Infinitival Complements (LGB treatment, but with CP/IP instead of $\bar{\text{S}}$/S)

a.<<<Throughout, we will assume that infinitival Infl is not a governor, and null C is also not a governor. The former is explicit in LGB; the latter is not, but Chomsky must have been assuming it.>>>
b.<<<Throughout, we will be assuming the PRO requirement (that PRO must not be governed; shortly, we will see the LGB deduction of this from other principles, making it a theorem) and (a version of) the ECP - trace must be governed.>>>
c.<<<Throughout, we will be assuming that all XPs **except IP** are barriers to government.>>>
d.<<<Throughout, we will be assuming that finite complements are always CPs, with *that* complementizer or null complementizer.>>
e.<<<Throughout, we will assume that an idiom must be a DS unit.>>>

I. We have seen 2 kinds of adjectives that are one-place predicates whose one argument is a clause; one kind takes a CP argument [__ CP], the other an IP [__ IP].

(1)   It is important [$_{CP}$ [$_{IP}$ PRO to solve this problem]]   ("PRO Theorem" The CP boundary
                          arb   protects PRO from being governed)

(2)   *Howard is important [$_{CP}$ [$_{IP}$ t to solve this problem]]   (ECP The CP boundary prevents
                                                                          t from being governed by
                                                                          important)

(3)   *It is unlikely [$_{IP}$ PRO to solve this problem]   ("PRO Theorem" The IP boundary does
                          arb   not protect PRO from being governed
                                                                  by *unlikely*)

(4)   Howard is unlikely [$_{IP}$ t to solve this problem]   (ECP The IP boundary does not prevent
                                                                  t from being governed by *unlikely*)

It is interesting that CP complements of adjectives can also have the overt C *for*, and an overt subject (assigned Case 'exceptionally' by *for*):

(5)   It is important [$_{CP}$ for [$_{IP}$ Howard to solve this problem]]

While it is conceivable that (5) could be re-analyzed as (6), with *for Howard* a PP, there are sentences that could not be analyzed that way (7).

(6)   It is important [$_{PP}$ for Howard] [$_{CP}$ [$_{IP}$ PRO to solve this problem]]
(7)   It is important [$_{CP}$ for [$_{IP}$ there to be an investigation]]

Pleonastics can never be objects of prepositions (likely because that is a θ-position), so (7) couldn't be re-analyzed like (6). Some other adjectives like *important* are *unimportant*, *legal*, *illegal*.

It is also interesting that IP clausal complements of adjectives have finite CP alternatives:

(8)   It is unlikely [CP that [IP Howard will solve the problem]]

Some other adjectives that behave like *unlikely* are *likely* and *certain* (but, strangely, not *uncertain).*

II. There are also adjectives that are two-place predicates, with the object argument an infinitive:

(9)   Mary is eager [CP [IP PRO to solve the problem]]

Notice that this must be 'control' and not 'raising', since *eager* **is** a two-place predicate. It takes a subject argument. Subject position could not have been empty at DS, so couldn't have been a target for movement. It also immediately follows that the subject can't be an expletive or a portion of an idiom:

(10)   *There is eager to be an investigation   (cf. ✓There is likely to be an investigation)
(11)   *The cat is eager to be out of the bag   (cf. ✓The cat is likely to be out of the bag)

Some other adjectives like *eager* are *anxious* and *happy*.

There are no two-place adjectives with IP complements. Such a complement couldn't have a PRO subject (since the subject would be governed by the matrix adjective). Nor could the subject be 'lexical', since it couldn't receive Case. Finally, obviously a DS subject couldn't raise from there to matrix subject position, since the matrix subject must already have been filled, given that we are hypothesizing a two-place predicate.

