

A corpus survey on binominal noun phrase construction in English: with special reference to the evaluativity and predicativity

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Abstract:

This study investigates the nature of Binominal Noun Phrases (BNPs) and their classification. Previous literature focused on the structure and semantic properties of BNPs, and researchers described the semantic conditions of the two NPs in such constructions in various ways. Aarts (1998), for example, argued that unlike common noun phrases with *of* (“N1 of N2”), the N1 in BNPs is predicated of the N2, which suggests the headedness of the N2 (e.g., *a hell of a problem*). Meanwhile, Constantinescu (2011) pointed out that the N1 necessarily yields an evaluative meaning imposed on the N2. Although Constantinescu’s analysis seems more appropriate, the ununiform character of the N1 prevents us from offering an explanation in favor of evaluativity. Then, we classify examples from the literature into three groups according to their semantic traits: lexical, figurative, and modificational. We argue that the evaluative meanings are made evident by the *find* test (cf. Bolinger, 1980), irrespective of the type classification. Along these lines, we also analyze corpus data that are compatible with the suggested classification and discuss some characteristics of BNPs observable through the corpus survey.

Keywords: Noun Phrases, Binominal Noun Phrases, Evaluativity, Gradability

1. Introduction

Normally, in English, the syntactic head of a noun phrase is the first nominal (N1) and is followed by a complement with the preposition *of* intervened, as shown in (1) below:

- (1) a. [NP the picture [PP of that boy]]
b. [NP a review [PP of the book]]

(Asaka, 2002, p. 114)

In (1), each N1 (i.e., *the picture* and *a review*) is the head of the respective NP, while the N2 (i.e., *that boy* and *the book*) is its complement. Some previous studies, however, point out another type of NP that is distinct from the examples in (1). Let us observe the phrases in (2):

- (2) a. an angel of a girl
b. a hell of a problem

(Quirk et al. 1985, p. 1285)

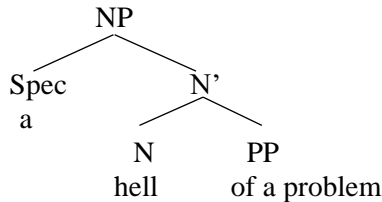
In (2), for example, the phrase *an angel of a girl* has the same meaning as the expression *an angelic girl*. In other words, the N1 *an angel* semantically behaves like the adjective *angelic* despite its nominal nature. In this case, it is the N2 (i.e., *a girl* and *a problem*) that serves as the semantic head, even though the same syntactic form appears in (1) and (2). Following previous studies, we call phrases like the ones in (2) Binominal Noun Phrases (BNPs), whose syntactic schema is described as in (3).

- (3) *schema of BNPs*^[1]

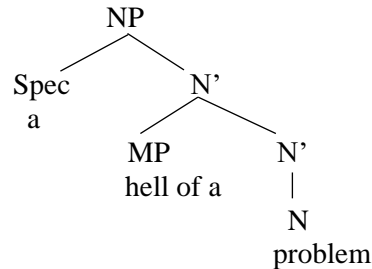
Det1	N1	of	Det2	N2
<i>an</i>	<i>angel</i>	<i>of</i>	<i>a</i>	<i>girl</i>

Previous work has focused on the syntactic and semantic nature of BNPs. Aarts (1998), for example, illustrates the syntactic structure of BNPs by proposing that the sequence “N1 *of* (a)” forms a constituent he coins the modifier phrase (MP).

(4) a. N1 as a head



b. N2 as a head (cf. Aarts, 1998)



The structure in (4a) represents the canonical noun phrase like the examples shown in (1), whereas the structure in (4b) displays the BNP in (2). Aarts proposes that the sequence *hell of a* forms a constituent MP, which modifies the N2 (i.e., *problem*). This structural analysis results in the parallelism between the canonical noun phrase (4a) and the BNP (4b) in that the N2 in the latter may as well be analyzed as the head both semantically and syntactically. According to Aarts, this contributes to dispensing with the exceptional headedness of BNPs.

