SFB 732 / B5.3

February 2, 2013
1. Link everything to ONE common theme: inference
   - How does prefixations contribute to disambiguate the root? Link with diachrony? acc/dative alternation.

1.1 New: diachronic work package

Research questions: closely related to the synchronic questions presented in the previous B group meeting.

1.1.1 Motivation

1. Personal: Nicolas Mazziotta’s profile and interests: research on with Old French (OF) and publications on OF syntax.
2. Strategic: Diachronic approaches are popular in Romance linguistics: in phase 1 and 2, experts were Romance linguists (G. Kaiser, S. Pfänder).
3. Theoretical: contribute to the explanation of the rise of inferences
   - Do we have an upfront ambiguity, i.e. when verbs/structures occur for the first time? Or is ambiguity triggered pragmatically (e.g. invited inferences), then lexicalized?
   - Diachronic analyses may also contribute to the typology of inferences.

1.1.2 Methods

- Connect synchronic and diachronic resources:
  - e.g. LVF (Mod. French): extract verb classes, then analyze representative verbs in Old French (OF)

1.1.3 Research questions

1. Tense:
• The disambiguating role of past tense: When and in which contexts did passé simple and passé composé develop their modern interpretation with regard to implicativity (???): e.g. passé simple = implicative. How do past tense and stative verbs (modals and others) interact? (cf. Bittar: annotation of modals in corpora). E.g. does the passé simple have imperfective interpretation? (il a été heureux). If so, how is perfectivity vs. imperfectivity distinguished in OF. Tense concord: Which inferences are triggered e.g. in hypotheticals and subordinates of verba dicendi? Subgroup of verbal periphrases that are (a) sensitive to tense oppositions and (b) interact with the properties of the main verb (*il s’est mis à m’étonner).

2. Complex predicates in synchrony (e.g. ?) and diachrony.

3. Alternations
• accusative vs. prepositional/dative (toucher OBJ vs. toucher à OBJ). Also: suivre, obéir
• inaccusatives: unmarked vs. reflexive marker (?): no distinction today (Martin/Schaefer:PAPER) TODO: DÉFINIR LE FIL ROUGE AVEC LE PROJET

1.2 Cooperation

Internal:
• Projet Reyle/Riester: IS and inferences
General research questions

- Phase 2: “assumption of well-behaved standard data”: we take the given meaning distinctions (in *Les verbes français, LVF*) as a base.
- Phase 3: “focus on search”: towards a more dynamic assessment of interpretation criteria, which modifies the default properties of a concept (or conceptual class) of a category (e.g. tense affix) according to context factors (tense, mode, affixation, argument structure)

2.1 Linguistics

B5 aims to build a finer-grained typology of inferences triggered by French verbs in context, especially those relevant for the *textual entailments* and a.o. the *event factuality* of the discourse in which verbs are used, and to account for these inferences in a cross-linguistic perspective. This supposes to investigate (i) the relevant lexical properties of verbs under study and (ii) the properties of contexts taken into account.

2.1.1 Which verbs?

In the 3d phase, we want to focus on three kinds of verbal predicates.

**Firstly**, we want to identify and investigate ‘sublexical modal’ verbs (other than defeasible causatives), that is verbs that have a modal component without being plain modal verbs. This includes (i) ‘sub-abilitative modal verbs’ (ex.: bâcler ‘to dash off’, which implicates that the subject was able to perform the job done better than she did), (ii) ‘sub-deontic modal verbs’ (e.g. mettre à+inf., which implicates in some context that an implicit agent $x$ has to perform the action described by the inf., or *confisquer*, which implicates that the subject exerts a deontic control on the object) (iii) *let*-verbs, etc.. We want to identify the different kinds of sublexical modalities involved and identify which contextual parameters contribute to specify the nature of the modal base.

