

Bare Nominals

Bert Le Bruyn, Henriëtte de Swart, and Joost Zwarts

Subject: Generative Linguistics, Linguistic Theories, Semantics, Syntax Online Publication Date: May 2017

DOI: 10.1093/acrefore/9780199384655.013.399

Summary and Keywords

Bare nominals (also called “bare nouns”) are nominal structures without an overt article or other determiner. The distinction between a bare noun and a noun that is part of a larger nominal structure must be made in context: *Milk* is a bare nominal in *I bought milk*, but not in *I bought the milk*. Bare nouns have a limited distribution: In subject or object position, English allows bare mass nouns and bare plurals, but not bare singular count nouns (**I bought table*). Bare singular count nouns only appear in special configurations, such as coordination (*I bought table and chairs for £182*).

From a semantic perspective, it is noteworthy that bare nouns achieve reference without the support of a determiner. A full noun phrase like *the cookies* refers to the maximal sum of cookies in the context, because of the definite article *the*. English bare plurals have two main interpretations: In generic sentences they refer to the kind (*Cookies are sweet*), in episodic sentences they refer to some exemplars of the kind (*Cookies are in the cabinet*). Bare nouns typically take narrow scope with respect to other scope-bearing operators like negation.

The typology of bare nouns reveals substantial variation, and bare nouns in languages other than English may have different distributions and meanings. But genericity and narrow scope are recurring features in the cross-linguistic study of bare nominals.

Keywords: noun, article, bare, reference, genericity, kind, indefinite, scope

1. Grammar and Meaning of Bare Nominals Across Languages

Bare nominals are nominal structures that appear as arguments without an overt quantifier, definite or indefinite article, or other determiner. There are various nominal structures without overt determiners, including proper names (*Mary, London*) and pronouns (*she, we*). Bare nominals differ from proper names and pronouns in that they have a nominal core, an expression belonging to the lexical category of nouns. Research in syntax has focused on the internal structure of bare nominals and their status as arguments. In full noun phrases, determiners are responsible for referential force. The question of how bare nominals achieve reference in the absence of a determiner has been addressed in by semanticists. The distribution and interpretation of bare nominals is subject to cross-linguistic variation, so we also discuss the typology of bare nominals. Further features of bare nominals include their tendency to take narrow scope, their relevance for aspectual theory, and dependent readings. Finally, we deal with bare singulars in special configurations like predication, incorporation, the complement of certain prepositions, and coordination.

1.1. The Grammar of Bare Nominals

The distinction between a bare nominal and a singular/plural noun that is part of a larger nominal structure is not visible from the morphology, but has to be made in the syntactic context: *Milk* is just a mass noun in the nominal phrase *the milk* in 1a, but a mass noun that functions as a bare nominal in 1b, because it occupies the direct object position. *Cookies* is a plural noun in *many cookies* in 2a, which functions as a bare nominal in 2b, 2c:

(1)

- a. I put the milk in the fridge.
- b. I bought milk.
- c. *I bought cookie.

(2)

- a. I baked many cookies.
- b. I baked cookies.
- c. Cookies are sweet.

Bare nominals have a restricted distribution. English uses bare mass nouns and bare plurals as arguments, but not bare singular count nouns (1c). Bare singulars only appear in special configurations: in predication (3a), in the object position of certain verbs (3b), or prepositions (3c) and in coordination (3d):

(3)

- a. I am chair of the department.
- b. Mary plays piano.
- c. Bob is in prison.
- d. I bought table and chairs for £182.

The conditions under which bare singulars are licensed strongly depend on the configuration in which they appear. The VN and PN configurations in 3b and 3c are heavily constrained, and productively appear only with certain verbs, certain prepositions, and certain nouns. In contrast, bare coordination is fully productive, and there are virtually no restrictions on the nouns in 3d (Heycock & Zamparelli, 2003, 2005; Le Bruyn & de Swart, 2014). Bare predication in 3a is somewhat in the middle: A wide range of nouns can appear here, but they belong to specific lexical classes (professional roles, religions, nationalities) (de Swart, Winter, & Zwarts, 2007; Matushansky & Spector, 2005). The status of bare singulars in special configurations like 3 will be addressed later. For the time being, we focus on examples like 1 and 2.

