

BARE PREDICATE NOMINALS IN DUTCH*

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Abstract

Bare predicate nominals (BPNs) have interesting syntactic and semantic properties that set them aside from full nominals in predicative constructions. In Dutch the differences between BPNs and other nominals are especially visible in the syntax-semantics interface. This paper analyzes Dutch BPNs by making a syntactic distinction between NPs and NumPs/DPs, and a correlating semantic distinction between two ways of relating kinds to individuals realizing them. Whereas the general Carlsonian *realization operator* relates a kind to all the individuals realizing it, we propose an alternative, more restricted, *capacity operator*, which only maps a kind to the individuals that realize it in a particular ‘capacity’ (profession, nationality, religion etc.) of the individual. We study the implications of these two modes of realization in conjunction with the different syntactic layers within the DP.

1 Introduction

Many natural languages allow predicative constructions involving a nominal expression. However, some of the interesting questions concerning the interpretation of such nominals are not easy to appreciate cross-linguistically, due to the obligatory presence (or lack of) indefinite articles in many languages. For instance, in languages like Modern Hebrew, where the indefinite article is lacking or hardly useful, the noun in predicate nominals typically appears bare as in (1), similarly to indefinites in argument positions. In languages like English, where the singular article is obligatory, the predicative construction typically involves a full noun phrase with an indefinite article, as in (2). We use the terms *bare predicate nominal* (BPN) and *marked predicate nominal* (MPN) to refer to nominal phrases in sentences like (1) and (2).

(1) dan more

BPN [Hebrew]

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|-----|------------------|---------------|
| | Dan teacher | |
| (2) | Dan is a teacher | MPN [English] |

It is often assumed that the indefinite article in MPNs is semantically void (cf. Partee 1986), and is inserted for syntactic reasons only. The observation that Modern Hebrew does not allow MPNs in the context of (1), whereas English doesn't have BPNs in contexts like (2), supports the hypothesis that cross-linguistically, presence or lack of the indefinite article in predicate nominals is only a matter of syntax. The fact that we generally use the sentences in (1) and (2) as translational equivalents seems to confirm that there is no semantic contrast. The central claim of this paper is that this impression is misleading. Besides Hebrew-type languages and English-type languages, there is a third class of languages in which the indefinite article in predicate nominals is frequently optional. Thus, in Dutch for instance, both (3a) and (3b) are grammatical:

- (3) a. Jan is leraar. BPN [Dutch]
 Jan is teacher
 b. Jan is een leraar. MPN [Dutch]
 Jan is a teacher.

The contrast between (3a) and (3b) is subtle and not easy to pinpoint. Intuitively, speakers often claim that the BPN construction in (3a) indicates that Jan is a teacher by profession, whereas (3b) admits a wider range of interpretations, including readings in which Jan is teaching without being a professional teacher, or is playing a role, is behaving like a teacher, or is a teacher in some metaphorical way. Thus, we can tentatively assume that (3a) entails (3b), but the entailment in the other direction is at best dubious. The claim that Jan is a professional teacher can be explicitly expressed in BPNs by using a so-called ‘capacity qualifier’, as in (4a):

- (4) a. Jan is leraar van beroep. BPN [Dutch]
 Jan is teacher by profession.
 b. *Jan is een leraar van beroep. MPN [Dutch]
 Jan is a teacher by profession.

The combination of a capacity qualifier with a MPN is ungrammatical, as illustrated in (4b). The semantic contrast between BPNs and MPNs in (3) thus correlates with a difference in their syntactic properties.

In fact, among the European languages that have an indefinite article, English is the odd one out in not allowing bare and marked predicates side by side. Bare nominal predicates are common in the Romance languages:

- (5) a. Gianni e' ingegnere/professore/macellaio. [Italian]
Gianni is engineer/professor/butcher.
b. Jean est médecin. [French]
Jean is doctor.
c. Juan es médico. [Spanish]
Juan is doctor.

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- d. João é médico. [Portuguese]
João is doctor.