Aarts’ argument for the structure in (4b) comes from headedness and constituency. Regarding the former, let us consider the examples in (5):

- (5) a. [A hell of a problem] came up in our meeting yesterday.
 b. # A hell came up in our meeting yesterday.
 c. A problem came up in our meeting yesterday.

(cf. Aarts, 1998, p. 130)

The noun phrase in (5a) is a BNP, where the N1 *hell* modifies the N2 *problem*. Omitting the N2 renders the sentence infelicitous, as in (5b), while the deletion of the N1 is felicitous, as in (5c), to denote the same situation as (5a). This asymmetry indicates that the semantic head of the BNP is the N2 rather than the N1 because what is responsible for a referent of an NP is usually the head noun.

Regarding permutational properties of the BNP, the sequence “*of* N2” cannot be extracted out of the BNP, as illustrated by (6).

- (6) a. a monster of a machine.
 b. * [of a machine]_i, it was [a monster *t*_i]
 c. * [a monster *t*_i] was delivered [of a machine]_i

(Aarts, 1998, p. 134; Abney, 1987, p. 297)

Both (6b) and (6c) show movement of the sequence *of a machine* from the BNP *a monster of a machine* given in (6a). More concretely, (6b) illustrates leftward movement and (6c) shows rightward movement, and both extractions are not appropriate. Given the traditional syntactic assumption that a movement operation may only target a constituent, it is demonstrated that the sequence *of a machine* in (6) does not form a constituent.

These facts lead Aarts (1998) to argue for the structure in (4b). Let us, in turn, consider the semantic relationship between the two NPs; previous studies have pointed out that the N1 needs to have particular semantic properties with regard to the N2. With this in mind, we now observe (7).

- (7) a. that fool of an engineer
 b. * that lad of an engineer

(Constantinescu, 2011, p. 49)

The N1 *that fool* in (7a) is acceptable, but the N1 *that lad* in (7b) is not. In this respect, Constantinescu (2011) claims that the N1 is required to encode an evaluative meaning with respect to the N2. Intuitively, the notion of *evaluativity* would capture the asymmetry in (7) because the word *fool* in (7a) seems to inherently carry such an interpretation. However, there are two problems, either conceptually or empirically: this notion is too intuitive to define, and it is not clear how the evaluative meaning, if any, is encoded. As a matter of fact, we will show later that the locus of the meaning varies. In this paper, we organize previous studies and classify BNPs attested from the literature in terms of the evaluativity imposed on N1s. We argue that they indeed carry evaluativity, evidenced by the *find* test suggested by Bolinger (1980). Along this line, we also present corpus data supporting the clarification.

This paper is organized as follows. Section 2 draws on the existing literature to review the semantic nature of the N1. More specifically, it investigates how the N1 in BNPs functions semantically. In Section 3, focusing on the process where an evaluative meaning is encoded, we clarify the types of N1s from examples provided in the literature. Section 4 demonstrates how the corpus data fit the three types defined in Section 3 and suggests some tendencies of the semantics of the N1. Section 5 provides the concluding remarks.

2. Evaluation and Its Relevance to BNPs

2.1 Predication in BNPs

One interesting property of the BNP is that the N1 behaves in the same way as an adjective and seems to modify the N2. Let us consider (8), repeated from (2a), and (9), which is similar to (7a).

- (8) a. an angel of a girl
- b. an angelic girl
- (9) a. the fool of a policeman
- b. the foolish policeman

(Asaka, 2002, p. 113-114)

We have already seen that the BNP *an angel of a girl* in (8a) corresponds to the meaning of *an angelic girl*, as in (8b). Similarly, (9a) denotes the meaning *a foolish policeman*, as in (9b). Both examples show that the N1 modifies the N2 as if it were an adjective. The N1's modification of the N2 is supported by (10) and (11):

- (10) a. Mary is the most angel of a girl that I have ever met.
- b. ?? Mary is a more angel of a girl than Jane.
- c. ?? She is a very angel of a girl.
- (11) a. * Mary is the most angel that I have ever met.
- b. * Mary is a more angel than Jane.
- c. * She is a very angel.