The lexical and grammatical restrictions on bare nominals set them aside from other nominal structures, and raise important questions for linguistic theory. Syntacticians have investigated the internal structure of nominal phrases to determine how bare nominals can function as arguments.

The puzzle of bare nominals for syntactic theory is best illustrated by a comparison with the internal structure of full nominal phrases like *the fresh milk* or *many cookies*.

Consider the standard way to build the syntactic tree of a full-fledged nominal phrase like *the fresh milk*. The tree in Figure 1 shows that *milk* is a noun (N) that combines with the adjective (A) *fresh* to build a noun phrase (NP) *fresh milk*. The NP combines with the article *the*, which resides in the determiner position (D). Since Abney (1987), it is common practice to assume that the determiner is the head of the nominal structure, so DP is the label of the structure as a whole.

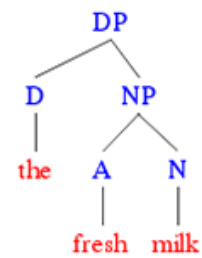


Figure 1: syntactic tree DP

Things are a bit more complex with plural NPs, because we are now dealing with a morphologically complex noun. If we take the *-s* on *cookies* to spell out the plural value of the noun in the number projection (Num), we obtain the syntactic tree in Figure 2 for plural DPs. Details vary depending on specific assumptions of the syntactic framework, but Figures 1 and 2 cover the basics: Nouns are embedded under functional projections where they contribute to the construction of nominal structures that reflect information on singular/plural (role of Num) and reference (role of D).

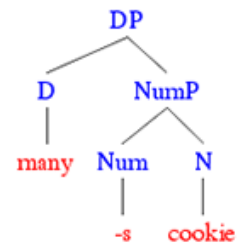


Figure 2: syntactic tree plural DP

As D is the head of the nominal structure, we expect DPs, not NPs or NumPs as arguments of the verb. Yet we know, from the basic observations in (1) and (2) that bare mass nouns and bare plurals can appear in subject and object position, at least in English. Different strategies have been explored in the literature to reconcile bare nominals with argumenthood.

One approach is to adopt a strict correlation between the DP shape of the nominal phrase and its syntactic position. Building on Stowell (1989) and Longobardi (1994), Borer (2005) hypothesizes that arguments correspond with DPs across the board (in all configurations, in all languages). If nominals in subject, direct, or indirect object position must have the shape of a DP, and bare nominals lack an article or other determiner, how can they appear here? Longobardi (1994), Borer (2005), and others assume that a null D is involved. Under this analysis, a DP is projected, and a determiner is present in the syntactic structure, even though it is not lexically spelled out. The bare plural *cookies* in 2b, for instance, would have the structure [DP [D \emptyset] [NumP [Num *-s*] [NP *cookie*]]]. Licensing of the null D is subject to language-specific grammatical constraints. All nouns can appear bare in regular argument position in languages like Mandarin Chinese, Hindi, Russian, etc., whereas no nouns can do so in languages like French or St'át'imcets (see the discussion on typology). Languages like English (but also Dutch, German, Spanish, Italian, etc.) occupy an intermediate position in that they freely use null Ds with mass nouns and plurals (see examples 1b and 2b, c), but not with singular count nouns (example 1c).

