

VERB CLASSES

1. CONTROL VS. RAISING VERBS

The distinction between raising and control verbs is not always a sharp one. There are various cases where one and the same verb seems to belong to more than one category. More precisely, it is possible to find verbs for which the tests that can be employed to differentiate raising from control constructions yield conflicting evidence. While some tests indicate that the verb under consideration is a raising predicate¹, others make them out to be control verbs. Among these ambiguous verbs are:

(1) **AMBIGUOUS VERBS:**

- a. **ASPECTUAL VERBS:** *start, begin, cease, end, stop, continue, resume,...*
- b. The verbs *promise, threaten* (and some others)

This limited class of expressions exemplify cases of lexical ambiguity that are called **HOMOPHONY**. For each member of the class, there are two different verbs - say, *start_{control}* and *start_{raising}* - which just happen share the same surface form (i.e. they are pronounced identically).

APPLYING THE TESTS

TEST I: If the verb licenses an expletive in subject position, it is a raising verb; otherwise it belongs to the class of control predicates:

- (2) a. There seemed to be riots on the street → raising
- b. *There wanted to be riots on the street → control

○ The ambiguous verbs qualify as raising verbs

- (3) There continued to be riots on the street → raising

- (4) a. There threatened to be a war → raising
- b. There promised to be changes → raising

TEST II: The quasi-argument *it* bears a Θ -role, but it is a very specific one which is only assigned by weather verbs such as *rain, snow, storm,...* If 'weather-*it*' shows up as the surface subject of a non-weather verb like *seem*, as in (5)a, it must have received its Θ -role in a lower clause. Thus, the presence of *it* in (5)a indicates that the subject has raised. Moreover, control predicates never assign the quasi-argumental Θ -role required by weather-*it*. Thus, if weather-*it* is incompatible as the

¹The class of raising verbs is actually not as small as it looks like at first sight (the classical examples are *seem, appear*, and *to be likely*). Here are some more raising predicates:

(i) turn out, tend, happen, figure, chance, be presumed, be rumored, be said, be thought, ...

surface subject of a verb selecting for an infinitival (a case exemplified by (5)b), the predicate accordingly must be a control predicate:

- (5) a. It seemed to rain → raising
 b. *It wanted to rain → control

- The ambiguous verbs qualify as raising verbs, as they may host weather-*it* in their subject positions:

- (6) It started/continued/stopped to rain → raising
- (7) a. It is threatening to rain → raising
- b. It promised to a beautiful day → raising
- c. It promised to stop to rain → raising

TEST III: If a verb takes a thematic subject, it is a control verb; otherwise it qualifies as a raising verb. This follows from the definitions of ‘raising predicate’ and ‘control predicate’, respectively.

- Aspectual verbs, as well as *promise* and *threaten* behave like control verbs w.r.t. to this third test:

- | | | | |
|-----|--|---|---------|
| (8) | John started to run | → | control |
| (9) | a. John is threatening to kiss the dog | → | control |
| | b. John promised to kiss the dog | → | control |

TEST IV: There are ‘intentional adverbs’ such as *deliberately, intentionally, inadvertently*, etc... which are subject oriented and express an intention on part of what can be called a cognitively active subject. ‘Subject oriented’ means that these adverbs always modify the subject (as opposed to the object). The property of being ‘cognitively active’ is defined by the possibility to ascribe to an individual desires, wishes, hopes and other mental states. It is characteristic of people and maybe higher animals, but also of puppets, pets etc... - think of children playing with dolls. In contrast, inanimate objects like vases, stones, tables, etc...do not qualify as cognitively active.

Crucially, compatibility with intentional adverbs implies the presence of a subject bearing a(n agentive) Θ -role:

- (10) a. The man deliberately hit the vase \Rightarrow agent Θ -role
 b. *The vase deliberately hit the man \Rightarrow no agent Θ -role
 (cf. The vase hit the man)

The ability of such a modifier to combine with a verb therefore indicates the presence of a subject Θ -role. This in turn entails that the modified verb cannot be a raising predicate:

- (11) a. John deliberately forgot to warn me → control
b. *John deliberately seemed (to me) to warn → raising

○ Applying the test to the verbs under consideration yields a clear result: aspectual verbs, *threaten* and *promise* are control predicates.

