

## Noun Incorporation Revisited: Valency Effects and Argument Promotion

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### Abstract

Morphology can affect the syntactic valency of verbs. Generally, noun incorporation, NI, involves a change of a transitive V into an intransitive: one of its independent arguments is expressed as a part of the compound. (cf. Mithun 1984, Booij 2005). Compounds with verbal heads, [XV]<sub>V</sub>, are rare in Germanic languages (cf. Booij 2005, 2009), but, occasionally, new compounds occur (cf. Dijk 1997 for Frisian). However, NV-compounding, attested in Old Swedish, became highly productive at the beginning of the last century (cf. Åkermalm 1965). In contemporary Swedish, NV-compounding is productive, especially on the Internet. According to Åkermalm (1965), NV-compounds are most frequently backformations, mainly from NN-compounds (*brandförsäkring*<sub>N</sub> ‘fire+insurance’ > *brandförsäkra*<sub>V</sub> ‘fire+insure’), but also analogical formations (*rekordhoppa* ‘record+jump’, *-köra* ‘drive’, *-simma* ‘swim’) or purely free combinations, often occasional (*solstudera* ‘sun+study’). Wellander (1915) refutes the term of backformation and claims that no derivation can proceed backward: the verb is the starting point (*försäkra*<sub>V</sub> ‘insure’ > *brandförsäkra*<sub>V</sub> ‘fire+insure’); a claim worth considering from a synchronic perspective.

According to Rosen (1989), languages can use either (i) compound NI: argument reduction, V (x, y) > NV (x) (cf. Mithun’s 1984 three first types), or (ii) classifier NI: no argument reduction, since the N does not satisfy an argument of the V but restricts its selection; the object NP must be semantically related to the incorporated N (cf. Mithun’s 1984 fourth type). We agree with Rosen (1989) and Mithun (2009) who assume that NI is a word-formation process, not a syntactic process (cf. Sadock 1985, Baker 1986, 1988). According to Mithun (2009), Mohawk NIs manifest a variety of internal semantic relations, similar to NN root compounds, and show no consistent valency effects as to the argument structure of the V head. Our data of NV-compounds in contemporary Swedish consists of about 500 types, drawn mainly from *The Swedish Language Bank* (<http://spraakbanken.gu.se>) and the Internet. Swedish follows the general abstract schema for right-headed compounding in Germanic languages (cf. Booij 2009) and manifests SVO order, contrary to the order within NV-compounds.

Ackerman & Moore (2001a) propose a correspondence theory of argument selection, theoretically neutral, in which they make use of Dowty’s (cf. 1991) distinction between Proto-Agent and Proto-Patient. According to Ackerman & Moore (2001b), morphosemantic rules, subject to the Paradigmatic Argument Selection Principle, alter lexical semantics and are associated with function changes and/or valence change. In our study, we examine mainly paradigmatic argument selection with regard to valency effects in NIs. In Swedish NI, peripheral arguments are most frequently incorporated: *vattenfylla* (*motorn*) ‘water+fill (the engine)’ vs. fill (the engine) with water, or *näthandla* (*mat*) ‘web+shop (food)’ vs. shop (food) on the web. Core arguments can also be incorporated: *ytpolera* (*bilen*) ‘surface+polish (the car)’ vs. polish the surface (of the car), or *kostnadsberäkna* (*ett bygge*) ‘cost+calculate (a building)’ vs. calculate the costs (of a building). None of these cases involves a decrease in valency, since the compound takes an additional object in syntax. Hence, we propose that in the latter case, the NI promotes the adjunct to the status of direct object, similar to applicative constructions in African and Austronesian languages: in Wolof, instrumental or locative NPs can, by adding an applicative affix to the V, be promoted to O (Booij 2005). Åkermalm (1965) notes that the rare exceptions, such as *kannstöpa* ‘pot+mould’, which do become intransitive seem odd and do not fulfil any purpose. According to Mithun (2009) as well, NI constructions generally fulfil a purpose, and can undergo further meaning extension and semantic shift, once lexicalized. Furthermore, Swedish NIs can contain ditransitive verbs:

*delge (honom information)* ‘part+give (him information)’. Besides, they can be more or less semantic transparent. We assume the meaning of a compound to be a function of the meaning of its parts (cf. Jackendoff 2009).

Josefsson (2005) claims that Swedish NV-compounds are well-formed, only if the N has a modifier function, similar to an adjunct. If the incorporated N corresponds to an internal argument, the compound is out (*\*äppeläta* ‘apple+eat’, *\*gräsklippa* ‘grass+cut’), since in that case, the NI would change the V’s valency, and its output meaning would not differ from the meaning of the corresponding syntactic phrase. However, Josefsson, as well, notes the existence of NV-compounds, incorporating an internal argument but remaining transitive, *hjärtoperera (en patient)* ‘heart+operate (a patient)’, which, according to her, contain a part-whole relation between the incorporated N and the independent argument. Such an analysis resembles to the Classifier NI of Rosen (1989), but, according to our data, it cannot cover all instances. Moreover, Josefsson notes that in some NIs, the N resembles to a subject but functions as an instrument: *polisbevaka (matchen)* ‘police+guard (the game)’.

In conclusion, our study shows that Swedish NIs involve hardly any valency effects. In the foremost frequent case, the incorporated N corresponds to a syntactic adjunct. In the less frequent case, the NI involves argument promotion: the incorporated N corresponds to a direct object, and an adjunct is promoted to direct object. Both cases of NI result in more compressed constructions compared to non-compound constructions.

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