((5a) from Zamparelli 2005; (5b-d) from Munn and Schmitt 2005)

In Germanic languages we find examples too, with contrasts very similar to the one we found in Dutch:

- | | | | |
|-----|----|---|-----------------|
| (6) | a. | Olivier var skuespiller.
Olivier was an actor. (literally) | BPN [Danish] |
| | b. | Din lille pige er en skuespiller.
Your little girl is an actress. (figuratively) | MPN [Danish] |
| | | (from Allan, Holmes and Lundskær-Nielsen 1995) | |
| (7) | a. | Herr Weber är katolik.
Mr Weber is a Catholic. | BPN [Swedish] |
| | b. | Han är an god katolik.
He is a good Catholic. | MPN [Swedish] |
| | | (from Holmes and Hinchliffe 1994) | |
| (8) | a. | Han er lærer.
He is a teacher. | BPN [Norwegian] |
| | b. | Han er en luring.
He is a sneaky person. | MPN [Norwegian] |
| | | (from Strandskogen and Strandskogen 1986) | |
| (9) | a. | Er ist praktizierender Katholik.
He is a professing Catholic. | BPN [German] |
| | b. | Er ist ein Aufschneider
He is a swank. | MPN [German] |
| | | (from Engel 1996) | |

In all these languages, the bare construction is restricted to nouns referring to professions, nationalities, religions and the like.

The Dutch examples (3) and (4), and their counterparts (5)-(9) in other European languages indicate that a proper analysis of the relation between BPNs and MPNs may involve a characterization of the syntax-semantics interface with predicate nominals. In this paper we study Dutch predicate nominals, where some of the relevant interface properties are clearly manifested. We are not aware of the existence of capacity qualifiers in other languages that allow both BPNs and MPNs, and Dutch will be used to bring out the semantics of BPN constructions as realizing capacities of an individual. We will see in section 2 that Dutch BPNs and MPNs display an interesting correlation with adjective inflection, which reveals the relevance of the NumP layer for the BPN/MPN distinction.

The analysis we propose is embedded in a larger discussion on bare nominals in natural language in the linguistic literature. We know that *in hospital* and *in a hospital* do not have the same meaning in English, and that the bare construction tends to refer to a

more abstract notion (related to stereotypical function, habituality, genericity) than the use of the full indefinite. We also know that bare plurals in English are kind referring, whereas singular indefinites are not (Carlson 1978), so ‘bareness’ is somehow related to reference to kinds or abstract properties. Full noun phrases are typically blocked in incorporation constructions, where bare nominals are frequently used to refer to institutionalized or habitual activities. If a language allows incorporation of bare singulars as well as bare plurals (e.g. Hindi, Hungarian), we see that the singular displays semantic number neutrality, whereas morphological plurality entails semantic plurality as well (Dayal 1999, Farkas and de Swart 2003). Munn and Schmidt (2005) highlight the relevance of number in the syntax and semantics of indefinites in general. As we will show in section 2, number neutrality is also a relevant semantic feature of BPNs. Interestingly, the syntactic and semantic constraints on bare nominals may vary with the construction they appear in. Thus, Heycock and Zamparelli (2003) observe that English does not normally accept bare singulars in regular argument position, but the coordination of such expressions is often fine. Heycock and Zamparelli observe, however, that unlike bare plurals, coordinated bare singulars do not admit an existential reading. Roodenburg (2004a,b) extends the discussion to French, a language that does not normally accept either bare singulars or bare plurals in regular argument position. Roodenburg observes not only that coordinated bare singulars and plurals are acceptable in French, but provides evidence that coordinated bare plurals in French allow an existential interpretation, as bare plurals generally do in English. Thus, the relation between bare nominals and number has become an important topic in recent studies in linguistics. We take it that general questions about number and bareness of nominals, and their relations with interpretation, can only be tackled with by studying specific constructions in a wide range of languages. This paper attempts to contribute to the bigger picture by concentrating on an account of the syntactic and semantic properties of BPNs and MPNs in general, and in Dutch in particular.

The structure of the paper is as follows. Section 2 gives the main facts about bare predicate nominals in Dutch. Section 3 sketches the syntactic analysis, and section 4 relates this to the semantics of BPNs and MPNs. Section 5 concludes with some questions of a wider (cross) linguistic perspective. The appendix summarizes some facts about the variety of Dutch nominals that support BPN constructions.