Syntactic evidence in favor of the null D analysis comes from Italian, in which bare nominals show up as post-verbal subjects, or in direct or indirect object position, but not as preverbal subjects (Longobardi, 1994):

(4)

- | | | | | | | | |
|----|---|-------|-------|-------|-------|------------|-----------|
| a. | * | Acqua | viene | giù | dalle | colline. | [Italian] |
| | | water | comes | down | from- | the hills | |
| b. | | Viene | giù | acqua | dalle | colline | |
| | | comes | down | water | from- | the hills. | |
- ‘Water comes down from the hills.’

The contrast between 4a and 4b indicates that null Ds are lexically governed, just like other empty categories (Rizzi, 1986): As the preverbal subject position in 4a is not a governed position, Italian bare nominals do not appear here. Longobardi interprets the null D in terms of a default existential quantifier, which accounts for the indefinite interpretation of *acqua* in 4b.

Longobardi's null D analysis of Italian bare nominals does not easily extend to other languages. In English, bare mass nouns and bare plurals are perfectly felicitous in subject position (compare 2c and the translation of 4), so the syntactic support for a licensing approach is missing. Yet English shares with Italian the indefinite interpretation of bare nominals. Beyond Germanic and Romance, bare nominals are not restricted to indefinite interpretations, but may be compatible with definiteness (for instance Serbo-Croatian 5b). In order to remedy the problems, Bošković (2008) proposes a parameterized version of the DP hypothesis. He suggests that languages that are systematically articleless, such as Serbo-Croatian project NPs, not DPs 5b, in contrast to English 5a:

(5)

- a. The stone broke the window.
- b. Kamen je razbio prozor. [Serbo-Croatian]
stone is broken window

The introduction of the DP/NP parameter strongly reduces the typological need for null Ds, but does not do away with them altogether. English has a definite and an indefinite article, so it qualifies as a DP language, and null Ds are posited for the bare mass nouns and bare plurals in 1b and 2b, c.

In sum, a strictly syntactic approach to bare nominals in terms of DPs with a null D has the advantage of uniformity, but faces empirical problems in the light of substantial cross-linguistic variation. Bošković (2008) creates room for arguments with different syntactic shapes (NP, NumP, or DP). The increased flexibility in grammatical structure shifts the burden of the analysis of bare nominals onto the semantics. The question of how bare nominals can function as arguments is then rephrased as the question of how bare nominals can achieve reference in the absence of an overt determiner.

3.2. What Bare Nominals Refer to: Kinds, Free Variables, Properties

From Carlson's (1977) seminal work onward, the referential force of bare nominals has dominated the semantic debate. English bare mass nouns and bare plurals have two main interpretations: They can be generic or existential. Carlson (2003) provides the examples in 6:

(6)

- a. Curious people crowded around the site of the accident ('some people').
- b. Curious people like to travel. ('curious people in general')
- c. Pick-up trucks come in four basic sizes.

Bare plurals in the subject position of stage-level predicates (describing temporary situations) are typically existential 6a, whereas bare plurals in the subject position of individual-level predicates (describing long-lasting properties) are generic 6b. The fact that bare plurals are not ambiguous in context leads Carlson (1977) to posit a unified analysis in terms of kind reference: Bare plurals name the kind. Kind reference is most easily perceived with kind-level predicates that directly ascribe a property to the kind, as in 6c. With individual-level predicates, the generic generalization ranges over entities realizing the kind 6b. The existential interpretation of the bare plural in 6a arises from an existential quantifier in the sentence (introduced by the stage-level predicate), not from the bare plural itself.

The kind-based analysis treats bare plurals as radically different from singular indefinites, the existential interpretation of which is rooted in the indefinite article. Even though singular indefinites also give rise to existential interpretations with stage-level predicates 7a, and generic readings with individual-level predicates 7b, they do not have kind reference, as witnessed by their incompatibility with kind-level predicates 7c:

(7)

- a. A curious person showed up at the site of the accident.
- b. A curious person likes to travel ('all curious persons, curious persons in general')
- c. *A pick-up truck comes in four basic sizes.

