The 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:

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1 The 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:

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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 \(\rightarrow\) raising  
   b. *It wanted to rain \(\rightarrow\) control

○ The ambiguous verbs qualify as raising verbs, as they may host weather-\textit{it} in their subject positions:

(6) It started/continued/stopped to rain \(\rightarrow\) raising

(7)  
   a. It is threatening to rain \(\rightarrow\) raising  
   b. It promised to a beautiful day \(\rightarrow\) raising  
   c. It promised to stop to rain \(\rightarrow\) 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 \textit{promise} and \textit{threaten} behave like control verbs w.r.t. to this third test:

(8) John started to run \(\rightarrow\) control

(9)  
   a. John is threatening to kiss the dog \(\rightarrow\) control  
   b. John promised to kiss the dog \(\rightarrow\) control

**Test IV:** There are ‘intentional adverbs’ such as \textit{deliberately}, \textit{intentionally}, \textit{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) \(\Theta\)-role:

(10)  
   a. The man deliberately hit the vase \(\Rightarrow\) agent \(\Theta\)-role  
   b. *The vase deliberately hit the man \(\Rightarrow\) no agent \(\Theta\)-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 \(\Theta\)-role. This in turn entails that the modified verb cannot be a raising predicate:

(11)  
   a. John deliberately forgot to warn me \(\rightarrow\) control  
   b. *John deliberately seemed (to me) to warn \(\rightarrow\) 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 boy*$_k$ expected that each other$_k$ will win
     b. The boy$_k$ 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:
PRINCIPLE A<sub>def</sub>: An anaphor has to be bound in its binding domain.

PRINCIPLE B<sub>def</sub>: A pronoun has to be free in its binding domain.

BINDING DOMAIN<sub>def</sub>: 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<sub>i</sub> wants him<sub>i</sub> to win  (ECM subject marked by italics)
    b. The boy<sub>i</sub> wants him<sub>k</sub> to win
    c. The boy<sub>i</sub> wants himself<sub>i</sub> to win

(22)  a. *The boys<sub>k</sub> expected them<sub>k</sub> to win
    b. The boys<sub>k</sub> expected them<sub>i</sub> to win
    c. The boys<sub>k</sub> expected each other<sub>k</sub> 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) [TP Antecedent [XP ECM-predicate [VP ECM-subject [ECM-clause to win]]]]

Superordinate/matrix clause     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<sub>acc</sub> 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<sub>acc</sub> out [ECM-clause [TP tthem [VP to win]]]

(NB: The VP-internal subject position in (25) is supressed 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.

(26)

```
(26) TP
   |       | T'
   |       |
   |       |
   |       |
   |       |
   |       | T° [+tense] AgrOP
   |       | Position in which object is assigned (accusative) Case
   |       |
   |       | wanted
   |       | AgrO°
   |       | V°
   |       | V'
   |       |
   |       | t_the boy
   |       |
   |       | t_wanted
   |       | t_them
   |       | T'
   |       |
   |       | T°
   |       |
   |       | VP
   |       |
   |       | V°
   |       |
   |       | win
   |       |
   |       |
   |       |
   |       |
   |       | Θ-role
```

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
3. **BARE INFINITIVALS**

Raising and control infinitivals both include a silent subject, the particle *to* and the main verb. ECM infinitivals also 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 [\(\text{VP Bill sing a song}\)]
  b. They felt [\(\text{VP the tank approach}\)]
  c. We saw [\(\text{VP them buy a ton of lard}\)]

**CAUSATIVES**

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