicative use (*cette position est clé*)
 - Gender inflection is very rare (*?position clé*)
- Clé in-between N and Adj
- Synchronic gradience as a result of gradual diachronic change (Denison 2001; Traugott & Trousdale 2010)

3. Conclusions

Conclusions

- French *clé* displays **synchronic categorial gradience** (N-Adj cline)
 - even if not all constructions are equally accepted by young native speakers of French;
 - even if the degree of acceptability of the innovative constructions is subject to geographic variation.
- From a constructional point of view, the hybrid nature of the [[N][*clé*]] construction can be accounted for by '**multiple inheritance**' from both a morphological and a syntactic parent construction.
- The idea of 'multiple inheritance' can be seen as the synchronic representation of the **complexity of language change**:

[I]nnovations in language change may derive not just from one, but from different source constructions at once. That is, change often seems to involve some interaction between lineages or between different branches of a lineage (Van de Velde, De Smet & Ghesquière 2013: 473)

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 - GlossaNet : <http://glossa.fltr.ucl.ac.be/>
 - Corpus Valibel: <http://www.uclouvain.be/valibel-corpus.html>

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Kristel.vangoethem@uclouvain.be

<https://uclouvain.academia.edu/KVanGoethem>