Postverbal DPs in Hocąk as Rightward Scrambling*

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1 Introduction

This paper examines data from Hocąk (Siouan) concerning the syntax of postverbal DPs. Previous cross-linguistic research has primarily argued that postverbal constituents are derived either via remnant VP movement (Bhatt and Dayal 2007, Hindi-Urdu) or by movement of an independent DP (Kural 1997, Turkish; Ko and Choi 2009, Korean; Manetta 2012, Hindi-Urdu).

Unmarked word order in Hocąk is verb-final, as in (1). However, Hocąk has relatively free word order: phrases can appear to the left or the right of their canonical position. A leftward moved DP is associated with a focus interpretation (2a), while a rightward moved DP is associated with a discourse-old or “backgrounded” interpretation (2b). In this paper, I argue postverbal DPs are instances of rightward scrambling, i.e. discourse-driven movement of individual DPs. This analysis supports the type of movement posited in Manetta 2012.

(1) wijukra šųųkra haja
    cat.DEF dog.DEF 3S.see
    ‘The cat saw the dog.’

(2) a. wažažira, hinųkra ruwi, wažažira
    car.DEF woman.DEF 3S.buy woman.DEF 3S.buy car.DEF
    ‘The car, the woman bought (it).’    ‘The lady bought something, the car’

Word order is crucial to disambiguate the subject from the object: the first argument is interpreted as the subject. In (3), the first interpretation of the sentence (although pragmatically unlikely) is the only one with neutral intonation; however, the second interpretation is only possible if there is a pause after ‘car’.

(3) wažažira hinųkra ruwi.
    car.DEF lady.DEF 3S.buy
    ‘The car bought the lady.’ OR ‘The car, the lady bought (it).’

For the purposes of exhibition, I represent Hocąk as SOV underlingly. However, I predict that my analysis could be modified to fit an antisymmetric account (Kayne 1994).

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1 Abbreviations in Hocąk examples: > = subject acting on object; ACT = active; AUX = auxiliary; DECL = declarative; DEF = definite; INDEF = indefinite; S = singular; PL = plural; POS = positional.
2 Postverbal DPs and Rightward Scrambling in Hocąk

In Hocąk, any number of DPs may appear to the right of the verb, in any order, as illustrated in (4) below.

(4) a. šųų kra hoxataprookeeja haja, wijkra  O V S
dog.DEF in.the.woods 3S.see cat.DEF
‘The cat saw the dog in the woods.’

b. wijkra hoxataprookeeja haja, šųų kra  S V O
cat.DEF in.the.woods 3S.see dog.DEF
‘The cat saw the dog in the woods.’

c. hinų kra wį wagaxhižą hok’ų, wąkra  S DO V IO
woman.DEF pencil.INDEF 3S.give man.DEF
‘The woman gave the man the pencil.’

d. wį wagaxhižą hok’ų, hinų kra, wąkra  DO V S IO
pencil.INDEF 3S.give woman.DEF man.DEF
‘The woman gave the man the pencil.’

Three types of evidence suggest postverbal DPs arrive postverbally via rightward scrambling. First, short leftward movement can strand quantifiers (as in (5b)). Quantifiers can also be stranded when a DP is moved rightward (6a). I assume the structure of a quantified phrase (6b).

(5) a. Base order:  S O-Q V
wijkra šųų kra hanąć waaja  šųų kra wijkra hanąć waaja
dog.DEF every 3s>3pl.see dog.DEF cat.DEF every 3s>3pl.see
‘The cat saw every dog.’

b. Leftward movement:  O S t-Q V
wijkra hanąć waaja, šųų kra  Q
waaja dog.DEF every 3s>3pl.see dog.DEF
‘The cat saw every dog.’

(6) a. Postverbal:  S t-Q V O
wijkra hanąć waaja, šųų kra  Q NP
qaaj every 3s>3pl.see dog.DEF
‘The cat saw every dog.