(Ike-uchi, 1996, p. 534–535)

Ike-uchi (1996) utilizes intensifiers such as *very*, *more*, and *most*, which can modify adjectives. These words can modify the N1 (i.e., *angel*) of a BNP, as in (10), but they cannot modify the word *angel* in (11), which serves as the head of the NP. This indicates that the N1 of the BNP, as in (10), serves as an adjective in the semantic sense.

Notably, the adjectival property of a noun does not mean there is a complementary distribution of the noun's ability to have a referent. In particular, a noun that refers to a person or a thing may be adjectival in some sense as well. Observe the contrast illustrated by (12) and (13):

- (12) a. that shyster of a lawyer
- b. * that lawyer of a son of yours
- (13) a. that baby of a brother of yours
- b. * that lad of a brother of yours

(Bolinger, 1972, p. 74, n. 14)

While in (12), *shyster* and *lawyer* both refer to a person who is a lawyer by profession, the acceptability differs. In addition to being referent to a person, *shyster* in (12a) refers to a person who uses unscrupulous and fraudulent methods in business. Such an added meaning is not found in (12b). In a similar vein, in (13a), the N1 *baby* has a meaning that the word *lad* does not; that is, the person (perhaps a boy) looks cute. These examples suggest that such added meanings are associated with the semantic condition imposed on the N1.

Moreover, the meaning that is tied with the N1 seems to be yielded by a modifier attaching to the N1. Observe (14) and (15):

- (14) a. ?? a cupid of a girl
 b. a naughty cupid of a girl
 (15) a. ?? a cat of a girl
 b. a slender/flirting cat of a girl

(Asaka, 2002, p. 118)

As demonstrated in (14a) and (15a), the words *cupid* and *cat* cannot occur in the N1 of a BNP. However, the phrases become felicitous once the N1 is modified by an adjective such as *naughty* or *slender*, as in (14b) and (15b).

In summary, we have seen that the N1 behaves like an adjective in that it attributes the semantic trait of the N2 involved. The attributability of the N1 may co-occur with its ability to have a referent, as illustrated in (12) and (13), and the peculiar semantic condition on the N1 may also be fulfilled by a modifier that is associated with the N1, as in (14) and (15).

2.2. Differences Between Gradability and Evaluativity

We have observed above that a peculiar semantic condition is imposed on the N1. Given the paraphrasability of the N1s as adjectives in (8) and (9), one may have recourse to the notion of *gradability* (Bolinger, 1972) in capturing the condition. However, Constantinescu (2011) analyzes BNPs in developing the notion of *gradability* as independent from *evaluativity* (or value judgment), and it is the latter, she argues, that the formedness of BNP is susceptible to. Here, we briefly overview her claim. First of all, the two notions can be defined on the basis of her observations, as shown in (16).

- (16) a. Gradability
 “refers to expressions which denote properties that may hold of entities to a higher or lower degree[.]”

(Constantinescu, 2011, p. 6)

- b. Evaluativity^[2] (Value Judgment)
 “refers to the expression of [...] speaker-based evaluation [that] is necessarily subjective, or emotive in some sense.”

(Constantinescu, 2011, p. 54)

Unlike gradability, the definition of evaluativity in (16b) is not easy to capture. In contexts other than BNPs, the notion is in fact exemplified by speaker-oriented expressions such as affective adjectives, as in (17).

- (17) this damned dog

(Constantinescu, 2011, p. 54)

The adjective *damned* in (17) is a swearword, and the speaker uses it because s/he considers the dog to be annoying. Thus, the speaker’s evaluation is reflected in the adjectival expression. At first sight, these two notions are indistinguishable in involving speaker’s subjectivity; in what follows, we discuss Constantinescu’s (2011) argument that evaluativity differs from gradability.

Let us then consider what makes those two notions clear-cut. Regarding gradability, intensive modifiers like *very* can modify adjectives in a degree sense. In the nominal domain, Bolinger (1972) observes that the adjective *big* can modify a gradable meaning of a noun in the same way as *very*. Observe the parallelism between (18) and (19).