III. There are verbs that are one-place predicates whose one argument is an infinitive:

(12)   Susan seems [IP t to like linguistics]

Evidence for this analysis comes from the fact that the matrix subject can be an 'idiom chunk' or pleonastic that must have originated in the embedded clause:

(13)   The cat seems [IP t to be out of the bag]
(14)   The shit seems [IP t to have hit the fan]
(15)   There seems [IP t to be a riot in the courtyard]

We know that the infinitive must be a 'bare' IP or the trace would fail to be governed, in violation of the ECP. Some other verbs like *seem* are *turn out* and *happen*. These verbs have alternative subcategorizations with finite complements and pleonastic subject:

(16)   It seems/turns out/happens that Susan likes linguistics

PRO is predictably impossible:

(17)   *It seems [$_{IP}$ PRO to like linguistics]   (Meaning something like 'It seems that
                    arb   someone or other likes linguistics')

Somewhat less expected is that lexical NP cannot remain in complement subject position:

(18)   *It seems [$_{IP}$ Susan to like linguistics]

Note that *seem* does govern *Susan* here, since it governs PRO in (17) and trace in (12). Thus, we are led to the conclusion that not all verbs are Case assigners. If *seem* is not, *Susan* in (18) runs afoul of the Case Filter.

There are a couple of verbs that are one-place predicates whose complements are infinitival CP. They have a pleonastic subject and take an infinitival complement with either a null C and a PRO subject, or a *for* C and an overt subject:

(19)   It hurts [$_{CP}$ for [$_{IP}$ me to see you like this]]
(20)   It hurts [$_{CP}$ [$_{IP}$ PRO to see you like this]]

Another verb like *hurt* is *sting*.

IV. There are verbs that are two-place predicates whose object argument is an infinitive. That infinitive might be an IP or a CP. An example of the first type is *believe*.

(21)   Mary believes [$_{IP}$ Susan to be a genius]

In this configuration *believe* governs *Susan*, since IP is not a barrier to government. PRO is impossible in the embedded subject position, since it would be governed here.

(22)   *Mary believes [$_{IP}$ PRO to be a genius]

Further, given the null hypothesis that a passivized verb has the same subcategorization frame as its active counterpart, we correctly predict that passive/raising is possible:

(23)   Susan is believed [$_{IP}$ *t* to be a genius]

The trace of *Susan* will be governed by the matrix passive verb in satisfaction of the ECP. Two other verbs like *believe* are *consider* and *declare*. All of these verbs can also take a finite complement:

(24)   Mary believes [$_{CP}$ that [$_{IP}$ Susan is a genius]]

Try is a two-place predicate taking a CP as its infinitival complement:

(25)   Harriet tried [$_{CP}$ [$_{IP}$ PRO to win the race]]
(26)   *Harriet tried [$_{CP}$ [$_{IP}$ Barbara to win the race]]
(27)   *Barbara was tried [$_{CP}$ [$_{IP}$ t to win the race]]

The CP boundary prevents *try* from governing the embedded subject, thus allowing PRO, disallowing lexical NP (via the Case Filter) and disallowing trace (via the ECP). Another verb like *try* is *attempt*.

V. There are verbs that are three-place predicates whose second object is an infinitival CP.

(28)   John told Charles [$_{CP}$ [$_{IP}$ PRO to attend class]]
(29)   *John told Charles [$_{CP}$ [$_{IP}$ Mary to attend class]]
                        -Case

Note that *tell* is indeed a three-place predicate:

(30)   John told Charles a story
(31)   John told Charles [$_{CP}$ that [$_{IP}$ he should attend class]]

It follows immediately that the NP immediately following the verb cannot be a pleonastic (since, for whatever reason, objects cannot be pleonastic).

(32)   *John told there to be an investigation

Some other verbs like *tell* are *convince*, *advise*, and *remind*.

VI. Finally there's a substantial class of verbs that are two-place predicates whose object argument is an infinitival that doesn't fit neatly into the paradigm we have developed (the one in LGB). A representative example is *want*. (31) suggests that the complement is a CP:

(33)   Judy wants [$_{CP}$ [$_{IP}$ PRO to go home]]

<This could not be Raising, since *want* has a subject θ-role to assign. Further evidence is provided by the fact that an idiom chunk cannot appear in matrix subject position:

(34)   The cat wants to be out of the bag   (Only has the literal meaning)>

However, unlike the situation with *try*, we can have a lexical subject of the complement:

(35)   Judy wants Harry to go home

All else equal, this might suggest that *want* also can take an IP complement (so that *want* can govern and assign Case to *Harry*. BUT, if the complement could be IP, trace should be possible, yet it is not, suggesting that the complement must be CP

(36)   * Harry is wanted [$_{CP}$ [$_{IP}$ t to go home]]

These conflicting properties are problematic for the LGB account of infinitivals. Some other verbs like *want* are *like*, *hate*, and *love*.