

## Direct and Indirect Modification in Hocak

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**Goal and Background:** This paper provides evidence that Hocak (Siouan) has direct modification, contra Helmbrecht’s (2004) claim that all adjectives in Hocak are indirect modifiers. The data also show that lack of rigid ordering is not a reliable diagnostic for indirect modification (contra Cinque 2010). Following Sproat and Shih (1991), Cinque (2010) argues that indirect modification is higher, unordered, and in (reduced) relative clauses (RC), whereas direct modification is lower, ordered, and in APs. In Hocak, attributive adjectives (1a) and relative clauses (1b) both occupy the same position relative to the noun and employ the same morpheme *-ra*, which Helmbrecht (2004) takes to be evidence that attributive adjectives are RCs. Moreover, these modifiers seem to have the status of indirect modifiers since they are unordered (2). I show that the modifiers in (1a) and (2) are APs.

**Evidence for Direct Modification:** Despite the appearance of indirect modifiers in Hocak, nationality/origin and material modifiers behave differently. First, their position must be prenominal; see the contrasts in (3). Second, unlike (1a) and (2), nation./origin and material modifiers are strictly ordered (4). This corresponds to the lowest part of Scott’s (2002) hierarchy in (5), where nation./origin precedes material. The restriction in (4) indicates the need to recognize a modifier hierarchy in Hocak. This follows from the hierarchy in (5), which is a feature of direct modification. Under Scott’s (2002) proposal, the hierarchy is manifested in a series of functional heads, which host the relevant APs in their specifiers. The strict ordering of nationality/origin > material is not because they form a compound with the noun they modify: Noun Phrase Ellipsis is possible (6). *Naa* ‘wooden’ would also be elided, if it truly formed a compound with its head noun.

**Postnominal Modifiers as APs:** Under Cinque’s (2010) account, indirect modifiers are either reduced RCs in IPs or full RCs in CPs. However, Hocak postnominal modifiers do not conform to Cinque’s generalization. Since adjectives in predicative environments may take plural morphology (*-ire*) (7), verbal and adjectival agreement in RCs should be completely parallel. When the head NP is the subject of the RC, then the verb inside the RC must agree with it (8). An adjective does not have the same agreement requirements (9). I assume that I/T hosts subject agreement (Baker 2008). The difference in agreement suggests that the modifiers in (2) are APs, not in RCs (IP/CP).

**AP Ordering:** I extend Svenonius’ (2008) theory of adjective ordering to Hocak. He claims that there is a series of functional heads that introduce different types of noun dependencies. I propose that postnominal APs merge in Spec,nP, while prenominal ones merge in Spec,FP. I depart from Svenonius in two major ways: (i) FPs hosting direct modifiers merge lower than nP; (ii) unlike other FPs, nP can form nP-shells, where each n is a reiterated form of itself. Variable orders are produced because modifiers in shell specifiers (nP) are in a spec-head relationship with the *same* head (n); see (10). In contrast to Cinque, this head is not used to directly produce ordering restrictions. A consequence of the nP-shell analysis is that it allows variable orders without positing that indirect modifiers are in RCs, while still maintaining the idea of one specifier per head (as in Cinque). Thus, indirect modification always involves RCs, as in (1b), and postnominal APs do not need to be in relative clauses. They behave like direct modification in that they are bare APs; however, they are unordered because the particular functional projection that they merge into can be iterated.

**Conclusion:** The data from prenominal modifiers supports the claim that Hocak has direct modifiers. The data also shed new light on one of Cinque’s diagnostics for indirect modification: free ordering of modifiers does not have to be indicative of indirect modification. Furthermore, this study highlights the fact that a language might appear to only have indirect modification, but deeper investigation reveals that direct modification exists.

- (1) a. wijuk seep-ra            b. waꞥk taani    hij-ra            (2) wijuk (seep) xete (seep)-ra  
       cat    black-RA            man tobacco suckle-RA            cat    black big black-RA  
       ‘the black cat’            ‘the man who smokes’            ‘the big black cat’

\*For expository purposes, I gloss *-ra* as RA.

- (3) a. iini    cii    (\*iini)-ra            b. hišjahakirujik    wažatire (\*hišjahakirujik)-ra  
       stone house stone-RA            Japanese            car            Japanese-RA  
       ‘the stone house’            ‘the Japanese car’

- (4) (\*naꞥ) hišjahakirujik naꞥ    wažatire-ra    (5) ... shape > color > nation./origin > material  
       wooden Japanese            wooden car-RA            (Scott 2002:114)  
       ‘the Japanese wooden car’

- (6) Meredith-ga    maꞥs wooracga-hižꞥ ruwꞥ anaga Brad-ga    **naꞥ**-ra    ruwꞥ.  
       Meredith-PROP metal cup-INDEF    buy and Brad-PROP wooden-RA    buy  
       ‘Meredith bought a metal cup, and Brad bought a wooden one.’

- (7) xete-ire            (8) Hinꞥk haji-{ire/\*Ø}-ra    wokit’e            (9) wijuk seep-ra    waaja  
       big-3PL            woman arrive-{3PL/SG}-RA    3O.speak.to            cat    black-RA    3O.see  
       ‘They are big.’            ‘S/he spoke to the women that arrived.’            ‘S/he saw the black cats.’

- (10) [nP {size/color/shape} [nP {size/color/shape} [FP1 nationality/origin [FP2 material [NP N ]]]]]

## References:

- Baker, Mark C. 2003. *Lexical categories: Verbs, nouns, and adjectives*. Cambridge: Cambridge University Press.
- Baker, Mark C. 2008. *The syntax of agreement and concord*. Cambridge: Cambridge University Press.
- Cinque, Guglielmo. 2010. *The syntax of adjectives*. Cambridge, MA: MIT Press.
- Helmbrecht, Johannes. 2004. Are there adjectives in Hocank (Winnebago)? *Arbeitspapiere des Seminars für Sprachwissenschaft der Universität Erfurt*.
- Scott, Gary-John. 2002. Stacked adjectival modification and the structure of nominal phrases. *Functional structure in DP and IP*, ed. by Guglielmo Cinque, 91–120. Oxford: Oxford University Press.
- Sproat, Richard, and Chilin Shih. 1991. The cross-linguistic distribution of adjective ordering restrictions. *Interdisciplinary approaches to language: Essays in honor of S.-Y. Kuroda*, ed. by Carol Georgopoulos and Roberta Ishihara, 565–593. Dordrecht: Kluwer.