(12) John deliberately stopped to lie → control

(13) a. John deliberately threatened to leave → control

b. John inadvertently promised to leave → control

○ Note on the side: German *drohen* behaves just like *threaten*, and yield a good minimal pair:

(14) a. John drohte zu stürzen → raising

b. John drohte die Regierung zu stürzen → control

☞ Summarizing, the verbs identified in (1) display properties of control as well as raising predicates. This apparently inconsistent behavior can be explained on the assumption that the members of (1) are in fact ambiguous: there are two versions of each verb (one control and one raising version) which just happen to share the same phonological realization.

2. EXCEPTIONAL CASE MARKING

In so called Exceptional Case Marking (ECM) constructions (= *accusativus cum infinitivo* or ACI), the subject of an embedded clause is assigned accusative case:

(15) a. I expected them to win

b. *I expected they to win

○ ECM verbs include:

(16) want, believe, make out, imagine, report, consider, allege, figure, know, observe, reckon, sense, understand,...

One of the most intriguing properties of the construction is that the subject of ECM infinitivals (e.g. *them* in (15)) behaves as if it were part of the higher clause, and not as if it were located in SpecTP of its own sentential projection. Evidence for this conclusion comes from various directions, two of which are listed below:

EVIDENCE I: BINDING THEORY

● Anaphors (reflexives and reciprocals) cannot serve as the subjects of tensed clauses:

(17) a. *The boy_k expected that himself_k will win

b. The boy_k expected that he_k will win

(18) a. *The boys_k expected that each other_k will win

b. The boys_k expected that they_k will win

The distribution of facts above is captured by Condition A and B of Binding Theory, which (roughly) look as follows:

(19) **PRINCIPLE A_{DEF}**: An anaphor has to be bound in its binding domain.

PRINCIPLE B_{DEF}: A pronoun has to be free in its binding domain.

(20) **BINDING DOMAIN_{DEF}**: The clause containing the NP (anaphor, pronoun, or R-expression).

• Turning to ECM constructions, it can be observed that pronouns that serve as ECM subjects no longer may corefer with NPs in the matrix clause (see (21)a and (22)a), while anaphors all of a sudden make good subjects (see (21)c and (22)c).

(21) a. *The boy_i wants *him_i* to win (ECM subject marked by *italics*)

b. The boy_i wants *him_k* to win

c. The boy_i wants *himself_i* to win

(22) a. *The boys_k expected *them_k* to win

b. The boys_k expected *them_i* to win

c. The boys_k expected *each other_k* to win

This observation demonstrates that the ECM subjects in (21) and (22) are located in the same binding domain as their NP antecedents. Since the antecedents are part of the higher clause, and since binding domains are defined in terms of being part of the same clause ('being clause-mate'), it follows that ECM subjects are also located in the superordinate (or matrix) clause. The structure therefore can be schematized as below:

(23)
$$\underbrace{[_{TP} \text{ Antecedent } [_{XP} \text{ ECM-predicate } [_{VP} \text{ ECM-subject } [_{ECM-clause} \text{ to win}]]]}_{\text{Superordinate/matrix clause}} \quad \underbrace{]}_{\text{Subordinate ECM clause}}$$

EVIDENCE II: PARTICLE VERBS

• Some verbs combine with a particle, among them *give up*, *put on*, *stand up*, *make out*,... One of these particle verbs - *make out* - also functions as an ECM predicate, it subcategorized for an ECM clause as an internal argument:

(24) I made *them_{Acc}* out [to win]

Clearly, the ECM subject receives its Θ -role from the lower predicate *win*. Still, *them* surfaces to the left of the particle *out*, which forms part of the matrix verb. Thus, the ECM subject *them* must have moved into the superordinate clause.