2 Main facts about bare predicate nominals in Dutch

Section 2.1 focusses on semantic contrasts between BPNs and MPNs in contexts like (3) above. Section 2.2 focusses on capacity qualifiers, section 2.3 on the correlation with adjective inflection.

2.1 Semantic contrasts between BPNs and MPNs

Similarly to examples (3a, b) above, the following pairs of sentences exhibit the contrast between bare and marked predicate nominals in Dutch (Haeseryn et al. 1997):

- (10) a. Peter is advocaat/Belg/christen.
Peter is lawyer/Belgian/Christian.

- b. Peter is een advocaat/een Belg/een Christen.
Peter is a lawyer/a Belgian/a Christian.

Nouns that appear in BPN constructions normally refer to humans, and indicate profession, nationality, religion and the like. Thus, the BPN constructions in (11) are ungrammatical:

- (11) a. Die vogel is een/*Ø mus.
That bird is a/*Ø sparrow
b. Dat voorwerp is een/*Ø tafel.
That object is a/*Ø table.

We will not attempt to give a characterization of the class of nouns that appear in BPNs, but refer to Matushansky and Spector (2003) for a discussion that focuses on this issue. Appendix A provides a list that exemplifies the kind of Dutch nouns that are accepted in BPN constructions, based on Haeseryn et al. (1997).

As was argued above, there is a genuine distinction between the semantic interpretation of BPNs and MPNs. This distinction, though often a subtle one, becomes easily noticeable in the following examples:

- (12) a. Henriëtte is manager.
Henriëtte is manager.
b. Henriëtte is een manager.
Henriëtte is a manager.

Both sentences are perfectly grammatical. However, (12a) is false with respect to the first author of this paper, because according to her job description she is a university professor, not a manager. Sentence (12b), on the other hand, is true with respect to the same person, for university professors in the Netherlands spend a considerable part of their time on administrative duties, without being considered “managers” in the professional sense of the word. We see something similar in (13):

- (13) a. Heleens echtgenoot is dictator.
Heleen’s husband is dictator.
b. Heleens echtgenoot is een dictator.
Heleen’s husband is a dictator.

(13a) is true if Heleen is married to someone like Mussolini or Saddam Hussein, that is, someone described as the leader of a dictatorial regime. (13b) is also true under the institutional reading, but allows a much larger range of interpretations. For instance, (13b), but not necessarily (13a), is true if Heleen has a dictatorial husband who likes to push her around. In English, the contrast is mirrored in the adjectival versus the nominal predicative constructions in (14):¹

¹ We are grateful to Donka Farkas (p.c.) for this example and the observed contrast in meaning.

- (14) a. Yoad is Jewish.
b. Yoad is a Jew.

(14a) is quite neutral, and predicates Jewishness of Yoad as a feature of his nationality, religion or birth. In addition to this neutral interpretation, (14b) allows a reading that calls up (positive or negative) stereotypes that can be associated with Jews.

For a final example, we observe that if, during a summer hike, we come upon a man fishing, we can assert that *Hij is een visser* (“he is a fisherman”), even if we do not know the man. Then we can walk over to him and ask: “*Bent u visser (van beroep)?*” (“Are you fisherman (by profession)?”). But it would be as uninformative to ask him “*Bent u een visser?*” as it would be to ask him “Are you fishing?”, because that is visibly what he is doing. We conclude from these examples that a sentence with a marked predicate nominal does not usually entail the corresponding sentence with a bare predicate nominal. However, the other direction of the entailment generally holds. Thus, the interpretation of BPNs is narrower than that of MPNs, and our semantics should reflect this.

Another important semantic property of BPNs, which contrasts them with MPNs, is their number neutrality. Compare the paradigms in (15) and (16):

- (15) a. Jan is leraar.
Jan is teacher.
b. Jan is een leraar.
Jan is a teacher.
c. *Jan is leraren.
Jan is teachers.
- (16) a. Jan en Sofie zijn leraar.
Jan and Sofie are teacher.
b. *Jan en Sofie zijn een leraar.
Jan and Sofie are a teacher.
c. Jan en Sofie zijn leraren.
Jan and Sofie are teachers.

