1 Adverbs in English

Cinque (1999) claimed that adverbs—when they co-occur—seem to be relatively strictly ordered with respect to one another. He started off his study with a lot of data from Italian, but now we’ll look at English. We will see how well the results match. Fortunately, this evidently probably now perhaps can be considered to be a cross-linguistic fact. Adverbs are rarely completely freely ordered.\(^1\)

Facts like the following can give us an ordering for English.

\begin{align*}
(1) & \quad a. \text{He usually completely misses the target.} \quad \text{usually > completely} \\
& \quad b. \quad * \text{He completely usually misses the target.} \\
(2) & \quad a. \text{He has already completely lost.} \quad \text{already > completely} \\
& \quad b. \quad * \text{He has completely already lost.} \\
(3) & \quad \text{By the time the game reaches halftime.} \ldots \\
& \quad a. \text{They have usually already lost.} \quad \text{usually > already} \\
& \quad b. \quad * \text{They have already usually lost.}
\end{align*}

Thus, we have: \textit{usually > already > completely}. It is still true when we have all three:

\begin{align*}
(4) & \quad \text{By the time the game reaches halftime.} \ldots \\
& \quad a. \text{They have usually already completely lost.} \\
& \quad b. \quad * \text{They have usually completely already lost.} \\
& \quad c. \quad * \text{They have already usually completely lost.} \\
& \quad d. \quad * \text{They have already completely usually lost.} \\
& \quad e. \quad * \text{They have completely usually already lost.} \\
& \quad f. \quad * \text{They have completely already usually lost.}
\end{align*}

The full set, like in Italian, would be something like this:

<table>
<thead>
<tr>
<th>\text{frankly}</th>
<th>\text{fortunately}</th>
<th>\text{evidently}</th>
<th>\text{probably}</th>
<th>\text{now}</th>
<th>\text{perhaps}</th>
<th>\text{wisely}</th>
<th>\text{usually}</th>
<th>\text{already}</th>
<th>\text{no longer}</th>
<th>\text{always}</th>
<th>\text{completely}</th>
<th>\text{well}</th>
</tr>
</thead>
</table>

But we have to be careful when evaluating this. Notice that we get conflicting orders if we check them when the adverbs come after the verb:

\(^1\text{Get it?}\)
(5) a. He has lost completely already. postverbal:  
   b. * He has lost already completely. completely > already

(6) a. He misses the target completely usually. postverbal:  
   b. * He misses the target usually completely. completely > usually

(7) By the time the game reaches halftime. . .  
   a. They have lost already usually. postverbal:  
   b. * They have lost usually already. already > usually

(8) By the time the game reaches halftime. . .  
   a. * They have lost usually already completely.  
   b. * They have lost usually completely already.  
   c. * They have lost already usually completely.  
   d. * They have lost already completely usually.  
   e. * They have lost completely usually already.  
   f. They have lost completely already usually.  

   And if we have two, one on each side of the verb, either order is ok:

(9) a. He has completely lost already.  
   b. He has already lost completely.

(10) a. He completely misses the target usually.  
   b. He usually misses the target completely.

(11) By the time the game reaches halftime. . .  
   a. They have already lost usually.  
   b. They have usually lost already.

   It seems that there are two “zones”—one before the VP and one after the VP. Within each zone, there is a strict ordering, but it is “backwards” in the postverbal zone.

   One adverb in the hierarchy kind of sticks out: well. It appears that well is only possible in the postverbal zone, and it has to be first. (You can think about what this implies in the analyses below, but I won’t ask you about it—we’ll leave it for now.)

(12) a. * John well concedes.  
   b. John concedes well.

(13) a. John concedes well usually.  
   b. * John concedes usually well.
Cinque (1999) proposed that adverbs are in this order due to a large number of functional heads, arranged in a strict order. It might look something like this (although this differs from what Cinque proposed—he specifically proposed that adverbs occupy specifiers; below, I’ve drawn them as heads... and intentionally):

(14) TP
    John T′
    T AlreadyP
    already CompletelyP
    completely vP
    tJohn v′
    V+v missed VP
tV DP
    the target

**Question 1.** Assuming that the tree in (14) represents the basic structure (provided by Merge), and based on both the foregoing discussion of adverb orders, and on Rackowski & Travis’ discussion of Malagasy, draw the TP for a possible analysis of each of (15), (16), and (17), on the model of (14).

(15) John already missed the target completely.
(16) John completely missed the target already.
(17) John missed the target completely already.

It seems that *always*, for some reason, can’t be in the postverbal zone (except perhaps with emphatic stress):

(18) a. John always plays video games.
(19) a. John usually always plays video games.
    b. * John usually plays video games always.
c. John always plays video games usually.
d. * John plays video games always usually.

(20) a. John always completely misses the target.
b. John always misses the target completely.
c. * John completely misses the target always.
d. * John misses the target completely always.

Make the following assumptions:

- Some heads can be silent (e.g., the null determiners, etc.)
- Any given phrase has only one specifier.

**Question 2.** Think about what is required (on the analysis you gave above) for always to appear in the postverbal zone. What structure could we assign to the always phrase (different from completely and already) in English to derive the fact that always can never appear in the postverbal zone? (Hint: The idea I have in mind was not highlighted in the Rackowski & Travis paper, but look at their tree in (13) on p. 122 and think about what might prevent MihitsyP from moving up to SpecNegP.

Ok, now, let’s suppose that Cinque’s wrong about adverbs being in specifiers. Instead, suppose that adverbs can adjoin to either vP or TP, and that the ordering facts come from some kind of separate (semantic?) statement that just says something like: Given what usually and always mean, usually has to be higher in the tree than always in order to be interpretable. That is, there’s still a hierarchy of some kind, but it isn’t encoded into the syntax in terms of functional heads. (This is roughly the approach Bobaljik 1999 suggests.)

Assume adjunction is possible on either the left or the right. Assume usually and already adjoin to vP.

**Question 3.** Given the assumptions just outlined, draw the structures for each of (15), (16), and (17) again. The fact that the adverbs in the postverbal zone come in the opposite order from those in the preverbal zone doesn’t seem very mysterious on this view—certainly, this seems much simpler.