

## Head Movement, XP Movement and Noun Incorporation

Head Movement (HM) has been controversial since various problems with it have been pointed out (Fanselow, 2003, Mahajan, 2003). One particular problem with HM is its incompatibility with Bare Phrase Structure. Specifically, Merge (a,b) always results in a phrase {a, {a,b}}. I suggest that feature geometries may offer a solution. There has been much syntactic work on feature geometries (Cowper, 2005, Harley & Ritter, 2002, McGinnis, 2005). Let us assume that a head is essentially a piece of a feature geometry. If Merge (a,b) consists of the merger of two compatible pieces of feature geometry, then a new larger feature geometry is formed, giving rise to a larger head. Here is brief explanation of how this can be implemented. Assume, following Cowper that Infl is a complex feature geometry. Assume also that the features of *v* are also arranged in a feature geometry. The current proposal suggests that both geometries are actually part of a larger geometry that can remain separate in languages without V-to-T movement or can be united in languages with V-to-T movement. Ultimately, V to C movement is possible as we have one single feature geometry that can be put together by the individual heads. Some consequences of this proposal are that noun incorporation (NI) must be XP movement (since the extended nominal and verbal projections assumedly comprise distinct geometries) and that HM cannot cross clauses. These results are incorporated into recent collaborative work on NI, in which it is argued that NI takes place by XP movement (Barrie & Mathieu, 2016). I present current research outlining an analysis for XP movement of NI in which the phrasal incorporated noun (IN) moves to a low topic position below IP (Belletti, 2004, Jayaseelan, 2001). A recurring issue for NI is the fact that the IN can appear with a full DP double in classifier incorporation (Barrie, 2015, Rosen, 1989). Instead, I exploit this fact to drive the analysis. Following Ott (2015), who proposed a similar analysis for split topics in German, the IN+double complex is merged as  $[[nP][DP]]$  and is unlabelable, hence unstable. Specifically, I propose that  $[[nP][DP]]$  forms a small clause in the sense of Moro (1997), where the *nP* is the predicate. This *nP* then undergoes raising to the low TopP as mentioned above, giving rise to the illusion of noun incorporation. The verbal complex is now put together by a combination of head movement and XP movement. Prosodic evidence will be adduced to bolster this analysis (Dyck, 2009, Michelson, 1988).

- Barrie, Michael. 2015. Two kinds of structural noun incorporation. *Studia Linguistica* 69:237-271.
- Barrie, Michael, & Mathieu, Eric. 2016. Noun Incorporation and Phrasal Movement. *Natural Language & Linguistic Theory* 34:1-51.
- Belletti, Adriana. 2004. Aspects of the Low IP Area. In *The Structure of CP and IP: The Cartography of Syntactic Structures*, ed. Luigi Rizzi, 16-51. Oxford: Oxford University Press.
- Cowper, Elizabeth. 2005. The Geometry of Interpretable Features: Infl in English and Spanish. *Language* 81:10-46.
- Dyck, Carrie. 2009. Defining the Word in Cayuga (Iroquoian). *International Journal of American Linguistics* 75:571-605.
- Fanselow, Gisbert. 2003. Münchhausen-Style Head Movement and the Analysis of Verb Second. *UCLA Working Papers in Linguistics* 13:40-76.
- Harley, Heidi, & Ritter, Elizabeth. 2002. Person and number in pronouns: a feature-geometric analysis. *Language* 78:482-526.

- Jayaseelan, K. A. 2001. IP-Internal Topic and Focus Phrases. *Studia Linguistica* 55:39-75.
- Mahajan, Anoop. 2003. Word Order and (Remnant) VP Movement. In *Word Order and Scrambling*, ed. Simin Karimi, 217-237. Malden, MA: Blackwell Publishers.
- McGinnis, Martha. 2005. On markedness asymmetries in person and number. *Language* 81:699-718.
- Michelson, Karin. 1988. *A Comparative Study of Lake-Iroquoian Accent: SNLLT*. Dordrecht: Kluwer.
- Moro, Andrea. 1997. *The Raising of Predicates : Predicative noun phrases and the theory of clause structure* Cambridge: Cambridge University Press.
- Ott, Dennis. 2015. Symmetric Merge and local instability: Evidence from split topics. *Syntax* 18:157-200.
- Rosen, Sara Thomas. 1989. Two Types of Noun Incorporation: A Lexical Analysis. *Language* 65:294-317.