While the BPN is acceptable with both singular and plural subjects – as witnessed by (15a) and (16a) respectively – the marked nominals *een leraar* in (15b,c) and *leraren* in (16b,c) have to agree in number with the subject.

2.2 Capacity qualifiers

As pointed out in (4) above, Dutch BPNs can appear with qualifiers attached to them, as in the examples in (17) (Haeseryn et al. 1997). MPNs as in (18) do not license such qualifiers.

- (17) Peter is advocaat *van beroep*/Belg *van nationaliteit*/christen *van religie*.
Peter is lawyer by profession/Belgian by nationality/Christian by faith.

- (18) a. *Peter is een advocaat *van beroep*/een Belg *van nationaliteit*/een christen *van religie*.
Peter is a lawyer by profession/a Belgian by nationality/a Christian by faith.
- b. *Peter en Sofie zijn advocaten *van beroep*/Belgen *van nationaliteit*/christenen *van religie*.
Peter and Sofie are lawyers by profession/Belgians by nationality/Christians by faith.

This is a general fact about Dutch, supporting the distinction between BPNs and MPNs in this language. In section 3 below we propose that capacity qualifiers may be used as a key to the semantics of BPNs.

2.3 BPNs and adjective inflection

Normally in Dutch, an adjective is inflected with a schwa (–*e*) when it modifies a non-neutral noun – a noun that takes the definite article *de*, rather than the neuter *het*. All human nouns in this paper (and, in fact, almost all human nouns in Dutch, except diminutives) are non-neuter in grammatical gender. Therefore the schwa on adjectives in MPN examples like (19a) is expected.

- (19) a. Jan is een kleine/werkloze visser.
Jan is a short[INFL+]/unemployed[INFL+] fisherman.
- b. Jan is werkloos/*werkloze visser.
Jan is unemployed[INFL-]/*unemployed[INFL+] fisherman.
- c. Jan is *klein/*kleine visser.
Jan is *short[INFL-]/*short[INFL+] fisherman.

By contrast, (19b) shows that adjectives in BPNs must be uninflected, even if the adjective may be inflected in its MPN counterpart in (19a). Further, all kinds of adjectives can in principle occur in MPNs as in (19a), but (19c) illustrates that not all adjectives occur in BPNs, not even if they are uninflected. Cross-linguistically, adjectives like *short*, *good*, etc. do not occur in BPNs, and typically require the insertion of an article (cf. the Swedish example in (7b) above).

Dutch shows exceptional lack of inflection for attributive adjectives in other cases as well (see Odijk 1992, Menuzzi 1994, Kester 1996, Haeseryn et al. 1997 and Broekhuis 1999 for discussion). One class of examples is especially relevant, because they share characteristics with BPNs. If the adjective and the noun together designate a particular type of profession or position, the adjective can remain uninflected even if it is not a BPN:

- (20) a. een artistiek directeur/ een artistieke directeur
an artistic[INFL-] director/ an artistic[INFL+] director
- b. de behandelend artsen
the attending[INFL-] doctors
'the doctors in attendance'

- c. een succesvolle scheikundig ingenieur
 a successful[INFL+] chemical[INFL-] engineer
- d. *een scheikundig succesvolle ingenieur
 a chemical[INFL-] successful[INFL+] engineer

The uninflected and the inflected forms of the adjective *artistiek* in (20a) relate to two different meanings. The uninflected *artistiek directeur* relates to a kind of director (an art director). The inflected *artistieke directeur* indicates a director that has artistic inclinations, possibly unrelated to his job description. (20b) indicates that lack of inflection extends to plurals for the class of adjectives that allows this. (20c) indicates that we can have a combination of inflected and uninflected adjectives if the former precede the latter. The inverse order of inflections in (20d) is ungrammatical (and would remain ungrammatical even if we added a schwa to *scheikundig*).

The following two observations tie exceptional lack of inflection of adjectives to BPNs:

- A noun can be used as a bare predicate if and only if it allows (exceptionally) uninflected adjectives.
- The adjectives that occur in BPNs also occur uninflected in non-bare constructions.

