Phonological effects in floating quantifier placement

Recently many phenomena that have been analyzed as syntactic are being re-examined in light of growing awareness of the role that prosody plays in language. Floating quantifiers (FQ) have been subjected to in depth syntactic analysis in order to determine how the FQ comes to occupy its final position. What is left unexplored by this research is the motivation and determination of the FQ’s final position- the question of why and not how. It is here that we find phonology and focus structure playing crucial roles. I will show that phonological constraints and information structure determine the final position of FQs.

All exhibits phonological qualities of both a function and a content word in that it requires another element to combine with but it itself does not reduce. All is favored in positions where it can prosodically combine with a phonologically weak element to its left. Prosodic incorporate (PI) is favored leftwards since this will provide all with the onset it is lacking.

1. The children have all seen the movie.
2. The children all have seen the movie.

In sentence (1) all can PI leftwards and gain an onset and have, a phonologically weak function word, can acquire a host. In (2) all can not PI leftwards. PI is impossible since neither element can prosodically reduce. Full DPs seldom occur in reduced form and all, which is most often pitch accented can also not reduce. (2) can be contrasted with (3) which is markedly better than (2).

3. They all have left.

In (3) all can prosodically incorporate with the subject they. Corpus searches show that all seldom occurs right adjacent to DPs yet frequently occur right adjacent to pronouns. From my own experiments the determining role that phonology plays can easily be seen. When asked to recite (2) from memory, informants unintentionally consistently produced (1). This unconscious switch attests to the naturalness of the word order in (1).

Information structure also plays a determining role in FQ placement. In many languages the floated word order has been analyzed as a focus construction (for Korean see Hyun-Oak Kim 1982, Han 1999; for a possible connection between information structure and q-float in Romance languages see Beletti 2003). English appears to exhibit the opposite effect. In English the data indicates that when the subject is in focus the floated word order is disfavored. Additionally if the FQ is contrastively focused all is nearly unanimously favored sentence initially.

4. a. Did all the children go or only some of the children?
   b. All the children went. (contrastive focus on all)

When FQs occur with pronouns which are, generally, topical in nature the floated order is favored.

5. We/they have all seen the movie.

This research shows that while it is syntax that provides the possible position that FQ can occur in, it is phonology and information structure that determine which of those possible positions the FQ will be realized in. This is supported by the fact that when the FQ occurs in a syntactically unviable position the sentence is perceived as unacceptable yet when the FQ occurs in a phonologically non-optimal location the sentence is perceived as degraded but still possible.
Contrastive *all*

![Graph showing the contrast in pitch and timing of words]

All associated with a topic

![Graph showing the contrast in pitch and timing of words]

Selected References:
Merchant, J. (1996). Object scrambling and Q-float in German. NELS 26, GLSA.