The contrast between 6c and 7c confirms that bare plurals are not the plural counterpart of singular indefinites. Another argument Carlson advances in favor of the special status of bare plurals builds on scope differences. Singular indefinites can take wide or narrow scope with respect to another scope-bearing operator in the sentence (negation, universal quantifier, intensional verb), but bare plurals are restricted to a narrow scope interpretation:

(8)

- a. I didn't see a spot on the floor. $\checkmark \neg \exists / \checkmark \exists \neg$
 b. I didn't see spots on the floor. $\checkmark \neg \exists / * \exists \neg$

Both 8a and 8b support a narrow scope interpretation of the indefinite ($\checkmark \neg \exists$) under which no spots were noticed. In addition, the singular indefinite in 8a supports a wide scope interpretation of the indefinite under which there is a spot on the floor that I didn't see ($\checkmark \exists \neg$). This reading is not available ($* \exists \neg$) for the bare plural in 8b. Carlson assumes that the existential force of the bare plural in the object position of a stage-level predicate is contributed by the predicate. As the verb scopes below negation, so does the bare plural. Narrow scope is thus a side effect of kind reference.

Carlson assigns the bare plural an interpretation that is unrelated to the singular indefinite, and thereby accounts for the differences between the two in contexts like 6c vs. 7c and 8a vs. 8b. In doing so, he misses out on the similarities between generic and existential interpretations in 6a, b; and 7a, b. With the advent of dynamic semantic theories that aim to analyze the discourse anaphora, an alternative approach to indefinites in terms of free variables emerged in File Change Semantics (Heim, 1982) and Discourse Representation theory (DRT, Kamp, 1984; Kamp & Reyle, 1993). Singular indefinites and bare plurals both license anaphora outside their scope, as illustrated with the so-called donkey sentences in 9a, b:

(9)

- a. Every farmer who owns a donkey_i beats it_i.
 (i) $\forall x$ [[Farmer(x) & $\exists y$ Donkey(y)] \rightarrow Beat(x,y)]
 (ii) $\forall x,y$ [[Farmer(x) & Donkey(y)] \rightarrow Beat(x,y)]
 b. Every farmer who owns donkeys_i beats them_i.
 $\forall x,Y$ [[Farmer(x) & Donkey(Y)] \rightarrow Beat(x,Y)]

The subscript *i* on *a donkey* and *it* in (9a) indicates that a coreferential interpretation is intended, and this reading of farmers beating their own donkeys is intuitively accessible for both sentences in 9a and 9b. Yet a traditional first-order logical analysis under which the singular indefinite in 9a denotes an existential quantifier is unable to explain the anaphoric dependency of *it* on *a donkey*, as illustrated in 9ai. The problem resides in the indefinite's position in the antecedent of the conditional. As the existential quantifier $\exists y$ does not scope over the consequent, the variable *y* representing the pronoun remains unbound, and its interpretation is contextually determined. In order to capture the bound variable reading of 9a, DRT takes indefinites to denote free variables, without any quantificational force of their own. The quantifier *every* behaves as an unselective quantifier that binds both variables *x* and *y*, yielding the desired anaphoric dependency 9a_{ii}. Bare plurals license anaphora outside of their scope, just like singular indefinites do, so the DRT analysis in 9b is identical to 9a_{ii}, except for the fact that the bare plural denotes a group of entities (indicated by means of the capital *Y*) (Kamp & Reyle, 1993). Diesing (1992) and Krifka, Pelletier, Carlson, ter Meulen, Chierchia, & Link (1995) posit an implicit generic quantifier that accounts for generic generalizations like 6b and 7b along similar lines.

Variable binding does not come into play in environments like 6c, in which the bare plural directly refers to the kind. So DRT treats bare plurals as ambiguous: They denote either variables or kinds. When they denote free variables, they behave in ways similar to singular indefinites (compare 6a, b; and 7a, b), but singular indefinites do not have a kind denotation, hence the contrast between 6c and 7c.