**Secondly**, we plan to focus on another kind of verbs whose contribution to textual entailment is crucial, namely *evidential verbs* (*trouver* ‘find’, *détecter* ‘detect’, *estimer* ‘consider’, *mésestimer* ‘undervalue’, *considérer* ‘consider’, *déconsidérer* ‘disconsider’, *décéler* ‘detect, reveal, indicate’, *indiquer* ‘indicate’, *découvrir* ‘discover’...). We want to investigate the inferences triggered by these verbs wrt (i) the truth of their complements (ii) the attitude adopted
by the subject wrt this complement. We also want to delineate ‘plain evidential verbs’ from ‘sub-evidential verbs’, that is verbs that do not directly refer to a cognitive act/attitude, but nevertheless trigger inferences about the kind of knowledge/evidence the speaker (or another cognitive agent) has on the event described. For instance, a subclass of object experiencer psych-verbs (e.g. effarer) strongly indicate that the occurrence of the emotion was the object of a direct perception rather than indirectly inferred. Again, the evidential component of these predicates varies with the context in which they are used and the relevant contextual parameters have to be identified and explained.

**Thirdly**, we want to investigate ambiguities similar to the one displayed by ‘defeasible causatives’ (among others the ambiguity between the culminating and non-culminating accomplishments, verbs displaying the direct/indirect object alternation, cf. ?) in a cross-linguistic perspective and see if a unified theory of these phenomena is possible.

### 2.1.2 Which contexts?

**Outer aspect**

We plan to pursue our on-going work on the contribution of outer aspect on event factuality in French. Firstly, we plan to investigate under which conditions perfect(ive) morphology can receive an imperfective interpretation. This is important to understand if we want to know whether the discourse entails the occurrence of a completed event or of a partial event only. This requires (i) to identify the lexical properties which licence/block such an interpretation (see e.g. the difference between gradable vs non-gradable accomplishments) (ii) to identify the contextual features which allow such an aspectual shift. For the latter point, we wish to investigate the interpretation of perfect(ive) vs imperfect(ive) morphologies through psycholinguistic experiments with children and adults with the Universities of Nantes and Paris 8 (e.g. in the line of ?, ?, and ?). Secondly, we want to understand under which conditions the imperfective morphology can receive a counterfactual interpretation (cf. ?). Thirdly, we will continue to investigate how aspect/tense morphology contributes to the interpretation of present and past (indicative and subjunctive) conditionals in French. This also directly influences the factuality of a text: for instance, conditionals with a passé simple in the protasis \( p \) tend to be interpreted as ‘factual conditionals’, e.g. conditionals presupposing the truth of \( p \) (and thus presupposing the occurrence of the event described in the protasis). This requires a more detailed investigation of (i) Sequence of Tense phenomena in French (ii) the counterfactual use of the imparfait (which can replace the conditionnel 2 in certain contexts) (iii) the possibility to interpret a conditionnel 2 as a conditionnel 1 (cf. ?).

**REACTIONS**

- **B4**: Iff -ung nominalization has a target state reading, this reading is also available with the German Zustandspassiv.
- **B6/Florian**: general cover term missing? Hans: why not take entailment?

**Morphology**

**Affixed and reflexive verbs**  Through the second phase, B5 initiated a collaboration with B6 on the difference between marked and unmarked causative verbs. This work made clear that one has to investigate further the role of affixes in the syntax/semantics of verbal
predicates. We aim to pursue this work in several directions. **Firstly**, we want to explain the not so rare exceptions to the rule according to which verbs prefixed with en-, a- and é- reject intransitivity. A related **second** task is to identify how these morphological pieces contribute to the syntax and semantics of the predicate when not used as transitivizers. This task will be pursued in a cross-linguistic perspective (differences between p-verbs within the Romance area and between p-verbs and Romance and Germanic languages). **Thirdly**, we want to provide clear(er) diagnoses for (i) the difference between unergative vs unaccusative verbs in French as well as (ii) for the disambiguation of the reflexive in French (e.g. through the study of the three different French translations of by itself, namely de lui-même, par lui-même and tout seul. On this point, we will focus on the class of psych-verbs, of which a subset only requires the reflexive form when used intransitively, for reasons that remain to be identified (compare Marie s’éclate ‘Marie is enjoying’ vs Le ballon (s’) éclate ‘the balloon is bursting’ on one hand, and Marie (s’) hallucine ‘Marie is hallucinating’ on the other). We also want to identify new uses of reflexive (resp. non-reflexive) forms of intransitive verbs in corpora (for instance, under the intransitive reading, grelotter is nowadays often used with a reflexive marker, and se planter is often used without the reflexive) and see what motivates these shifts.

