A prosodic account of head-movement

Richards (2006, to appear) posits a universal prosodic condition on relations between C and wh-phrases; he proposes that, depending on the organization of a language's prosody and the position of its C, it may satisfy this universal condition either via wh-movement or via direct manipulation of the prosody. I extend this prosodic requirement to all Probe-Goal relations:

Condition on Agree and Prosody (CAP): If a Probe X Agrees with a Goal α, then X and α must be separated by as few prosodic boundaries as possible, for some level of phrasing.

The CAP predicts the distribution of head-movement and adjacency requirements (see Ackema and Neeleman 2004 for a related proposal).

Adjacency requirements. Richards follows Selkirk (1984) and subsequent work in positing a parameter governing the mapping of syntactic edges onto prosodic boundaries; languages can vary in whether they map Left or Right edges of syntactic phrases onto prosodic boundaries; boundaries are marked throughout with { and }. If the Probe and the prosodic boundary projected by the Goal are on opposite sides of the Goal, then the CAP can be satisfied without movement; a new, higher-level prosodic domain can be built, taking the Goal's prosodic boundary as one of its edges, and grouping the Goal together with the Probe, as in Japanese (1) and Chichewa (2) (with the new prosodic domain indicated on the top line). If the Probe and the prosodic boundary projected by the Goal are on the same side of the Goal, then movement must take place to make the two adjacent, thus minimizing the number of prosodic boundaries intervening between them. Richards' examples of the latter type include Tagalog (3) (with a head-initial C) and Basque (4) (with head-final C).

English. English, like Tagalog, has obligatory wh-movement, and thus should mark Left edges of phrases with prosodic boundaries; since C is also on the Left of wh-phrases, the CAP forces overt wh-movement to make wh-phrases adjacent to C. In general, Goals must be adjacent to Probes on their Left, but not to Probes on their Right. The subject need not be adjacent to following T (5a), but the direct object must immediately follow the *v*-V cluster, and T and Case-assigning C must be adjacent to the subject if they precede it (5b-c).

French. French wh-movement is not obligatory (6); French maps Right edges of phrases onto prosodic boundaries, and thus can connect C with wh-phrases without movement. French should be the mirror image of English; DPs should have to be adjacent to Probes to their Right, but not to Probes to their Left. French famously (Emonds 1978, Pollock 1989) does not require the direct object to be adjacent to the verb on its left, but does require the subject to be adjacent to T on its right (7). The contrast between (5a-b) and (7) is typically described by saying that the French verb raises higher than the English verb; if V and T are to be pronounced as one word, V must raise to T, becoming adjacent to the subject. We also predict that if the subject is not present, the verb will not need to raise to be adjacent to it; thus, the tensed verb in (8a-b) must precede negation, but the infinitival verb in (8c) need not.

Danish. Danish, like English, is head-initial and has obligatory overt wh-movement; Danish DPs should therefore have to be adjacent to Probes to their Left, as in English. Unlike English, Danish has robust V2. In non-V2 clauses, the CAP forces objects to be adjacent to the verb (9). When V2 brings the verb to the left of the subject, the subject and verb must be adjacent (10). Such examples demonstrate the economy flavor of the CAP; postverbal subjects and objects should both be adjacent to the V-*v*-T-C complex, in principle, but since this is impossible, adjacency is only enforced for the subject. Related languages allow non-adjacency between the verb and the subject in parallel sentences, with interpretational consequences involving focus/specificity (Svenonius 2002); I leave these for future research.

Irish. Irish, like English, is head-initial and requires wh-movement, and we expect that DPs must be adjacent to Probes to their Left. Since Irish is VSO, we predict that the subject must be adjacent to the preceding V (Duffield 1995). As in the Danish case, because the CAP is an economy principle, the grammar must be satisfied with V-S adjacency, giving up on V-O.

{----------->(C)

(1) { **dare**-ga { hon-o kaimasita ka? [*Japanese*]
who-NOM book-ACC bought C
'Who bought the book?'
(C)<----------}

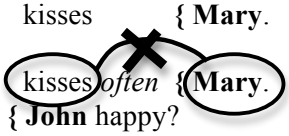
(2) C anáménya chiyáani} ndi mwáálá [*Chichewa*]
he.hit what with rock
'What did he hit with the rock?'

(3)… kung { **kanino** mo ibinigay ang pera [*Tagalog*]
C who.DAT you gave the money
'…who you gave the money to'

(4) Jon **señek** } ikusi rau [*Ondarroa Basque*]
Jon who.ERG see AUX.C
'Who saw Jon?'

{----------> (T)

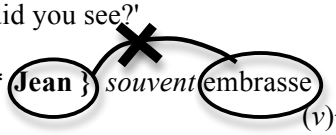
(5) a. {**John** *often* kisses { **Mary**. [*English*]



b. * {**John** kisses *often* { **Mary**.
c. Is (**probably*) { **John** happy?
d. [For (**probably*) { **Mary** to be about to leave] would worry me.

(C)<----------}

(6) Tu as vu **qui** } ? [*French*]
you have seen who
'Who did you see?'



(7) a. * **Jean** } *souvent* embrasse **Marie**}.
(*v*)<----------}
b. **Jean** } embrasse *souvent* **Marie**}.
Jean kisses often Marie
'Jean often kisses Marie'

(8) a. **Jean**} parle pas l'italien
Jean speaks not Italian
'Jean doesn't speak Italian'
b.* **Jean** } pas parle l'italien
c. Pas parler l'italien…
not to.speak Italian
'Not to speak Italian…'

(9) … at { Johann (ofte) spiser (* ofte) { **tomater** [*Danish*]
that Johann often eats often tomatoes
'…that Johann often eats tomatoes'

(10) Næste eftermiddag laa (* endnu) { **stenene** (endnu) urørte
next afternoon lay still the.stones still unmoved
'The next afternoon the stones still lay unmoved'

(11) Chuala (* ar ndóigh) mé an t-amhrán sin [*Irish*]
heard of.course I the song that
'I of course heard that song'