The English Binominal NP Construction: A Construction-Based Perspective

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As attested in naturally occurring data in (1), English Binominal NPs (BNPs) with the structure 'Det1 N1 *of* Det2 N2' display complex syntax and semantics.

(1) a.   It's been [**a** hell of a day] at the office.

　　 b.   And you won't be saying anything to [**that** ponce of a boss] you've got, Howard?

　　 c.   [**Some** dragon of a receptionist] refused to let him see her boss without an appointment.

　　 d.   And she was old, antique. Deep lines grooved [**her** prune of a face].

In this paper, we show that the regular and idiosyncratic properties of the BNP construction lead us to an account in the spirit of construction grammar; we specifically argue that the English BNP is a nominal juxtaposition construction linked to a special semantic relation.

In dealing with the BNP, the first puzzle is what is the head of the overall structure. The headedness issue is central in three different approaches to the preposition *of*: as a preposition selecting the following NP headed by N2 in ((2a), Abney 1987, Napoli 1989), as a pragmatic marker forming a unit with the preceding N1 and following *a/an* ((2b), Aarts 1998, Keizer 2007), and as a prepositional complementizer F selecting a small clause ((2c), Kayne 1994, Den Dikken 2006):

(2) a. $[_{NP}$ a $[_N$ hell $[_{PP}$ of a problem]]

　　 b. $[_{NP}$ a $[_{MP}$ hell of a] problem]

　　 c.   that $[_{D/PP}$ $[_{NP}$ idiot$_j$] $[_{FP}$ of $[_{IP}$ a doctor I^0 t$_j$]]] ...

Each of these three approaches has its own merits, but is not fully satisfactory to capture the BNP's regular as well as idiosyncratic properties. The obligatoriness of the PP may support N1 being the head, but the semantic locus of the overall structure seems to be the second noun N2. For example, N1 in (1a) can be paraphrased as an adjectival modifier as *a hellish day*, and further Det1 and a pre-N1 modifier can scope over the remote N2 as in *[that] fool of a [doctor]* or *that [little] bastard of a [chaplain]*. However, the N2-as-head approach in (2b) is also forced to assume the string "N1-of-a" as a constituent, sacrificing the traditional constituency. The third main analysis in (2c), reflecting the subject-predicate meaning relation between N1 and N2 as shown from the paraphrases in (3) for the examples in (1), assumes that the N1 *idiot* is originated as the predicate of the N2 and then undergoes predicate inversion within a small clause.

(3) a.   a hell of a day – the day is a hell

　　 b.   a jewel of a city – the city is a jewel

　　 c.   a martinet of a mother – the mother is a martinet

Successful though this analysis seems to be in capturing the semantic relation, the analysis does not provide an answer to what motivates the movement operations involved here.

Furthermore, none of these three approaches properly addresses the freedom of the selectional restrictions or that of the semantic head:

(4) a.   She doesn't want to talk to $\left\{\begin{array}{l}\text{this idiot of a prime minister.} \\ \text{this idiot.} \\ \text{a prime minister.}\end{array}\right\}$

    b.   I met $\left\{\begin{array}{l}\text{a colourless little mouse of a woman.} \\ \text{*a colourless little mouse.} \\ \text{a woman.}\end{array}\right\}$

    c.   I detest $\left\{\begin{array}{l}\text{that rotten little fig of a human being.} \\ \text{that rotten little fig.} \\ \text{*a human being.}\end{array}\right\}$

As illustrated here, in terms of the selectional restriction, the semantic head in (4a) can be either N1 or N2. But the one in (4b) is only N2 while the semantic head in (4c) is N1. In addition, the three approaches address the issue of morphosyntactic constraints on the BNP in a precise way. For example, Det2 must be the indefinite article *a/an* as in (5). In addition, there are syntactic freezing effects: the *of*-tagged PP cannot be extraposed or *wh*-questioned as shown in (6a) and (6b), respectively. Further, neither the PP nor the NP2 can be coordinated as given in (7).

(5) a.   a hell of **a**/*some/*any/*one day

    b.   this chit of **a**/*her/*that/*this/*some/*any/*the/*one girl

(6) a.   [A monster of a machine] was delivered/*A monster was delivered of a machine.

    b.   She had [a skullcracker of a headache.]/*What did she have a skullcracker of?