**Nominalizations**  The nominalizations of predicates under study are very interesting to investigate because they can contribute to delineate the contribution of the root (shared by related words of different categories) from those of the other morphological pieces involved. **Firstly**, building on previous works of B1, B2 and B5 on the syntax and semantics of nominalizations and nominalizing suffixes, we will investigate the morpho-syntax and semantics of two kinds of nominalizations which often tend to keep only one of the two readings of the related verb, namely **psych-nominalizations** and **nominalizations of defeasible causatives** (cp. l’éclatement du ballon ‘the bursting of the balloon’ vs l’éclatement de Marie ‘the enjoyment of Marie’; l’authentification de l’expert ‘the expert’s authentication’ vs de la signatureextarg ‘the signature’ authentication’; # l’encouragement se lisait sur son visage ‘the encouragement could be read on her face’), and see whether/why/how the nominalizing process disambiguates. **Secondly**, we want to explain why affixed verbs tend to select other nominalizing suffixes than the corresponding ‘bare’ (non-affixed) verbs (couchage vs *accouchage, accouchement vs # accouchage), and why it is more difficult to convert affixed verbs than bare verbs with zero suffixation (cf. chemin vs *achemin, cri vs décri, cumul vs *accumul, but af-flux, dis-crédit).

**2.2 Resources**

**2.2.1 Les verbes français**

Since semantic analysis are usually too fine-grained to produce large-coverage resources, the results from the different research tasks will be represented by two levels of granularity:

1. in full detail, as described in the publications

2. at an abstract level, where only a subset of the theoretical distinctions is considered, as annotated in LVF

**2.2.2 Corpus annotation for French (silver standard?)**

One corpus, multi-layer annotation:
• document differences between ±augmented dependency parsing
• annotate predicate classes and truth values of complements
• annotate types of accomplishments (±culminating)

2.3  CL Resources and cooperation with IMS

2.3.1  D8 / Kuhn

status: to be discussed with D8

1. Dependency parsing augmented by verb class information, taken from LVF and further resources.
   • simple = using the Bernd Bohnet’s parser: add some information types already present in LVF to a training corpus: (a) per meaning: subcat frames, (b) per verb: alternation types, e.g. anti-causatives
   • complex = using Wolfgang Seeker’s ILP parser, e.g. to encode and account for specific constraints on verb frames

2. Dependency parsing and coordination:
   • B5.2: semantic relation ~ type of coordination
   • coordination of verbal heads (vous vous êtes battus et même combattus) vs. verb phrases
     (2.1) il a [bu et dégusté] son café
     (2.2) il a [mangé] et [dévoré ses carottes]

2.3.2  DX / Schulte im Walde

status: to be discussed with DX (scheduled 12.12.2012)
3.1 Event factuality

Focus: verbal/ event-nominal predicates that are ambiguous between resultative and non-resultative readings, i.e. that either entail the occurrence of a (partial or total) result or not.

General question: what are the factors that contribute to disambiguate these predicates and how do these factors interact?

