Peeling the onion: on domains and semantic hierarchies in Icelandic compounds.

Overview: Inflected elements within compounds, although fairly well known, have been generally overlooked in the literature. Compounding in Germanic has therefore been assumed to be recursive structure where nouns are added to nouns; yielding potentially large and complex structures. (1). Evidence from Icelandic, however point to such structures being too simple. In this paper I argue based on evidence from Icelandic, for a more articulated structure to a account for structural and semantic limitations on compounding.

i. Compounds consist of two layers, in which different types of modifiers (stem and inflected) are merged, (2).

ii. The relation of each modifier and the head will be restricted by the modifier’s position relative to other modifiers and their relations with the head.

I set aside the question of whether stems are composed of a root and a category creating node as in e.g. Marantz (1997).

Structure: Icelandic allows both stem and inflected modifiers in compounds. Any linear order of elements is possible; however, interpretation reveals restriction on constituency depending on the type of modifiers, (3-6). When both modifiers are of the same type, either stem or inflected, (3-4), the compounds are ambiguous wrt. grouping of elements. “Mixed” compounds (GEN –STEM – HEAD / STEM – GEN – HEAD), however, are not. In case of compounds with the order GEN – STEM – HEAD only right branching structure is possible (as noted by Rögnvaldsson 1990), (5). In case of the order STEM – GEN – HEAD, only left branching structure is possible, (6). This seems to have gone unnoted in the literature. Based on these data I propose (a) that inflected nouns have a (potentially empty) structure (X) above the nominal stem (N), and (b.) that compounding combines sisters of the same type/domain: X-X or N-N. (6a) and (5b) are excluded since they would involve a merger of an N (stem) to an X (inflection), and X to an N, respectively.

Semantic relations: Adopting Bisetto and Scalise’s (2005) classification of compounds and drawing on the works of Scott (2002), Cinque (2010) and Bobaljik (1999), I argue that potential relations are subject to a semantic hierarchy, (7). This hierarchy is repeated on each level but does not hold between levels. In principle, every relation is possible for any modifier. In a right branching structure, the potential relations of a modifier $\alpha$, are restricted based on the position of $\alpha$ relative to any other modifier in the structure. The compound in (8a), is ambiguous between subordinate and coordinate interpretation. An addition of a attributive stem modifier, góð-, will disambiguate the compound, excluding the subordinate interpretation, (8b). If the attributive modifier is inflected, as in (8c), both subordinate and a coordinate interpretations will be available; further illustrating the necessity for the two levels of modification. This hierarchy also holds at the higher level of modification, (9). In (9a) the inflected modifiers are ordered in accordance to the hierarchy, where as any other ordering will not be acceptable, (9b-c).
1. Donau #dampf#schiff#fährt -s #gesell -s#kapitän-s#mutze 
   Danube#steam #ship #journey-L#journeyman-SUFF-L#captain-L#cap 
   ‘cap of the captain of the Danube steam ship company’ (Neef 2009)

2. a. karl-a #hest #vagn - Ø 
   men-GEN#horse#wagon-NOM 
   ‘a horse drawn carriage for men’

   b. 
   X
   X
   N
   MAN
   X
   N
   HORSE
   WAGON

3. karl #hest #vagn - Ø 
   man#horse#wagon-NOM
   a. [MAN [HORSE [WAGON]]] 
   ‘a horse-drawn carriage for men’
   b. [[MAN [HORSE]] [WAGON]] 
   ‘a carriage drawn by male horses’

4. karl-a #hest-a #vagn-Ø 
   men-GEN#horses-GEN#wagon-NOM
   a. [MAN [HORSE [WAGON]]] 
   ‘a horse-drawn carriage for men’
   b. [[MAN [HORSE]] [WAGON]] 
   ‘a carriage drawn by male horses’

5. karl-a #hest #vagn - Ø 
   men-GEN#horse#wagon-NOM
   a. [MAN [HORSE [WAGON]]] 
   ‘a horse-drawn carriage for men’
   b. *[ [MAN [HORSE]] [WAGON]] 
   ‘a carriage drawn by male horses’

6. karl#hest-a#vagn-Ø 
   man#horses-GEN#wagon-NOM
   a. *[ [MAN [HORSE] [WAGON]]] 
   ‘a horse-drawn carriage for men’
   b. [[MAN [HORSE]] [WAGON]] 
   ‘a carriage drawn by male horses’

7. Semantic hierarchy of modifier-head relation.
   SUBORDINATE > ATTRIBUTIVE > COORDINATE

8. a. vél #mað-ur 
   machine#man-NOM
   ‘(heavy) machinery operator/robot’
   b. góð #vél #mað-ur 
   good#machine#man-NOM
   ‘a good quality robot’
   c. geða-a #vél #mað-ur 
   good(N)-GEN#machine#man-NOM
   ‘a good quality (heavy) machinery operator/robot’

9. a. Ísafjarðar #geða #bakara #lögga 
   Ísafjörður-GEN#good(N)-GEN#baker-GEN#cop 
   a good baker-cop in/from Ísafjörður
   b. ??bakara#geða#Ísafjarðar#lögga 
   c. ??geða#Ísafjarðar#bakara#lögga 
   d. ??geða#bakara#Ísafjarðar#lögga

References.