- (18) a. John is (very) tall.
 b. John is taller than Mary.
 (19) a. a big (cheese) eater
 b. a big jazz enthusiast

(Constantinescu, 2011, p. 55)

The examples in (19) show that a noun, such as *enthusiast* and *eater*, can be modified by the adjective *big* to denote a person who eats cheese very much in (19a) or who is very enthusiastic about jazz in (19b). This demonstrates that the interpretation of such modificational relations (e.g., between *big* and *enthusiast*) seems to be parallel to the interpretation where an adjective is modified by *very*. In this line of argumentation, let us assume that *very* and *big* are a diagnostic tool for illuminating a gradable meaning of an element to which they attach.

Notably, affective adjectives, which are related to evaluativity by assumption, may not be modified by *very*. This indicates that this type of adjective carries no gradability. Observe (20):

- (20) * this very damned dog

(Constantinescu, 2011, p. 55)

Assuming that affective adjectives carry evaluativity in conveying speaker-oriented implicature (i.e., conventional implicature), example (20) thus illustrates that gradability is distinct from evaluativity.

Let us turn to the case of BNPs. Following Bolinger (1972), we have seen that gradability in a noun is brought to light by *big*, with a meaning corresponding to *very* for the adjectival domain. If the N1 in the BNP must carry gradability, it is predicted that nouns that may co-occur with *big* are allowed to occupy the slot of N1. However, this prediction is not borne out in (21):

- (21) a. ?? that (jazz-)enthusiast of a doctor “a doctor who is enthusiastic about jazz”

- b. * that eater of a doctor

- (cf. a big jazz enthusiast, a big (cheese) eater)

(= (19))

(Constantinescu, 2011, p. 56)

Both the phrases in (21) are unacceptable in spite of the fact that *enthusiast* and *eater* have gradable meanings, as confirmed in (19). This observation leads Constantinescu to claim that gradability is not a necessary condition for the N1 in the BNP.

Furthermore, she illustrates the fact that the N1 need not be gradable by presenting the examples in (22).

- (22) a. a box of a house * “a house that is very box-like”
 b. a stealth submarine of a car
 c. that balloon of a {head / bridal gown / building}
 d. that tower of a {song/burger/cake/man}

(Constantinescu, 2011, p. 57)

As Constantinescu shows, the examples in (22) do not have degree interpretations. In fact, the first nominal of each sentence in (22) metaphorically modifies the second (i.e., *box-like*, *stealth submarine-like*, *balloon-like*, and *tower-like*). In (22a), the phrase *a box of a house* is not about a house that is “a box to a high degree” but is “box-like.” This suggests that the N1 in BNPs is not necessarily gradable.

Constantinescu also has recourse to the *big* test. *Big* in (23) does not behave like *very* in the adjectival domain but instead describes the size of each noun. More concretely, *a big box* in (23a) denotes the size of the box, not a high degree of being box-like. By comparing (22) and (23), the nouns occupying the N1 slot in (22), Constantinescu concludes, are differentiated from those with *big*, as in (23), in interpretation. This implies that gradability is not associated with the semantic condition imposed on the N1.

- (23) a. a big box
 b. a big stealth submarine

- c. a big balloon
- d. a big tower

(Constantinescu, 2011, p. 57)

Finally, let us examine whether the condition on the N1 slot involves evaluativity. As observed above, Constantinescu argues that gradability is insufficient for the N1. In ((24a), the BNP is not felicitous irrespective of whether the noun is gradable (cf. (19a)). However, if the N1 is modified by an adjective such as *huge* in (24b), the phrase becomes acceptable.

- (24) a. * that eater of a doctor (=(21b))
 b. that huge eater of a doctor

(Constantinescu, 2011, p. 62)

The rescue by the modifier *huge* entails that it is a key factor for the formedness in (24b). Given that *huge* conveys the speaker's emotional attitude toward the way the doctor eats, together with an intensive function that *big* would have, Constantinescu claims that it is evaluativity that governs the N1, proposing that this notion is independent from gradability.