Examples of more specific questions [> results B5 and collab. B5/B6]

- Typology and definitions of the relevant resultative/non-resultative readings (failed attempt, partial success, etc)
- Cross-linguistic study of the differences between (i) culminative and non-culminative readings of accomplishments and (ii) defeasible and non-defeasible causatives. Is a unified theory of these ambiguities possible?
- How do these ambiguities reflect in the nominal domain?
- What is the role of outer aspect in the disambiguation of these predicates? In particular, for languages like French, we want to investigate when accomplishments sentences with perfect(ive) tenses get a non-culminating interpretation (as reported in some recent experiments)
- More specific related questions on perfect(ive) vs imperfect(ive) markers (e.g. what is the semantics of perfective/imperfective morphemes in conditionals and SOT contexts in French?)

3.2 The causative/anticausative alternation

Theoretical questions:

- Revisiting the differences between unaccusative and unergative verbs in French (the standard diagnostics are often quite problematic)
- Delineating the different readings of the reflexive marker [> results from B6 and collab. B5/B6]
  - identification of the indicators
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- competition between the different readings for a same verb
- identification/ study of shifts between reflexive and non-reflexive uses in corpora (grelotter→se grelotter, se planter→planter; "not in dictionaries but often found")
- Study of the morpho-syntax/semantics of reflexive vs non-reflexive subject experi-encer verbs (e.g. what is at the source of the three classes of SEPVs, the reflexive marker being either compulsory, optional or impossible?)
- Study of the morpho-syntax/ semantics of psych-nominalisations in French [ > results from B1, B5, B6 and B7]

Related computational tasks:

- Enrichment of the LVF database (association of a hierarchy of reading preferences for the reflexive form of each verb)
- Automatic extraction of neologisms (new uses of reflexive or non-reflexive forms) in corpora
- Automatic identification of potential list of anticausatives/unergative verbs in French:
  - Identification of the two sets in a 'non'-problematic language like German
  - Identification of the most common French translations through parallel corpora like Europarl
- automatic identification of cases where a reflexive form translates a passive in another language in Europarl
- automatic identification of cases where a passive form translates a reflexive form in another language in Europarl

3.3 Affixation in the verbal and nominal domains in Romance languages

Theoretical questions [ > results from B4 and on-going B5.2 work]

- On the morphosyntactic side: What kind of morphemes are prefixes in French/ Spanish? parts of discontinuous morphemes? verbalizing heads? aspectual affixes?
- On the semantic side: What are their semantic (incl.aspectual) value? Does affixation affect the scale associated to the verb?
- Comparison between p-verbs in Romance and Germanic languages (eg. Do French verbs sometimes instantiate the satellite-framed pattern, as recently claimed by Kopecka?)
- How do the differences between p-verbs and related bare verbs reflect in the nominal domain? [ > results of B5.1/2, B4.1/2, B2.1, B.1, B.6]
  - what are the factors that explain the difference in the choice of the nominalising suffix for bare and related p-verbs: couchage/*couchement vs accouchement/#accouchage, litage/*litement vs aliment/*alitage? why is arraisonnage much more frequent in corpora than raisonnage? why do we have asservissement but not *servissement?
– does the presence of the prefix affect the possibility to build a non affixed noun? Why do we have af-flux/ dé-crédit but not (*a)-chemin/ (*dé)-cri or (*ac)-cumul? Why don’t we have *déconseil after conseil? Why do we have découvert (financier) and not découverture (financière) (while we have couverture/# couvert financier)?
– ...

Methodology:

- Study of the history of affixation in French
- Study of the polysemy of affixes at study through experiments on the interpretation of pseudo-words

Related computational tasks:

- Development of the 'morphologized' version of the LVF:
  – to each verb is associated (i) a morphosyntactic decomposition, with diachronical information, (ii) other entries related morphologically, (iii) the lexicographed and used but non-lexicographed related nouns
  – To each noun is associated its different readings [capitalize on results from Nomage, Lille]
  – Readings share by the verb and the related noun are indicated too
- Automatic identification of nominal neologisms on the Internet