

1 What are Complex Predicates?

Given the absence of consensus, it is necessary to make it precise in which way the term *complex predicates* is used in this chapter, and, more generally, in the HPSG tradition. A complex predicate (CP) is composed of two or more predicates (verbs + non finite verbs, nouns, adjectives, ? prepositions), which together describe one situation, and display syntactic properties of monoclausality.

Word is a syntactic unit: the definition excludes words with a complex semantics (such as *kill* = ‘cause to die’), as well as compound verbs, and verbs seen as constructed in the syntax in a level of ‘deep structure’ (such as the verb *dance* analyzed as verb+noun, with the noun *dance* incorporated, Hale and Keyser, 1996). On the other hand, tense auxiliaries and the main verb in Romance languages (French *a fini* ‘has finished’) are two different words, since they can be separated by adverbs (French *a complètement fini* ‘has completely finished’), but they jointly describe the same situation, the auxiliary bearing tense and aspect information.

In addition, the different predicates belong to the same clause. This means that the arguments belong to one argument structure, and there is one localization for the situation. However, we admit that the property of monoclausality can manifest itself differently in different languages (see Butt 2010, *pace* Haspelmath 2016). In the case of Romance CPs, the first verb (here the auxiliary) hosts the clitics which pronominalize the arguments of the main predicate: pronominalization of the NP complement in *Marie a fini son livre* (‘Marie has finished her book’) gives *Marie l’a fini* (Marie it-has finished’).

Serial verb constructions (SVC) are also composed of verbs which describe a situation and belong to the same clause (1). Following Haspelmath (2016), there are, however, a number of differences: they are sequences of verbs, and do not involve various categories. These verbs are independent: they have the same form and meaning when they occur outside the SVC, and they do not involve predicate argument relationship between them, in particular infinitival complements and causative constructions are excluded, contrary to CPs. Finally, they tend to each describe a subevent, being frequently directionals or resultatives (Prince 2017), while a tense auxiliary as in the French example above is not associated with a subevent.

- (1) Ozo sàan rra ogbà. (Edo, from Haspelmath 2016)
Ozo jump cross fence ([modulo accents on the vowels](#))

Complex Predicates enter into a number of constructions, such as Romance languages auxiliaries, auxiliary and modal constructions in German and Dutch, and Korean so-called *restructuring verbs*, causative constructions, light verb constructions (Butt 2010 proposes to limit the term complex predicates to light verb constructions; no reason that we can see).

They involve a syntactic relationship between the predicates, the first one (resp. the last one in verb final languages) is a head taking the second (resp. the first) as complement, and argument inheritance (or composition, or attraction), by which the head inherits the arguments of its predicative complement: the arguments of the complement predicate are “raised” to become arguments of the predicate head. This analysis is implemented formally as structure sharing between the arguments of the complement and of the head verb.

2 Auxiliaries and restructuring verbs in Romance languages: argument inheritance and structure

2.1. Argument inheritance mechanism

illustrated by tense auxiliaries in French, followed by a past participle and its complements (Abeillé-Godard, 2002).

French Tense auxiliaries are the head of a construction: they bear inflectional affixes and pronominal clitics like any other verb, and they can be gapped with or without the past participle, while the participle cannot be gapped independently. Properties showing that there is a CP: obligatory clitic climbing, occurrence in bounded dependencies.

Feature structure for auxiliary *avoir*.

The arguments (subject and complements) selected by the participle are inherited by the auxiliary (or “raised”) : they are structure shared; clitics analyzed as affixes (Miller and Sag) belong to the arguments (as *non canonical* elements), and inherited as such; the feature [WEIGHT *light*] ensures that the auxiliary combines with a lexical participle (not a phrase); this is sufficient to ensure that clitics always climb in French, because participles never host clitics ; but for Italian, use the feature CLTS {} (Monachesi 1998).

2.2. RL restructuring verbs: argument inheritance is optional (\neq tense auxiliaries) i.e. clitics on the head verb or on the infinitival (*Anna lo vuole comprare*, *Anna vuole comprarlo*).

Restructuring verbs in RL (Catalan, Italian, Portuguese, Romanian, Spanish): modal verbs, aspectual verbs, motion verbs (Rizzi 1982); exemplify in the different RL.

Properties showing CP: clitic climbing, middle *si* construction, bounded dependencies (=tough construction), ?auxiliary selection. Illustrated with Italian (Monachesi 1998).

Correlation of properties: if clitic “upstairs”, then no extraction of complement verb+its complements.

Analysis in HPSG: Argument composition lexical rule, feature CLTS {} to account for the fact that clitics all climb, middle *si* lexical rule, lexical description of tough adjectives (see also Abeillé *et al.* 98).

2.3. The structure of a CP

Argument inheritance is compatible with different structures: exemplified with auxiliaries and Restructuring verbs in RL. Properties tested with evidence of CP (clitic upstairs). (Abeillé-Godard 2010).

Structural properties: various adverbs between the two verbs (OK French and Italian, and Romanian modal *a putea*), possibility of an (inverted) subject NP between the verbs (OK in Italian, Portuguese, with R *a putea*, not in French, Spanish, R tense aux’s), coordination of infinitives with their complements (yes, except Spanish and R tense aux’s), extraction of the complement verb with its complements (never OK).

Analysis: absence of extraction shows that the complement verb does not form a constituent with its complements.

Absence of the coordination of complement verbs with their complements (as well as absence of insertions) accounted for by verbal complex (head verb+participle or infinitive): Spanish and R tense aux’s; flat structure in French, Italian, Portuguese, and R *a putea*, coordination explained in terms of non constituent coordination, differences regarding insertions due to different word order.

Note. Spanish data should be checked again. Possible variation.

? The case of attributive verbs in RL (Abeillé-Godard 2000)

3. Causative constructions: argument inheritance and case marking

- More complicated syntax-semantics interface: the causative verb has its own subject, not inherited => what happens to the subject of the infinitive?
two constructions with *faire* in French (Abeillé-Godard-Sag 1998)
- ?a problem of case marking with Korean auxiliaries (semantically, K. auxiliaries resemble restructuring verbs more than tense-aspect aux’s) (Yoo 2003, ? Kim 2016)

4. Complex predicates and word order

- German and Dutch word order with auxiliaries and modals:
Partial VP fronting (De Kuthy and Meurers 2001), auxiliary flip (Hinrichs et Nakazawa 1994, Meurers 2002, Müller 2002); and Dutch (Rentier 1994, Bouma and van Noord 1998).
- Question: are German coherent constructions included in CPs? Can we distinguish between argument inheritance and domain union (scrambling)? (Chung 1998, Kathol 1998, Lee 2001)
- Verb final language: Persian (Müller 2010) as opposed to non-verb final.

5. Light verb constructions: syntax and semantics

- Discussion of the construction: properties in Persian, French (support verb constructions), Korean. Mainly verb + nominal complement, but possibly verb + preposition.
- Persian (Müller 2010, Samvellián 2012), Korean (Lee 2001, ?Kim 2016).
- 2 semantic cases: compositional and idiomatic.

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