

Motivating different kinds of phrases

1 Distinguishing Arguments from Adjuncts

The following criteria are often cited in the literature to motivate the distinction between arguments and adjuncts.

1.1 Semantic Contribution

Arguments and adjuncts differ in the kind of semantic contribution they make. Arguments denote

- participants of an event

(1) *Sandy kissed Robin.*

- individuals/entities for which a state of affairs holds

(2) *Sandy knew the answer.*

Adjuncts denote the circumstances under which an event took place or a state of affairs occurred. Adjuncts refer to

- time

(3) *Sandy knew the answer on Monday.*

- frequency

(4) *Sandy forgot her umbrella. twice*

- place

(5) *Sandy kissed Robin in the park.*

- manner

(6) *Sandy kissed Robin passionately.*

- cause

(7) *Sandy knew the answer because she had studied for the test.*

- effect or purpose

(8) *Sandy kissed Robin to show his affection.*

etc. of an event or state-of-affairs.

1.2 Iterability

Adjuncts can be iterated (subject to semantic restrictions), arguments cannot.

(9) *John buttered the toast at midnight with a knife in the bathroom.*

(10) * *John buttered the toast the bread.*

1.3 Obligatoriness

Adjuncts are optional, arguments (of verbs) are obligatory.

(11) a. *John buttered the toast at midnight with a knife.*

b. *John buttered the toast at midnight.*

c. *John buttered the toast.*

(12) * *John buttered.*

1.4 Predictability

The selection and semantic contribution of arguments tends to be idiosyncratic, while semantic contribution of adjuncts is uniform and predictable.

Idiosyncratic selection:

(13) a. *John ate the stake.*

b. *John ate.*

(14) a. *John devoured the steak.*

b. * *John devoured.*

Idiosyncratic semantic contribution:

(15) *John fears thunderstorms.*

(16) *Thunderstorms frighten John.*

1.5 Linear Order

1.5.1 Order among complements/adjuncts

In languages with relative fixed word order complements allow no scrambling, while adjuncts can be ordered more freely.

(17) a. *John buttered the toast with a knife in the bathroom at midnight*

b. *John buttered the toast at midnight with a knife in the bathroom.*

c. *John buttered the toast in the bathroom at midnight with a knife.*

(18) a. *Mary gave John a book.*

b. * *Mary gave a book John.*

1.5.2 Relative order of complements with respect to adjuncts

In English, at least certain adjuncts tend to occur after complements.

- (19) *The authorities blamed the arson on the skydivers [without checking the facts].*
- (20) **The authorities blamed [without checking the facts] the arson on the skydivers.*

1.6 Substitutability

In English, a V' can be substituted under *do so* ellipsis. This entails that complements must be within the antecedent of *do so*, whereas adjuncts may be either inside or outside.

- (21) *Calvin saw Hobbs in the garden and Peter did so too.*
- (22) *Calvin saw Hobbs in the garden and Peter did so in the kitchen.*
- (23) **Calvin saw Hobbs in the garden and Peter did so John in the kitchen .*

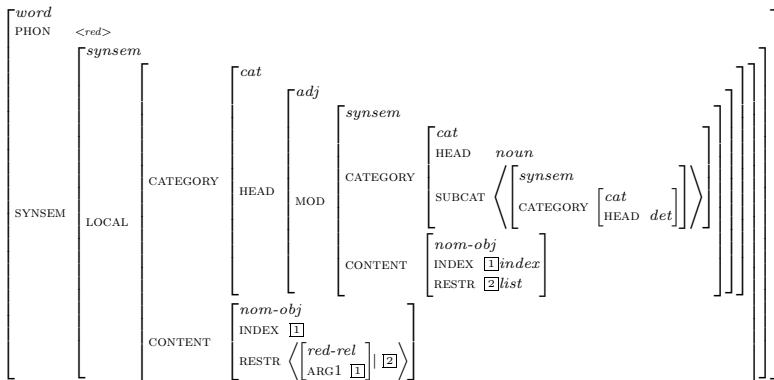
1.7 Extractability

Extraction out of complements is "easier" than extraction out of adjuncts.

- (24) *How do you believe / * regret / * deny that John left _ ?*
- (25) *Who do you believe / regret / deny that John met _ ?*

2 Restricting what can be modified

The MOD attribute as part of the lexical entry of the adjective *red*:



3 Distinguishing Subjects from Objects

3.1 Subject/Object Asymmetries

- (26) **Who do you believe that _ wrote this paper?*
- (27) *What do you believe that Sandy wrote _ ?*

3.2 Parasitic Gaps

In English, extraction out of a subject is only possible in the presence of a second gap. Extraction out of objects is not constrained in this way.

- (28) a. *Who did [rivals of _] assassinate _ ?*
 b. **Who did [rivals of _] assassinate the President?*
- (29) *Who did John assassinate [rivals of _] ?*

3.3 Evidence from implicative universals

3.3.1 Agreement

Agreement systems typically involve subjects. If they affect objects, then subjects are affected as well.

3.3.2 Modification

Modification, e.g., by relative clauses, is allowed for objects only if it is allowed for subjects as well.

3.3.3 Subject-oriented binding conditions

For example, long distance reflexive binding in Norwegian, *eius/suus* opposition in Latin.

4 Markers

4.1 Markers are not Heads

Some verbs select a complementized sentential complement headed by a base-form (rather than a finite) verb:

(30) *I demand that he leave / * leaves immediately.*

Such selection is straightforwardly accounted for if the verb is the head of the complementized sentential complement.

4.2 Markers are not Specifiers

(see Pollard and Sag 1994, pp. 363ff.)

4.2.1 Semantic Criterion

Markers tend to be semantically vacuous, specifiers not.

4.2.2 Syntactic Criterion

Markers are words, whereas specifiers can be phrases:

(31) *[much more] intelligent (than Sandy)*

(32) *[[three gallons] less] wine (than beer)*

Specifiers phrases can even have a recursive structure:

(33) *[[Many [more [thank 50]]] men] appeared on the horizon.*

(34) *[[[[How much] more] comfortable] [than the first chair]]] was the other chair.*

4.3 How is marking encoded?

Lexical specification The SPEC and MARKING attributes as part of the lexical entry of the complementizer *that*:

