### Basic syntactic constructions: The empirical landscape

L614  
(with slides taken near-verbatim from Detmar Meurers)  
Spring 2015

#### Subcategorization

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<td>(1) a. I laugh.</td>
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<td>&lt;NP&gt;</td>
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<td></td>
<td>b. I saw him.</td>
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<td></td>
<td>c. I give her the book.</td>
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<td></td>
<td>d. I said that she left.</td>
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Cannot always be derived from semantics:

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<td>(2) a. Paul ate a steak.</td>
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<td>&lt;NP NP&gt;</td>
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<td></td>
<td>b. Paul ate.</td>
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<tr>
<td>(3) a. Paul devoured a steak.</td>
<td></td>
<td>&lt;NP NP&gt;</td>
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<td></td>
<td>b. * Paul devoured</td>
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#### Government

- One element decides on the form of another element, e.g.:
  - verbs govern the case of their nominal argument
  - verbs govern the form of their verbal argument

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<td>(4) a. He left.</td>
<td></td>
<td>Nom</td>
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<td>b. * Him left.</td>
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<td>(5) a. She sees him.</td>
<td></td>
<td>Acc</td>
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<td>b. * She sees he.</td>
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#### Verb form

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<td>(6) a. Peter will win the race.</td>
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<td>Base Form</td>
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<td></td>
<td>b. * Peter will won the race.</td>
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<td></td>
<td>c. * Peter will to win the race.</td>
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<td>(7) a. Peter has won the race.</td>
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<td>Past Participle</td>
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<td></td>
<td>b. * Peter has win the race.</td>
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<td></td>
<td>c. * Peter has to win the race.</td>
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<td>(8) a. Peter seems to win the race.</td>
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<td>To-Infinitive</td>
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<td></td>
<td>b. * Peter seems win the race.</td>
<td></td>
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<tr>
<td></td>
<td>c. * Peter seems won the race.</td>
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#### Agreement

- Two elements agree in some (abstract) property, e.g.:
  - Subject-verb agreement in person and number
  - Pronoun-antecedent agreement in person, number, and gender
  - Adjective-noun agreement in case, gender
Agreement

Subject-Verb Agreement

(9) a. She walks / walk.
   b. The men *walks / walk.

(10) a. Maria lacht / *lachen / *lache / *lachst.
     b. Die Männer *lacht / lachen / *lache / *lachst.

(11) a. That they are alive is / *are a pleasant surprise.
     b. Daß sie leben ist / *sind erfreulich.

(12) a. Hier wird / *werden gelacht.

Agreement

Pronoun-Antecedent Agreement

(13) a. He claimed that her car broke down.
     b. She claimed that her car broke down.
     c. They claimed that their car broke down.

Agreement

Adjective-Noun Agreement in Gender

(14) a. La fille est heureuse / *heureux.
     The girl is happy / happy.
     b. Le garçon est *heureuse / heureux.
     The boy is happy / happy.

Arguments vs. Adjuncts

Semantic Contribution

- Arguments and adjuncts differ in semantic contribution:
  - Arguments denote
    - participants of an event
      (17) Sandy kissed Robin.
    - individuals/entities for which a state of affairs holds
      (18) Sandy knew the answer.
  - Adjuncts denote the circumstances under which an event took place or a state of affairs occurred, referring to
    - time
      (19) Sandy knew the answer on Monday.
    - frequency
      (20) Sandy forgot her umbrella twice.

- place
  (21) Sandy kissed Robin in the park.
- manner
  (22) Sandy kissed Robin passionately.
- cause
  (23) Sandy knew the answer because she had studied for the test.
- effect or purpose
  (24) Sandy kissed Robin to show his affection.
- ...
### Arguments vs. Adjuncts

**Iterability**

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

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

(26) * John buttered the toast the bread.

**Oblatoriness**

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

(27) a. John buttered the toast at midnight with a knife.
    b. John buttered the toast at midnight.
    c. John buttered the toast.

(28) * John buttered.

**Predictability**

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

Idiosyncratic selection, e.g., consider obligatoriness:

(29) a. John ate the steak.
    b. John ate.

(30) a. John devoured the steak.
    b. * John devoured.

Idiosyncratic semantic contribution:

(31) John fears thunderstorms.

(32) Thunderstorms frighten John.

**Order among complements/adjuncts**

- In languages with relatively fixed word order complements allow no scrambling, whereas adjuncts can be ordered more freely.

(33) 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.

(34) a. Mary gave John a book.

(35) The authorities blamed the arson on the skydivers [without checking the facts].

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

(37) Calvin saw Hobbs in the garden and Peter did so too.

(38) Calvin saw Hobbs in the garden and Peter did so in the kitchen.

(39) * Calvin saw Hobbs in the garden and Peter did so John in the kitchen.
A head generally realizes its arguments locally within its head domain (i.e., as sister of lexical head in X-bar tree).

Certain kind of constructions resist this generalization, such as, for example, wh-questions (here from the NYT):

(40) a. Who do you think \_ writes well about human sadness?
   b. Who do you think the cops are going to believe \_?

How can the non-local relation between a head and such arguments be licensed?
- How can their properties be captured?

Different categories can be extracted:

(43) a. Which man did you talk to \_?
   b. [To [which man]] did you talk \_?
   c. [How ill] has the man been \_?
   d. [How frequently] did you see the man \_?

This sometimes provides multiple options for a constituent:

(44) a. Who does he rely [on \_]?
   b. [On whom] does he rely \_?

Unboundedness:

(45) a. Who do you think Hobbs saw \_?
   b. Who do you think Hobbs said he saw \_?
   c. Who do you think Hobbs said he imagined that he saw \_?

An unbounded dependency construction
- involves constituents with different functions
- involves constituents of different categories
- is in principle unbounded

There are several types of unbounded dependency constructions (UDCs), cf., e.g., Pollard and Sag (1994, ch. 4).
- Strong UDCs: an overt constituent occurs in a non-argument position.
- Weak UDCs: no overt constituent in a non-argument position.

Wh-elements can have different functions:

(41) a. Who did Hobbs see \_?
   b. Who do you think \_ saw the man?
   c. Who did Hobbs give the book to \_?
   d. Who did Hobbs consider \_ to be a fool?

Wh-elements can also occur in subordinate clauses:

(42) a. I asked who the man saw \_.
   b. I asked who the man considered \_ to be a fool.
   c. I asked who Hobbs gave the book to \_.
   d. I asked who you thought \_ saw Hobbs.

A syntactic link from filler to gap is needed

(46) a. Kimi, Sandy trusts \_.
   b. [On Kimi], Sandy depends \_.

And this link has to be established for an unbounded length:

(48) a. Kimi, Chris knows Sandy trusts \_.
   b. [On Kimi], Chris knows Sandy depends \_.

Strong UDCs

An overt constituent occurs in a non-argument position:

Topicalization:
(52) Kimi, Sandy loves \_.

Wh-questions:
(53) I wonder [who, Sandy loves \_].

Wh-relative clauses:
(54) This is the politician [who, Sandy loves \_].

It-clefts:
(55) It is Kimi, [who, Sandy loves \_].

Pseudoclefts:
(56) [What, Sandy loves \_] is Kimi.
Weak UDCs

No overt constituent in a non-argument position:

**Purpose infinitive (for-to clauses):**
(57) I bought it, for Sandy to eat.

**Tough movement:**
(58) Sandy is hard to love.

**Relative clause without overt relative pronoun:**
(59) This is [the politician], [Sandy loves].

**It-clefts without overt relative pronoun:**
(60) It is Kim, [Sandy loves].

Non-finite constructions: An empirical challenge

**Problem 1:** What is interpreted to be the subject of the non-finite verb?

(61) a. John tried to dance. (subject)
b. John promised Peter to dance. (subject)
c. John persuaded Peter to dance. (object)

**Problem 2:** Why do verbs selecting non-finite complements differ w.r.t. what kind of controllers can occur?

(62) a. John tried to dance. (subject)
b. John appeared to dance. (subject)
(63) a. John persuaded Peter to dance. (object)
b. John expects Peter to dance. (object)
(64) a. * It tried to rain. (subject)
b. It appeared to rain. (subject)
(65) a. * John persuaded it to rain. (object)
b. John expects it to rain. (object)

**Classifying non-finite complements**

Verbs selecting non-finite arguments can be classified w.r.t. their orientation (subject, direct or indirect object):

- What is interpreted to be the subject of the non-finite complement?
  - Determined by interpretation of embedded infinitive.

- the nature of the relationship of the embedding verb to the controller:
  - Is the controller an argument of the embedding verb?
  - A range of tests

**Empirical basis of classification (cont.)**

1'. The same holds when a dummy subject is permitted:

(69) a. There is a dragon in the wood.
b. Hobbs is a dragon in the wood.
(70) a. There seems to be a dragon in the wood.
b. Hobbs seems to be a dragon in the wood.
(71) a. * There wants to be a dragon in the wood.
b. Hobbs wants to be a dragon in the wood.
Local relations
From local to non-local relations
Middle distance dependencies

Empirical basis of classification (cont.)

Test 2: clausal subjects

2. If the embedded verb permits a clausal subject, so does the raising verb:

(72) a. That Sarah dances fascinates John.

(73) a. That Sarah dances seems to fascinate John.
    b. Sarah seems to fascinate John.

    b. Sarah wants to fascinate John.

Empirical basis of classification (cont.)

Test 3: idiomatic subjects

3. If the embedded verb has a subject with an idiomatic interpretation, so does it when selected by a raising verb:

(75) The cat is out of the bag.
(76) The cat seems to be out of the bag.
(77) % The cat wants to be out of the bag.

Empirical basis of classification (cont.)

Test 4: subjectless constructions

4. In languages where subjectless constructions exist, raising verbs can embed such subjectless complements:

(78) a. Dort scheint getanzt zu werden.
    He seems to dance over there.'
    b. Ihn scheint zu frieren.
    He seems to freeze.

(79) a. * Dort versucht getanzt zu werden.
    He tries to dance over there.
    b. * Ihn versucht zu frieren.
    He tries to freeze.

Empirical basis of classification (cont.)

Test 5: passivization

5. passivization of the non-finite complement results in a paraphrase

    b. A book was read by John.

(81) a. John seems to read a book.
    b. A book seems to be read by John.

(82) a. John wants to read a book.
    * A book wants to be read by John.

Raising as a widespread phenomenon

Complements of other categories

Not only VP but also AP complements are possible complements of raising verbs like seem or appears:

(83) John seems/appears intelligent.
(84) John seems/appears to be intelligent.