Noun Incorporation, Instability, and Labelling

**Nutshell:** Noun incorporation (NI) is analyzed by Baker (1988, 1996, inter alia) as head movement driven by the Morphological Visibility Condition. I present problems with this analysis and propose that NI is driven by instability caused by the inability to label the nominal object to undergo NI (in the sense of Chomsky 2008; 2013; Cecchetto and Donati, 2015). In short, the incorporated noun undergoes movement into the verbal complex to allow the object to have a label. A result of this proposal is that the incorporated noun is a phrase rather than a head (Barrie & Mathieu, 2015). The data discussed here are from Onondaga, a Northern Iroquoian language closely related to Mohawk.

**NI: Head Movement or XP Movement?** Baker is perhaps the foremost proponent of NI as head movement (Baker, 1988, 2009). The impetus for this approach is (i) the notion that word formation is restricted to head movement, (ii) that the verbal complex with NI is typically considered to be a single word, and (iii) that the incorporated noun (IN) typically consists of just a root (or root + nominalizer). Here is an example showing NI in which the IN appears to be a bare root.

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(1) a. waʔ5 ha5 hninu 5ʔ neʔ o- yɛkw -a?
   FACT- 3.GM.AG buy -PUNC DET NPREF- tobacco -NFS
   ‘He bought tobacco.’ [Onondaga, (Woodbury, 1975)]
   b. waʔ5 ha5 yɛkw 5 a5 hninu 5ʔ
   FACT- 3.GM.AG- tobacco- EPEN- buy -PUNC
   ‘He bought tobacco.’
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There is, however, significant evidence that NI proceeds by XP movement (Barrie and Mathieu, 2016), requiring some or all of the ideas above to be rethought. We begin with a discussion on labelling and NI.

**Labelling These Days:** In the operation Merge (a,b) → {c, {a,b}} how do we determine the label c? There has been much discussion on this topic lately (Cecchetto and Donati, 2015, Chomsky, 2008, 2013, Moro, 2000, Ott, 2015). The gist of the proposals referenced here is the following:

- Merge (H, XP) → H is label
- Merge (YP, XP) → unstable, cannot determine label

Thus, if two phrases, XP and YP, are merged, either YP or XP moves. The element that remains determines the label. Ott (2015) assumes that Merge (XP, YP) always creates a point of local instability since there is no label. Following Chomsky (2008), Ott assumes that unlabelled objects cannot receive a theta-role, thus requiring movement for interpretation. Thus, movement is especially necessary for DP arguments which have not yet received a theta-role. We move on to NI and doubling, linking this phenomenon with the above discussion on labelling.

**NI and Doubling:** Doubling is problematic for syntactic accounts of NI (Baker, 1988, 1996, Rosen, 1989).

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(2) waˀgnasgwahní:nǫˀ neˀ gwíhsgwihs
    FACT- 1.SG.AG- animal- EPEN- buy -PUNC
    ‘I bought a pig.’ [Onondaga]
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In brief, the IN and the double cannot occupy the same spot upon Merge. Baker’s response to this problem was to posit that the double is in a clause peripheral position à la Jelinek (1984). This solution is not tenable in light of the fact that the double can undergo wh-movement (Barrie et al., 2014, Barrie and Deer, 2012).

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(3) a. gaęnigáeˀ gwíhsgwihs waˀsnasgwahní:nǫˀ
    which pig waˀ- naskw- a- hninóˀ neˀ kwíhskwihs
    FACT- 2.SG- animal- JOIN- buy -PUNC
    ‘Which pig did you buy?’
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Barrie (2015) suggested the following solution to this problem. He proposed that the IN (nP) and the double (DP) merge to form a large ZP; however, the relationship between nP, DP, and ZP was left vague.

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(4) [ZP [nP Incorporated N][DP double]]
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ZP – unidentified category
Evidence for assuming an $nP$ (rather than a bare nominal root) comes from the fact that overt nominalizers and other functional material can appear in the IN (Barrie and Mathieu, 2016). In the following example the IN contains a semi-reflexive marker (SRFL), a kind of middle voice marker. This highlights the claim that the IN is a morphologically complex XP.

(5) a. $hoda' \text{ditsho}\text{da}'$ [Onondaga]

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