(b) (cf. Bresnan 1973, Manetta 2012)

The second piece of data deals with locative expressions. In (7), the locative hoxataprookeeja ‘in the woods’ obligatorily modifies the object ‘dog’. The locative takes scope over the object regardless if it is in neutral position between the object and the verb (7a) or in a fronted position (7b). Remarkably, all postverbal arguments are within the scope of the locative, as shown in (8).

(7) a. wijkra šųų kra hoxataprookeeja haja
cat.DEF dog.DEF in.the.woods 3s.see

b. hoxataprookeeja wijkra šųų kra haja
in.the.woods cat.DEF dog.DEF 3s.see
= ‘The cat saw [the dog in the woods].’
≠ ‘[The cat in the woods] saw the dog.’
Third, Hocât, like all Siouan languages, is a wh-in-situ language (as in (9a)). In (9b), the wh-expression has been moved leftward. Both allow for normal question interpretations.

(9)  
(8)  
a. šųų kra hoxataprookeeja haja wijukra  
dog.DEF in.the.woods 3S.see cat.DEF  
‘[The cat in the woods] saw [the dog in the woods].’

b. wijukra hoxataprookeeja haja šųų kra  
cat.DEF in.the.woods 3S.see dog.DEF  
‘The cat saw [the dog in the woods].’

A wh-expression that occurs to the right of the verb cannot be interpreted as a normal question; it is interpreted as a second question. This is shown in (10) for peeţega ‘who’.

(10)  
(11)  
(12)  
(13)  
Base order: SOV  
[vp wijukra [vp šųų kra haja] v]  
i. Rightward scrambling of subject to Spec,CP: OVS  
[[tp [vp tš ... šųų kra] haja (T)] wijukraš]  
ii. LF representation following reconstruction: SOV  
[tp [vp wijukra [vp šųų kra V ]] haja (T)]  

There is evidence that suggests that postverbal arguments move to Spec,CP. Hocât has a declarative morpheme -šąŋ that sits in C (see also Boyle 2007 for Hidatsa). Postverbal DPs must appear to the right of the -šąŋ (13). The object in (13a) is thus in Spec,CP.
The analysis in (11) explains the distribution of postverbal DPs. (i) Given the structure of a quantified phrase in (6b), the word order in (6a) is expected since arguments can move rightward independently, akin to leftward movement. (ii) By assuming that each rightward-moved DP is obligatorily reconstructed (cf. 11ii), we can derive the locative scope facts. I argue that locatives take scope over vP, and that subjects move to Spec,TP in SOV orders; thus, reconstructed arguments (subjects/objects) are obligatorily modified by the locative. (iii) Postverbal question words are interpreted as a separate question. This restriction on wh-words makes sense if the right edge is reserved for discourse-old DPs. Wh-words by definition cannot be discourse-old. Finally, I predict that an analysis based on Multiple Move (Hiraiwa 2010) or Attract-All (Bošković 1999) could be extended to account for multiple postverbal arguments, as in (4d).

3 Cross-linguistic Implications

The evidence presented here supports an analysis in which postverbal DPs arrive in their surface position by rightward movement. Postverbal arguments in verb-final languages are not unique, as Japanese, Hindi, Korean, and Turkish are known to allow such constructions.

Bhatt and Dayal (2007, Hindi-Urdu) argue that postverbal DPs are derived via rightward movement of a remnant VP, which adjoins to a projection above the verb. With the evidence from Hocak, it is unclear how a backgrounded interpretation would be assigned in a remnant VP. Moreover, this account would not account for the stranded quantifier example in (6a).

Kural (1997) shows that the LCA is unable to account for scopal properties of postverbal constituents in Turkish. Postverbal arguments arrive in their surface position by rightward scrambling to Spec,CP. Similarly, Ko and Choi (2009, Korean) propose an economy-based approach based on Fox (2000), whereby postverbal arguments move rightward to Spec,vP. As the example in (13b) shows, postverbal DPs sit in Spec,CP, which suggests that Turkish and Hocak pattern to the exclusion of Korean.

Selected References