A strong desire to return to a unified analysis of bare plurals that places special emphasis on kind reference has given rise to the neo-Carlsonian analysis by Chierchia (1998) (more in the discussion on reference). But Krifka (2004) points out that even theories that build on a unified analysis of bare plurals in terms of inherent kind reference need flexible type-shifting mechanisms to derive other readings. He takes his starting point in the English bare plural as a plural noun, so in his analysis bare plurals are neither kind referring nor indefinite, but denote properties. In order to function as an argument, the type of the noun must be shifted from $\langle e, t \rangle$ to something else, typically *e* (kind reference) or $\langle \langle e, t \rangle, t \rangle$ (existential quantifier). This type-shifting function is performed by overt determiners in

full DPs, but in the absence of these can happen freely whenever a type mismatch makes function application impossible. Where syntactic theories posited a null D, type-shifting approaches posit free (i.e., syntactically invisible) type-shifting operations to explain the appearance of bare nominals as arguments.

The debate on bare nominals started out with English bare plurals and mass nouns, but gradually the empirical dataset grew, as cross-linguistic studies revealed the ways in which languages vary in the grammar and interpretation of bare nominals. Thus we need a typology of bare nominals.

3.3. Variation in the Grammar and Interpretation of Bare Nominals

Some languages have a more restricted distribution of bare nominals than English. As observed in relation to example 4 discussed in the introduction, Italian bare nominals only appear in post-verbal position. French and St'át'imcets (Matthewson, 1998) are even stricter, and do not allow argumental bare nominals at all:

(10)

J'ai	acheté	*livre /	*livres/	*lait/	un	livre/	du	lait/
I-have	bought	*book/	*books/	*milk/	a	book/	INDEF-MASS	milk/
le	livre/	le	lait/	des	livres /	les	livres.	[French]
the	book/	the	milk/	INDEF_PL	books/	the	books.	

'I bought a book/milk/the book/the milk/books/the books.'

French grammar has a full range of definite and indefinite articles for singular, plural, and mass nouns. The use of these articles is obligatory, so they effectively block bare singulars, bare mass nouns, and bare plurals, as we see in 10. Other languages are freer than English; for instance, Serbo-Croatian does not have either definite or indefinite articles, and also uses bare singulars in argument position, as illustrated in 5b. These data indicate that the distribution of bare nominals inversely correlates with the nominal grammar: The richer the article system of a language, the less freedom for bare nominals, and vice versa.

Chierchia (1998) proposes a parameterized theory that governs the distribution of bare nominals across languages. The parameter [\pm pred] determines whether nouns have a predicative denotation and denote in the domain of type $\langle e, t \rangle$ expressions, where they combine with a determiner to build a DP. The parameter [\pm arg] determines whether bare nouns can be used as arguments, and thus denote in the domain of type e expressions. In Chierchia's neo-Carlsonian ontology, denotation in type e implies that the bare nominal has kind reference. No language can have a setting of [$-$ pred, $-$ arg], as it must be possible to use a bare noun either as a predicate, or as an argument. The typology of bare nominals thus consists of three classes of languages:

(11)

- a. [$-$ pred, $+$ arg]: bare nominal arguments are kind denoting. All nouns are mass. No singular/plural distinction, classifier system. Example: Mandarin Chinese.
- b. [$+$ pred, $-$ arg]: mass/count distinction and singular/plural distinction, no bare nominals. Example: French.
- c. [$+$ pred, $+$ arg]: kind-referring bare mass nouns/plurals, no bare singulars. Example: English.

In Chierchia's ontology, predicates derived from kinds are always mass, so the feature [$-$ pred] triggers the use of classifiers with numerals to ensure countability in languages like Mandarin Chinese (11a). The feature [$-$ arg] in 11b explains why French does not have bare nominals at all (no kind reference), but resorts to the full-fledged paradigm of definite and indefinite articles in 10. The feature setting [$+$ pred, $+$ arg] accounts for languages like English, where kind reference correlates with plurality. Bare plurals have kind reference, because they denote the sum of all realizations of the kind across possible worlds. Mass nouns are inherently plural in Chierchia's ontology, so they pattern with bare plurals, in contrast to bare count singulars, which do not have kind reference.