(7) a.   *I had a hell [of a day] and [of a time].

    b.   *Into the assessment room stepped a giant of [a man] and [a woman].

Turning to our account of the BNP, we take a slightly different approach from any of the previous approaches, aiming to account for the general as well as the idiosyncratic properties of the construction.

- There are two nominals in contiguity with each other though the preposition is intervening.

- Neither nominals can be clearly identified as the head of the whole phrase.

- Elements in the BNP are frozen in the sense that neither N1 nor N2 can be involved in a movement operation. They observe island constraints like the Coordinate Structure Constraints.

- The two NPs are parallel in many respects. The two nominals agree in number, semantic gender, and selectional restrictions.

- Det2 can be marked only with the indefinite article *a/an*.

- The two NPs entertain a predication relation in which N1 has an evaluative function of N2.

These properties and others indicate that the BNP is really a fixed construction subject to high-level morpho-syntactic constraints. We propose that the BNP is a type of nominal juxtaposition construction whose syntactic form is associated with a specific semantic relation, as represented in Figure 1.

$$\text{Syntax: } N'_i \left| N'_j \left[\text{AGR } \boxed{1} \right] \right| + \textit{of} + \left| NP_i \begin{bmatrix} \text{MRK } \textit{a/an} \\ \text{ARG } \boxed{1} \end{bmatrix} \right|$$

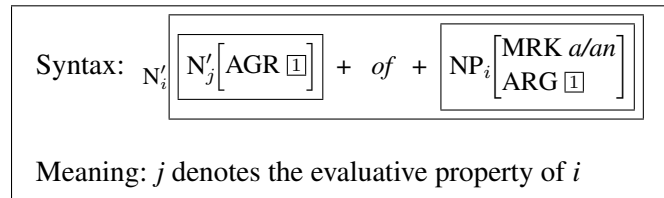Meaning: *j* denotes the evaluative property of *i*

Figure 1: BNP Construction in English

The constructional constraint in Figure 1 specifies that the BNP is a juxtaposition of two nominal expressions N′ and NP, linked by *of*. The result of juxtaposing the two nominal phrases with identical agreement (AGR) features induces a predication relation in which the first nominal (*j*) denotes an evaluative property of the second nominal (*i*). Note that this juxtaposition does not assign any syntactic headedness property to either noun, similar to the behavior of asyndetic co-ordinated constructions. The constructional constraint says that the index value of the composite N'_i is identical to the second NP_i, implying that N2 is the semantic head. Consider an exemplar structure that our analysis generates:

(8)
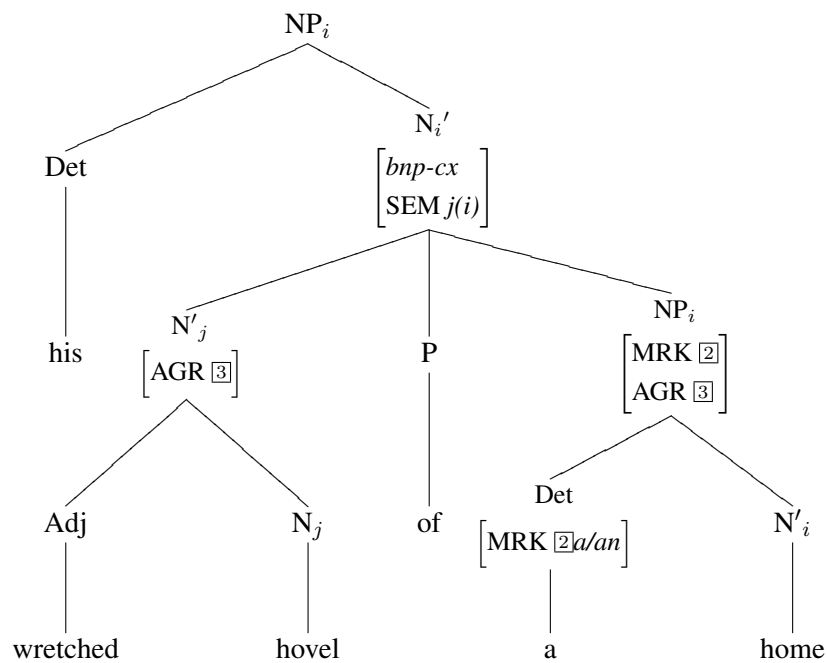
As shown in the structure, the two nominal phrases *wretched hovel* and *a home* are linked by the preposition. The constructional constraint in Figure 1 ensure that these two nominal phrases have the identical AGR (number and gender) value, and further that the second NP is marked with the indefinite article *a/an*. The index value of the whole NP structure (*i*) is identical with the second NP, ensuring its semantic headedness. The semantic value (SEM) also shows that the two nominals are in a subject-predicate relation.