Obviously, this is not a full description of the nouns that occur in the BPN construction, nor of the adjectives that can remain uninflected, but it shows that there are non-accidental correlations that motivate a unified analysis of the two classes. The following table summarizes our observations so far:

	<i>Bare predicate nominals</i>	<i>Marked predicate nominals</i>
	<i>x is, zijn</i> N	<i>x is een</i> N, <i>zijn</i> N-pl
F1	restricted class of nouns	all nouns
F2	restricted interpretation	wider interpretation
F3	capacity qualifiers possible	capacity qualifiers impossible
F4	number-neutral	number-sensitive
F5	only certain adjectives, uninflected	all adjectives, inflected

Sections 3 and 4 propose a syntactic-semantic account that captures these facts.

3 Layers within in the DP

We adopt the following, fairly standard structure of a layered DP in Dutch:

- (21) [DP ... D [NumP ... Num [NP ... N ...] ...] ...]

The NP level is unspecified for number. It contains the complements of the noun, and is highly restricted in the possibilities it allows for adjectival modification. The NumP

level encodes the number inflection of the noun phrase (Ritter 1991), and allows the full range of modification (adjectives, PPs, relative clauses). The DP level involves determination by articles, demonstratives and quantifiers, and has genitive possessives. We make the following assumption about the syntactic structure of BPNs and MPNs (see also Munn and Schmitt 2005 for a similar claim):

(A1) Bare nominals are NPs, marked nominals have at least a NumP projection.

An additional assumption is about the level at which adjective inflection is assigned:

(A2) Adjective inflection is assigned within the NumP.

According to these two assumptions, we obtain the following syntactic structures:

- (22) a. Marie is [_{NP} artistiek directeur]
 Marie is artistic[INFL-] director
 b. Marie is [_{DP} een [_{NumP-sing} artistieke [_{NP} directeur]]]
 Marie is an artsy[INFL+] director
 c. [_{DP} die [_{NumP-sing} succesvolle [_{NP} scheikundig ingenieur]]]
 that successful[INFL+] chemical[INFL-] engineer

Since a BPN is assumed to be an NP, it contains no NumP to assign inflection, so the adjective in (22a) needs to remain uninflected (Fact F5). If inflection is assigned in MPNs, the syntactic structure is different (22b), and we will see that this has consequences for the interpretation. The order of the inflected and uninflected adjectives is fixed by the syntactic structure (22c), which explains the ungrammaticality of the reverse order in (20d).

4 Capacities and sets

Our analysis is based on the following semantic assumptions:

(A3) Nouns lexically denote kinds of type k .

(A4) Predication of the form x is A always expresses a membership relation, where the predicate A in the sentence denotes a set of e -type entities.

One way of deriving the set of entities relevant in predication is using a Carlsonian *realization operator*. This operator, which we denote “REL”, maps kinds to sets of entities realizing the kind. We assume that REL is used for the interpretation of MPNs, which leads us to postulate the following semantics for predicative constructions involving full DPs:

- (23) x is een A > $x \in \text{REL}(A_k)$

In this representation the REL operator is assumed to be of type $\langle k, \langle e, t \rangle \rangle$ - from kinds to sets of entities that realize it. Note that the REL operator is not defined beyond what it

type suggest – the exact ontological relation between kinds and their realizations is a matter that we leave outside the formal framework we develop here.

The semantics of BPN constructions is minimally, but crucially, different from this semantics of MPNs. The intuition behind our general proposal for BPNs is based on the behavior of BPNs with an overt capacity qualifier. For the sentences in (24) we propose the following semantics:

- (24)
- | | |
|---------------------------------|---|
| <i>x is A van beroep</i> |> $x \in \text{van_beroep}(A_k)$ |
| <i>x is A van nationaliteit</i> |> $x \in \text{van_nationaliteit}(A_k)$ |
| <i>x is A van religie</i> |> $x \in \text{van_religie}(A_k)$ |

Capacity qualifiers are assumed to be of type $\langle k, \langle e, t \rangle \rangle$, just like the realization operator REL. The denotation of expressions like *van beroep*, *van nationaliteit*, *van religie* is thus assumed to map a kind A_k to the set of entities realizing A_k as a particular role in society, often associated with its typical activities. Capacity qualifiers QUAL are more restrictive than REL, because only entities that realize the kind in the way that is expressed by the qualifier are in the set. Furthermore, capacity qualifiers are partial functions, cf. *#advocaat van nationaliteit* (‘lawyer by nationality’), *#Belg van religie* (‘Belgian by religion’). In some cases, two different qualifier functions have overlapping domains. For instance, the BPNs *jood van religie/van geloof/van geboorte* (‘Jew by religion/by faith/by birth’) are all acceptable.