There remain two issues to be addressed: first, a diagnostic tool is not proposed in the literature for illuminating evaluativity on a noun, unlike gradability. Although sentence (24b), for example, seems to have an evaluative meaning intuitively, the argument for the presence of evaluativity in the N1 would be circular unless we know the way the notion is diagnosed independent of the BNP. Second, we must clarify the process by which this notion is encoded. In fact, we will argue in Section 3 that examples of BNPs need to be classified in terms of this process. Section 3 proposes a reliable test to illuminate evaluativity in nouns and argues that the classification we offer is amenable to the test.

3. Three Types of Evaluative Source in N1s

3.1. Find Test

This subsection appeals to Bolinger's (1980) observation to justify the evaluativity of the N1. Bolinger shows that a small clause selected by the verb *find* requires a predicate with an evaluative meaning. This is exemplified by (25):

- (25) a. I found her a decent person.
 b. I found her a delight.
 c. * I found her (a) basketball coach.

(Bolinger, 1980, p. 20)

The small clause complement of the verb *find* does not simply form a subject-predicative relationship; otherwise, the infelicity of (25c) would not be captured. Bolinger demonstrates instead that the small clause complement not only forms a predication, but also denotes the N1's evaluation of a property of the N2. Thus, the small clause in (25a) has the evaluative meaning "She is a decent person," while that in (25c) has the only the classificational interpretation "Her job is a basketball coach" and hence the unacceptability.

Given this insight, it is possible that the evaluativity of the N1 of a BNP is confirmed by inserting the N1 into the complement of *find*. This *find* test is shown in (26):

- (26) a. I found her idiot.
 b. I found her an angel.
 c. * I found him an eater.
 d. I found him a huge eater.

The *find* test shows that while nouns such as *idiot* or *angel*, which may occupy the N1 slot of the BNP, are grammatical in the complement of *find*, the use of *eater* in (26c), which may not be the same position (cf. (21b)), is infelicitous. Therefore, it is argued that the presence of evaluativity is illuminated by the *find* test.

More attractive is that, as shown in (27), the *find* test helps us capture the contrast between (27a) and (27b) by way of the presence/absence of evaluativity: *Shyster* in (27a) can be inserted into the complement of the small clause, as in (27c), which means that the word inherently carries evaluativity, and hence the acceptability of the BNP. On the other hand, (27d) shows that *lawyer* cannot be interpreted as carrying an evaluative meaning and therefore may not be the N1 of the BNP as in (27b).

- (27) a. that shyster of a lawyer.
 b. * that lawyer of a son of yours.
 c. I found her shyster.
 d. * I found her a lawyer.

In this subsection, we have seen that the evaluative meaning of the N1 is confirmed by the *find* test. Although the observations via this test lend empirical support to the idea that the N1 must be evaluative in some sense, it is not yet clear what kind of N1 can be licensed as evaluative. More precisely, we must tackle the issue of where the evaluative meaning of an N1 originates.

3.2. Classification of N1s

In Section 3.1, we saw how to confirm whether the N1s of BNPs have evaluativity. Then, this section identifies three types of N1s, all of which have evaluative meanings, based on the *find* test. Observe (28) and (29), the latter of which is reproduced from (26):

- (28) a. that **idiot** of a prime minister
 b. an **angel** of a girl
 c. that *(huge) **eater** of a doctor
 (29) a. I found her **idiot**.
 b. I found her an **angel**.
 c. I found her *(huge) **eater**.

While the three types of N1 have an evaluative meaning in common as shown by (29), it seems to be expressed by various means: In (28a), *idiot* has an evaluative meaning inherently, by which the BNP in (28a) is licensed. We label such N1s the “lexical” type. Then, the N1 in (28b) refers not to the word *angel* literally, but to the girl’s attribute metaphorically. More precisely, the meaning of *an angel of a girl* in (28b) is equivalent to “the girl is like an angel.” Since this type of N1 requires a metaphoric interpretation, we label it the “figurative” type. In (28c), the N1 *eater* does not have an evaluative interpretation itself, as illustrated by the *find* test. In order to yield some sense of evaluativity, this sort of N1 needs to be modified by an adjective like *huge*. We call such N1s the “modification” type. What is crucial is that despite the various sources of evaluativity, these three types *are* in common in expressing the meaning, which is illuminated by the *find* test, as in (29). To summarize, we can describe the three types introduced above as follows:

- (30) Three Types of N1 in BNPs
 a. Lexical (e.g., *that idiot of a prime minister*)
 b. Figurative (e.g., *an angel of a girl*)
 c. Modificational (e.g., *that *(huge) eater of a doctor*)

Thus, this section has clarified that the evaluativity of the N1 is confirmed by the *find* test and the N1s in BNPs can be classified into three types. Following this, Section 4 tests whether the N1s of BNPs in corpus data can also be categorized into the three types.

4. Corpus research

4.1. Method

This section examines corpus data to determine whether the N1s of BNPs are distributed into the three types listed in Section 3.2. We utilized the Corpus of Contemporary American English and set some constraints, shown in (31), in order to collect the relevant data without the distraction of canonical noun phrases. This is because the syntactic annotations provided in the corpus, such as categorial information, may not differentiate BNPs from the sequence “NP *of* NP” that is a canonical noun phrase (e.g., *the picture of that boy*).

- (31) Settings of the Corpus Research
- a. The contexts of the corpus data are only fiction and spoken genres.
 - b. The noun phrase is used alone in a passage.
 - c. The sequence of NPs searched is “Det (Adj) N of Det N.”

Based on (31a), we extracted data only from the fiction and spoken genres, which appeared to include stylized phrases. We presumed that BNPs are relatively attestable because they seem to have been conventionalized over time by virtue of their exclamative use. Regarding (31b), our data extractions were confined to tokens where the NP was used alone in a passage. More precisely, we gathered NPs that were sandwiched by two periods. This was because we made a conjecture that BNPs appear alone rather than as a part of a sentence due to their exclamatory purposes. Finally, the sequence of NPs was set up as consisting of “Det (Adj) N of Det N,” as in (31c). This crucially helped us to identify BNPs even given a large number of data items, because it has been observed that BNPs strongly resist definite articles immediately followed by the N2 (e.g., Aarts, 1998)—a striking syntactic trait that differentiates BNPs from canonical NPs with *of*.

In collecting the data, we paid attention to the referentiality of both the N1 and the N2. With this in mind, we set several criteria for the two NPs. As described in Section 3, we proposed classifying the N1s into three types: lexical, figurative, and modificational. The lexical type needs to be further scrutinized from the viewpoint of referentiality. The motivation for this stems from the fact that the N1 *idiot* and the N2 *doctor* in (32a) have a coreferential relation in referring to the same individual, whereas the N1 *wonder* and the N2 *city* in (32b) do not. More generally, we rely on a featural classification that states the lexical N1s can be further categorized into either “+ individual ([+]ind.)” or “-individual ([-]ind.)” in terms of whether or not they have the same referent as the N2.

- (32) Semantics of N1s of BNPs
- a. Lexical [+] ind. (N1=N2) (e.g., *that idiot of a doctor*)
 - b. Lexical [-] ind. (N1≠N2) (e.g., *a wonder of a city* “a wonderful city”)
 - c. Figurative (metaphorical meaning) (e.g., *an angel of a girl, a hell of a problem*)
 - d. Modificational (e.g., *a *(huge) eater of a man*)
 - e. Other

Let us turn our attention to the N2. We have observed that evaluativity is tied with the N1. Given that the evaluative meaning of the N1 is oriented to the N2, it is necessary to take into consideration the semantic status of the N2 as well. Although we do not offer any crucial statements in this research because we are not concerned with the number attested, the classification of the N2 would be important in particular for understanding to what extent the N1’s evaluation of a property of the N2 is contingent on the predicative relationship between the two NPs. Based on the semantics of nouns, we classified N2s into the following types:

- (33) Semantics of N2s of BNPs
- a. [+] animate (e.g., *human*)
 - b. [-] animate, [+] entity (e.g., *knife*)
 - c. [-] animate, [-] entity (e.g., *beauty*)
 - d. Other

It should be noted that both animate nouns and inanimate nouns can be inserted into the N2 slot. We first labeled the N2s as either “[+] animate” or “[-] animate.” Then, the “[-] animate” type was divided in two subcategories: “[+] entity” (e.g., *knife*) and “[-] entity” (e.g., *beauty*). Section 4.2 discusses the results of the corpus research.