This proposal departs from traditional analyses but captures numerous constructional properties that otherwise remain as puzzles. The present analysis views the BNP as directly having two nominals parallel in many respects including number, gender, and selectional restrictions. Multiple coordination is not possible because the construction is strictly binary like *neither/nor*. The two nouns enter into a predication relation in which N1 has an evaluative function on N2, which follows from the purely form-function mapping in the spirit of construction grammar. Note that though the second NP is subject to rather stricter constraints such as having to be marked with the indefinite article, there is no constraint on NP1 other than the AGR value. This will license more complex examples like (9).

(9) a.   that [destroyer of education] of [a minister]

     b.   this [manipulator of people] of [a mayor]

     c.   my [true defender in need] of [a husband]

The nouns *destroyer* and *manipulator* require their own complements *of education* and *of people*. Such an N′ is juxtaposed with a following indefinite NP. However, the analysis does not license examples like (10), violating the indefiniteness requirement on Det2.

(10) a.   *that [destroyer of education] of [the minister]

      b.   *my [true defender in need] of [the husband]

As long as this constraint is satisfied, NP2 can also be complex as in (11).

(11) a.   Don't forget we've both done this a hell of a lot more times than you have!

      b.   There was a hell of a lot of smoke.

Also, observe that the BNP can be recursive as in (12a). The generation of such a recursive BNP is straightforward within the juxtaposition approach proposed here. However, it would not generate (12b), due to the constraint on the BNP construction that Det2 is indefinite.

(12) a.   [that asshole of [an idiot of a doctor]] (data from Den Dikken 2006)

      b.   ??/*that asshole of that idiot of a doctor

This leaves *that asshole of an idiot* as the only possible constituent. The freezing effects also follow from the juxtaposition in a straightforward manner: the two elements in the BNP are frozen in the sense that neither N1 nor N2 can be involved in a displacement operation like extraposition, as further attested in (13):

(13) a.   *[Of a lawyer], he was a fool __ .

b.   *[A little slip __] came in [of a girl].

In the present analysis, these are also expected from the coordination-like properties of the juxtaposition BNP construction. The linker *of* has two dependents N1 and N2 and an extraction of an element from only one of these two will violated the juxtaposition properties.

This paper shows that once we accept the view that the English BNP construction is a type of nominal juxtaposition construction (cf. Jackendoff 2008), many distinctive properties of the construction follow in a simple and straightforward manner.

Selected References

Aarts, Bas. 1998. Binominal Noun Phrases in English. *Transactions of the Philological Society* 96: 117–158.

Culicover, Peter and Ray Jackendoff. 1997. Semantic subordination despite syntactic coordination. *Linguistic Inquiry* 28: 195–218

Den Dikken, Marcel. 1995. Copulas. Paper Presented at *GLOW 18*, Tromsø. Vrije Universiteit Amsterdam/HIL, MS.

Den Dikken, Marcel. 2006. *Relators and Linkers: The Syntax of Predication, Predicate Inversion and Copulas*. Cambridge: MIT Press.

Jackendoff, Ray. 2008. *Construction after construction* and its theoretical challenges. *Language* 84: 8–28.

Kayne, Richard. 1994. *The Antisymmetry of Syntax*. Cambridge: MIT Press.

Keizer, Evelien. 2007. *The English Noun Phrase: The Nature of Linguistic Categorization*. Cambridge: Cambridge University Press.

Napoli, Donna Jo. 1989. *Predication theory: a case study for indexing theory*. Cambridge: Cambridge University Press.