We now extend this analysis of BPNs with qualifiers to general BPNs, by adopting the following assumption:

- (A5) There is a covert general capacity operator CAP of type $\langle k, \langle e, t \rangle \rangle$, mapping a kind A_k to the set of individuals realizing A_k as a particular capacity.

We take the covert capacity operator CAP to be operative in BPN constructions. The restricted interpretation of BPNs (Fact F2) follows from the contrast between the general capacity operator CAP and the standard realization operator REL.

Although we do not properly define the realization operator REL and the capacity operator CAP, there are some semantic relations between these operators themselves, and with capacity qualifiers. To summarize these relations, we assume that for any kind A_k , for any capacity qualifier QUAL defined for A_k , the following subset relations hold:

- (25) $\text{QUAL}(A_k) \subseteq \text{CAP}(A_k) \subseteq \text{REL}(A_k)$

These relations reflect entailments like the following:

- Peter is *advocaat van beroep* \Rightarrow Peter is *advocaat* \Rightarrow Peter is *een advocaat*
Peter is lawyer by profession \Rightarrow Peter is lawyer \Rightarrow Peter is a lawyer
- Jan is *jood van religie* \Rightarrow Jan is *jood* \Rightarrow Jan is *een jood*
Jan is Jew by religion \Rightarrow Jan is Jew \Rightarrow Jan is a Jew

In addition, we assume the following:

(26) Whether or not $CAP(A_k) \subseteq QUAL(A_k)$ depends on the kind A_k and on QUAL.

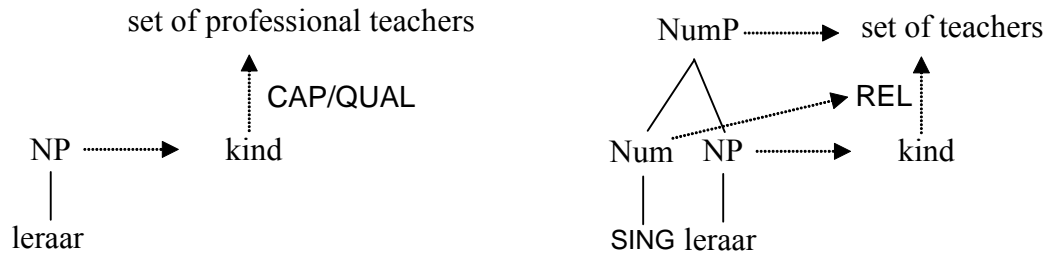
This (lack of) subset relation is reflected in (non-)entailments like the following:

- Peter is advocaat \Rightarrow Jan is advocaat van beroep
Peter is lawyer \Rightarrow Peter is lawyer by profession
- Jan is jood \nRightarrow Jan is jood van geboorte
Jan is Jew \nRightarrow Jan is Jew by birth

The syntax-semantics interface can now be defined as follows:

(A6) The CAP and QUAL operators optionally apply at any level within the DP. The REL operator mandatorily applies at the NumP level.

These assumptions are illustrated in the following figure:



(A6) immediately explains why capacity qualifiers are ungrammatical in MPNs (Fact F3): the obligatory presence of REL blocks all other operators of type $\langle k, \langle e, t \rangle \rangle$.