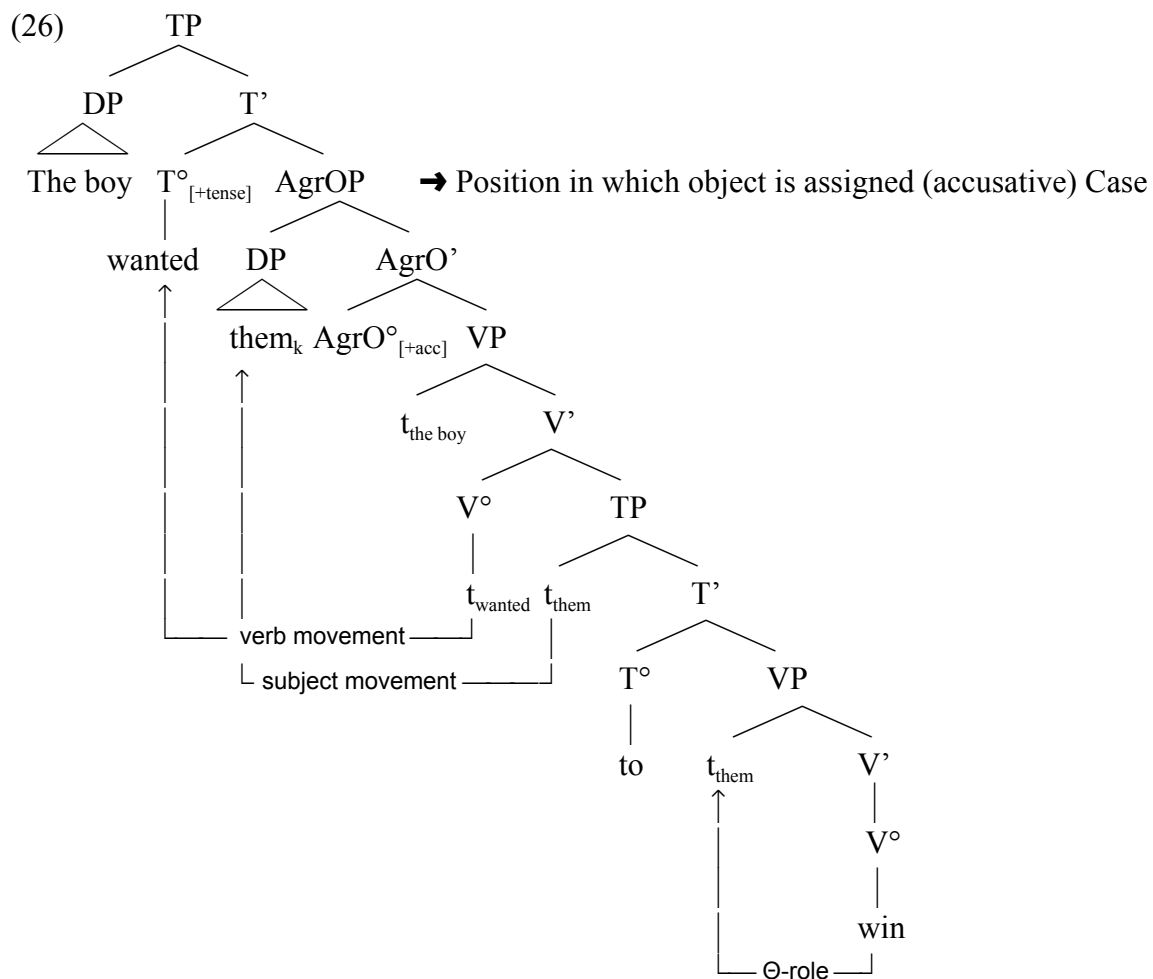
(25) I made *them_{Acc}* out $[_{ECM-clause} [_{TP} t_{them} [_{VP} \text{ to win}]]]$

\uparrow movement $\quad \quad \quad \uparrow$ Θ -role

(NB: The VP-internal subject position in (25) is suppressed for expository convenience; in a more accurate representation of (25), the Θ -role would of course have to be assigned to SpecVP, from where the subject would then raise to SpecTP, etc...)

ANALYSIS

On a prominent analysis (due to Howard Lasnik), the ECM subject is generated in the lower clause and moves to a specific position in the higher clause (SpecAgrOP) that is responsible for checking accusative case. Crucially, the ECM subject is now in the same binding domain as the antecedent in the higher clause. A further aspect is of relevance for the analysis: the ECM verb (*want* in (26)) must move short distance across *them* in order for the derivation to yield the correct word order (...*want them*... and not ...*them want*...). We will (for the purposes of this course without justification) assume that ECM predicates are special in that they may undergo this particular short head movement - they resemble in this respects main verbs in French, which also move from V to T.



3. BARE INFINITIVALS

Raising and control infinitivals both include a silent subject, the particle *to* and the main verb. ECM infinitivals are slightly larger than raising and control infinitivals: they contain an overt NP subject, which is marked by accusative, and which moves into the higher clause. Finally, there is also a third class, which is relevant inasmuch as it demonstrates that some infinitivals can also be smaller than raising and control infinitivals. These **BARE INFINITIVES** are so small that they do not even include the particle *to*.

Bare infinitives include perception verbs and causatives, and are analyzed as VP-complements to the superordinate predicate:

PERCEPTION VERBS

- (27) a. She heard [_{VP} Bill sing a song]
b. They felt [_{VP} the tank approach]
c. We saw [_{VP} them buy a ton of lard]

CAUSATIVES

- (28) a. Sally had [_{VP} me do the dishes]
b. You didn't let [_{VP} her know about the accident]