4.2. Results and Discussion

Table 1 summarizes the results of the classification that set out in Section 4.1 and shows the 12 types of BNPs, without *Other* types (i.e., (32e) and (33d)).

Table 1: Results from the corpus survey

N1 \ N2	[+] Animate	[-]Animate ([+]entity)	[-]Animate ([-]entity)
Lexical [+]ind.	The theatrics of a loser (fiction)	A warren of passages (spoken)	A hurricane of wind (fiction)
Lexical [-]ind.	The death of a pioneer (spoken)	A wardrobe of dresses (fiction)	A night of friction (fiction)
Figurative	A heck of a guy (fiction)	A whale of a table! (fiction)	A ghost of a smile (fiction)
Modificational	An excellent breed of dog (spoken)	???	A merry tinkle of laughter (fiction)

While Table 1 shows that the corpus data can be distributed to the types of BNP, there are three points to be developed: First, although only one example is presented for each type, the number of lexical [+]ind and [-]ind types is relatively higher than the others. In these types, N1s such as *idiot* lexically refer to a person who is stupid. This suggests that BNPs like *that idiot of a doctor* and *a wonder of a city* are conventionalized over time. Since these types of BNPs are stylized, their number seems to increase gradually.

Secondly, the number of “[+] animate” N2s is relatively small as a whole. In other words, [-] animate nouns tend to appear in the position of N2. In contrast with this observation, most BNPs in the literature have a [+] animate N2, such as *a prime minister* in *an idiot of a prime minister*. In order to deal with this contrast, more data on N2 need to be gathered.

Finally, although examples were found for almost all 12 types, as shown in Table 1, we could not identify instances of N1 (modification) and N2 ([-]animate [+]entity) because it is difficult to judge whether the N2 is [-]animate ([+]entity) or not. Previous studies do not give a clear account of whether or not a modifier may appear on an N2 in a BNP. The lack of data may reflect the complexity of BNPs and the need to analyze them more properly. However, the details of this point are beyond the scope of this paper.

5. Concluding Remarks

Based on the observations provided by previous studies, we have elaborated on the behavior of BNPs in terms of two main points: *evaluativity* imposed on the N1 and the classification based on the source of the evaluation. Following Constantinescu (2011), we saw that it is the evaluative meaning (value judgment) of an N1 that licenses a BNP. Confronted with the opacity of this notion, in particular, various loci of the evaluativity in N1s, we demonstrated that the N1s of BNPs can be roughly classified into three types (lexical, figurative, and modificational) and argued that in either source, evaluativity is indeed encoded in the N1, as is illuminated by the *find* test. We thus arrived at the conclusion that evaluativity is not dedicated to a particular category (i.e., affective adjectives vs. N1 in BNP) or to a particular semantic property of a noun (e.g., referentiality). In addition, in order to grasp how evaluative meanings are obtained, we analyzed corpus data and classified them into 12 types.

Although these observations have contributed to our understanding of the nature of BNPs, it remains to be clarified why BNPs have the sequence “N1 of N2” where a predicate-subject relation,

rather than a subject-predicate relation, holds with such a strange logical order, together with an evaluative meaning. This point will be examined from a principled approach in future research.

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Notes

[1] There are some morphological and semantic restrictions on each slot of BNP. In particular, it is reported that the Det2 slot may not be occupied by definite articles, the property that we appealed to when identifying BNPs in our corpus survey. Interested readers are referred to Kim and Sell's (2015) overview of those restrictions.

[2] Constantinescu (2011, p. 49) presents that the notion of evaluativity is confusing especially in discussions that refer to gradability, and then calls it value judgment. This is because some previous studies (cf. Bierwisch, 1989) treated evaluative expressions (e.g., *beautiful*, *interesting*, *industrious*) in the same way as gradability. In this paper, we mainly use evaluativity in a neutral position.

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