The analysis also explains why BPNs are number neutral (Fact F4). According to the syntactic assumption (A1), BPNs do not have a NumP, so there is no room in the syntax to express number. Semantically, we can account for number neutrality by assuming a general distributivity operator D , which is assumed by many semantic theories of plurals. This operator, following Link (1983), maps a set of entities X to the set of i-sums of members in the non-empty subsets of X . The i-sum of a set $Y \subseteq X$ is denoted $\oplus Y$. With the distributivity operator D , the interpretation of (16a) can now be spelled out as follows:

(27) Jan en Sofie zijn leeraar.
Jan and Sofie are teacher (= Jan and Sofie are teachers)
 $j \oplus m \in D(CAP(leraar)) \Leftrightarrow j \oplus m \in \{ \oplus A : \emptyset \neq A \subseteq CAP(leraar) \}$

According to this semantics, Jan and Sofie both qualify as professional teachers.

Our syntactic assumptions (A1) and (A2) explain why the adjectives that occur in BPNs remain uninflected (cf. section 2 above). Our semantic assumption (A3) helps to explain why not all adjectives can occur in BPN constructions. The account we propose for Fact F5 is based on the assumption that there are two types of adjectives: exceptional

adjectives like *artistiek* in *artistiek directeur* (“art director”) denote functions from kinds to kinds, of type $k \rightarrow k$, whereas more common adjectival forms, as in *artistieke directeur* (“artsy director”) are intersective functions of type $et \rightarrow et$: from sets of entities to sets of entities. We further assume the following correlation between the two types of adjectives and inflection/location within the DP:

- (28) $k \rightarrow k$ adjectives are in NP and are uniformly non-inflected
 e.g. *artistiek directeur*: $\text{REL}(\text{artistiek}_{k \rightarrow k}(\text{directeur}))$
 artistic[INFL-] director
 $et \rightarrow et$ adjectives are in NumP and are inflected or uninflected according to the
 general paradigm in Dutch
 e.g. *artistieke directeur*: $\text{artistieke}_{et \rightarrow et}(\text{REL}(\text{directeur}))$
 artistic[INFL+] director

The only adjectives that occur in BPNs are those that modify the kind. Other adjectives modify the extension of the noun after application of the REL operator to the kind. This interpretation is appropriate for *artistiek*. When *artistieke* is inflected, it is not part of the NP, but appears in the NumP. It gets a different interpretation in this position, because it has a type $\langle\langle e, t \rangle, \langle e, t \rangle\rangle$ denotation, rather than a type $\langle k, k \rangle$ denotation. Our analysis thus accounts for the observed correlation between adjective inflection and interpretation in (20).

5 A wider perspective

The set of assumptions (A1) through (A5) accounts for the syntactic and semantic properties summed up in facts F2 through F5 at the end of section 2. We leave the lexical semantics of nouns that occur in BPNs (fact F1) for another occasion, but provide the observations by Haeseryn et al. (1997) in an appendix, so that the interested reader can compare the data to proposals made by Matushansky and Spector (2003) with respect to French BPNs.

Our proposal concerning inflected and uninflected adjectives raises the more general question of how this analysis fits into the lexical semantics of adjectives. The observation that the contrast between the more restricted ‘capacity’ reading and a wider interpretation can be mirrored in the contrast between adjectival and nominal predicative constructions such as *Jewish/a Jew* in the English example (14) indicates that bare nominals may in certain ways be closer to adjectives than to full nominals. This idea receives support from the observation that capacity qualifiers are compatible with adjectives, at least in certain dialects of Dutch:²

- (29) Hij is Belgisch van nationaliteit/christelijk van religie/joods van geboorte.
 He is Belgian (Adj) by nationality/christian (Adj) by religion/Jewish (Adj) by birth.

² The examples are from Guido van den Wyngaerd (p.c.) on Flemish. In more northern dialects of Dutch (spoken in the Netherlands, rather than in Belgium), the construction seems less frequent, but the observation is obviously relevant to the general discussion.

A tentative explanation we would like to propose for the similarity between bare nominals and adjectives is that adjectives do not present the layered structure of DPs. In particular, adjectives do not involve a NumP, the level at which the standard realization operator REL applies. This opens up the possibility of using the overt/covert capacity operators CAP and QUAL in the semantics of predicative constructions involving adjectives, in Dutch as well as in other languages.

