Floating Universal Quantifier as a Base-Generated Head in the VP Periphery

Dong-yi Lin
Ghent University

Like English all and French tous, the universal quantifier niz ‘all’ in Kavalan, an Austronesian language in eastern Taiwan, can immediately precede a DP (1a) or appear in a quantifier-floating construction where it is not adjacent to its DP associate (1b).

(1) a. m-lizaq tu wasu [ya m-niz sunis].
   AV-like OBL dog ABS AV-all child
   ‘All the children like dogs.’

b. m-niz m-lizaq tu wasu [ya sunis].
   AV-all AV-like OBL dog ABS child
   ‘The children all like dogs.’

According to Sportiche (1988) and Shlonsky (1991), quantifier floating results from the stranding of a universal quantifier in an intermediate position where its DP associate passes. Doetjes (1997) however argues that a floating quantifier is base-generated in the left periphery of VP. The present paper argues for the base-generation approach to floating niz ‘all’, which exhibits semantic and morphosyntactic differences from non-floating niz.

The first difference between floating and non-floating niz concerns scope interaction with negation. (2a) shows that either non-floating niz or the negation marker mai can take wider scope over the other. In contrast, floating niz exhibits scope-freezing effects, as illustrated by the unambiguity of (2b) or (2c). The ambiguity of (2a) can be attributed to reconstruction. The absolutive DP in (2a) occupies Spec, TopP (Lin 2013), which is higher than mai, whereas its base position is VP-internal and lower than mai. Reconstruction cannot take place in (2b) or (2c), as floating niz is base-generated above the lexical verb, either higher than mai (2b) or lower than mai (2c), and thus there is no lower copy that licenses reconstruction.

(2) a. mai qibasi-an-na ni imuy [ya m-niz qudus].
   NEG wash-PV-3ERG ERG Imuy ABS AV-all clothes
   ‘Imuy didn’t wash all the clothes.’ (NEG > all; all > NEG)

b. m-niz mai qibasi-an-na ni imuy [ya qudus].
   AV-all NEG wash-PV-3ERG ERG Imuy ABS clothes
   ‘Imuy didn’t wash all the clothes.’ (*NEG > all; all > NEG)

c. mai m-niz qibasi-an-na ni imuy [ya qudus].
   NEG AV-all wash-PV-3ERG ERG Imuy ABS clothes
   ‘Imuy didn’t wash all the clothes.’ (NEG > all; *all > NEG)

Secondly, while non-floating niz is a nominal modifier, floating niz should be analyzed as a full-fledged verb. The contrast between (3a) and (3b) shows that floating niz, but not its non-floating counterpart, can take the imperative suffix. Floating niz, but not non-floating niz, can also take the causative prefix (4). As illustrated in (5), floating niz can be affixed with the patient voice marker, whereas non-floating niz cannot. Moreover, the voice markers on floating niz are verb-defining v, which can determine the argument structure of a sentence. While PV -an by itself can assign an external argument and an affected theme, AV m- cannot (Lin 2013). PV-marked niz in (6a) is thus grammatical even without a lexical verb, but this is not true of AV-marked niz in (6b). All these facts suggest that floating niz should be analyzed as the main verb of a sentence. This empirical generalization is incompatible with the stranding analysis, which predicts that the stranded quantifier should be embedded inside a specifier position and cannot undergo head movement to v. Instead, as low adverbials in the VP periphery are all realized as a verb in Kavalan (Chang 2006), the facts shown in (3) – (6)
corroborate the analysis of floating niz as a base-generated head in the VP periphery below v (cf. the high base-generation site of Malagasy daholo proposed by Koopman 2005).

(3) a. niz-ika m-liyam [ya sudad].
   AV-IMP.PV AV-read ABS book
   ‘Read all the books!’
   b. *m-liyam [ya niz-ika sudad].
   AV-read ABS all-IMP.PV book

(4) pa-niz=iku [tu sunis] pa-taqsi.
   CAUS=all=1SG.ABS OBL child CAUS-study
   ‘I make all the children study.’

(5) a. niz-an-na=ti ni abas q<m>an [ya byabas].
   all-PV-3ERG=PFV ERG Abas <AV>eat ABS guava
   ‘Abas ate all the guavas.’
   b. *qan-an-na=ti ni abas [ya niz-an byabas].
   eat-PV-3ERG=PFV ERG Abas ABS all-PV guava

(6) a. niz-an-na=ti ni abas ya byabas.
   all-PV-3ERG=PFV ERG Abas ABS guava
   ‘Abas ate used up all the guavas.’
   b. *m-niz ti-abas tu byabas.
   AV-all NCM-Abas OBL guava

Another piece of evidence against the stranding analysis of floating niz is its insensitivity to A/A’ distinction. A DP that undergoes A’-movement cannot strand a quantifier, unless it first undergoes short A-movement (7a) (Bobaljik 2003). In (7b), the relative operator that floating niz quantifies over undergoes A’-movement without incurring ungrammaticality. This challenges the contention that a floating quantifier is only licensed in an A-chain due to its immediate adjacency to the DP-trace of its associate. This explanation does not apply to Kavalan. On the base-generation approach to floating niz, the grammaticality of (7b) is expected, as floating niz and its DP associate never form a constituent and thus the movement type of the associate does not determine whether niz can float or not.

(7) a. *the professors who Taylor will have all met before the end of term (Bobaljik 2003)
   b. byabas [RC niz-an-na=ay ni buya m-Rasa]
      guava all-PV-3ERG=REL ERG Buya AV-buy
      ‘the guavas that Buya all bought’

Finally, if floating niz and non-floating niz are not derivationally related, as claimed by the base-generation approach, it is predicted that they should be able to co-occur in a sentence. As shown in (8), this prediction is borne out. Non-floating niz in (8) quantifies over a set of entities, whereas its floating counterpart in the same sentence quantifies over events.

(8) niz-an-na ni abas q<m>an [ya m-niz byabas].
   all-PV-3ERG ERG Abas <AV>eat ABS AV-all guava
   ‘Abas ate up all the guavas.’

In conclusion, floating niz is not derived from non-floating niz as a result of stranding. The two differ both semantically and syntactically. Non-floating niz is a nominal modifier, whereas floating niz is base-generated in a head position in the VP periphery below v and exhibits properties of a full-fledged verb just like other adverbal verbs in Kavalan.