Such an approach raises new questions about the semantic type of adjectives and lexical nouns. So far, we have assumed that all lexical nouns refer to kinds, and the predicative construction maps them onto sets of individuals via the standard realization operator or a special capacity operator. In some sense then, we would like to extend this claim to adjectives, and assume that they refer to kinds as well. This is a non-standard assumption, and one that is not necessarily compatible with the classical Carlsonian framework. Neo-carlsonian approaches are currently rethinking and redefining the notion of kind, e.g. Chierchia (1998), Dayal (2004). Their claims about the denotation of bare singulars (in languages like Hindi), bare plurals and definite singulars referring to kinds (in languages like English), and definite plurals referring to kinds (in Romance languages) indicate a departure from the classical view that reference to kinds by nominals is similar to reference to entities by proper names. Rather, genericity expressed by plurals involves the construction of a plural group entity out of intensionally defined instances, whereas definite singular kinds are indirectly defined through type-shifting via the definite article. Only the bare singular seems to be directly referring to an atomic kind entity. If these analyses are on the right track, our conception of the ontological notion of kind is shifting, and needs rethinking. The notion of kind that arises not only from our discussion, but from some of the leading semantic analyses of bare constructions that have been advanced in the recent literature, involves an abstract concept that captures the essence of a lexical projection (AP or NP) stripped of all its functional layers (typically Num and D projections). Thus the study of bare nominals is an area where syntax, compositional semantics, and lexical-conceptual semantics meet.

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Appendix: The class of nouns that occur in Dutch bare predicate nominals

There is no complete characterization of the class of nouns in Dutch that can appear in BPNs. The nouns that Haeseryn et al. (1997) use in their examples give a rough idea:

- (i) *professions, ranks*: soldaat ‘soldier’, advocaat ‘attorney’, opticien ‘optician’, partijsecretaris ‘party secretary’, medewerker ‘coworker’, doctor ‘doctor’, hoogleraar ‘professor’, leraar ‘teacher’, directeur ‘director’, leider ‘leader’, tandarts ‘dentist’, artiest ‘artist’, dienstmeisje ‘maid’; *religions, ideologies*: christen ‘christian’, communist ‘communist’; *nationalities*: Belg ‘Belgian’; *kinship relations*: vader ‘father’, oom ‘uncle’

However, we also encountered BPNs with nouns like the following, sometimes accompanied by a PP complement:

- (ii) patient ‘patient’, alcoholist ‘alcoholic’, vreemdeling ‘foreigner’, kampioen ‘champion’, vrijgezel ‘bachelor’, miljonair ‘millionaire’, vegetariër ‘vegetarian’, perfectionist ‘perfectionist’
 (iii) lid van de club ‘member of the club’, slachtoffer van een misdrijf ‘victim of a crime’, winnaar van de tour ‘winner of the tour’, gevangene van een systeem ‘prisoner of a system’

BPNs with non-human nouns are very rare (Haeseryn 1997):

- (iv) Deze kamer is opslagplaats.
This room is storage depot. “This room is a storage depot”.
 (v) Dat zinsdeel is bijwoordelijke bepaling.
That constituent is adverbial adjunct. “That constituent is an adverbial adjunct”.

The modifiers that are possible in BPNs are of two basic kinds, compositional and non-compositional. The compositional modifiers apply relatively freely with a compositional semantics most of the time:

- (vi) voormalig president ‘former president’, plaatsvervangend hoofd ‘acting head’, behandelend arts ‘doctor in attendance’, aankomend advocaat ‘prospective lawyer’, gepensioneerd leraar ‘retired teacher’, gediplomeerd opticien ‘certified optician’, overtuigd socialist ‘confirmed socialist’, predikant in ruste ‘retired clergyman’, assistent in opleiding ‘assistant in training’

Examples of the other type are adjectives like *scheikundig* ‘chemical’ and *maatschappelijk* ‘social’ in combination with professions:

- (vii) scheikundig ingenieur ‘chemical engineer’, maatschappelijk werker ‘social worker’

We think these adjective-noun combinations do not necessarily involve a compositional semantics. For *scheikundig ingenieur*, it may be maintained that a chemical engineer is a kind of engineer that is concerned with chemistry. However, for *maatschappelijk werker* the derivation of the name of the profession from the combination of the adjective and the noun requires an extra step. Here we do not get into this twilight zone between compositional semantics and lexical semantics.