Chierchia appeals to an additional blocking principle that explains the differences between English and articleless languages like Russian or Serbo-Croatian (see example 5b). Even with that enrichment, Chierchia's typology does not explain the full range of variation across the languages of the world. The three-way partition does not accommodate Brazilian Portuguese (Munn & Schmitt,

1999), Indonesian (Chung, 2000) or Dëne Sųliné (Wilhelm, 2008). Certain empirical claims that Chierchia makes have been challenged as well, for instance, Cheng and Sybesma (1999) argue that Mandarin classifiers take up the role of the determiner in some cases.

Dayal (2004) proposes an extension of Chierchia's theory to account for kind reference of bare singulars and bare plurals in Hindi. They can both be used with kind-level predicates in Hindi, so both have kind reference:

(12)

- a. kutte yehaaN aam haiN [Hindi]
 dogs here common are
 'Dogs are common here.'
- b. kutta aam janvar hai
 dog common animal is
 'The dog is a common animal.'
- c. bahut saal pahle, yehaaN ek aurat rahtii thii.
 many years ago, here one woman lived
 aurat bahut bhadur thii
 woman very brave was
 'Many years ago, a woman lived here. The woman was very brave.'
- d. kuch bacce andar aaye. bacce bahut khush the
 some children inside came. children very happy were
 'Some children came inside. The children were very happy.'

The Hindi bare plural in 12a denotes the sum of all realizations of the kind across possible worlds, and thus achieves kind reference. The Hindi bare singular in 12b denotes the unique kind, an interpretation that would be rendered by the definite singular generic in English. In Dayal's analysis, Hindi uses bare singulars for atomic kind reference, because the language does not have a definite article, in contrast to English. In support of this analysis, Dayal points out that bare singulars and bare plurals both get a definite interpretation in episodic contexts (see 12c and d). As illustrated in 12c, the introduction of a new discourse referent requires the use of the unstressed numeral *ek* ('one').

The Hindi data illustrate that blocking does not only constrain the distribution of bare nominals, it also affects their interpretation. As illustrated in examples 1 and 2, English bare mass nouns and bare plurals have generic or indefinite interpretations, but cannot be interpreted as definite. Similar observations were made by Longobardi (1994) for Italian bare nominals (see example 4). In contrast, Hindi bare singulars get a definite or generic interpretation, but not an indefinite one (12b, c). Serbo-Croatian differs from English, Italian, and Hindi in not having any articles; and in this language, bare nominals can have a definite or indefinite interpretation, depending on the context (see example 5b). Considerable freedom in the interpretation of bare nominals has also been reported for Russian, Polish, and other articleless languages like Dëne Sųliné (Wilhelm, 2008) or Karitiana (Müller & Bertucci, 2012):

(13)

- Taso - ø naka- 'y- t boroja [Karitiana]
 man 3- DECL- eat- NON-FUT snake
 'A/the/some man/men ate a/the/some snake(s)' or 'Men eat snakes'

The emerging generalization is that if a language does not have a grammaticalized article system, no blocking arises, and bare nominals are freely used with definite, indefinite, and generic reference. In languages like English and Italian, the grammaticalized definite article blocks the definite interpretation of the bare nominals, and restricts them to a generic or indefinite interpretation. In Hindi, the unstressed numeral *ek* ('one'), which shares important features with English *a*, blocks the indefinite interpretation of bare singulars.

Chierchia (1998) formulates the blocking principle as an elsewhere condition: If the language has an article or determiner D that encodes a particular semantic operation that maps a noun (type <e,t>) onto an argument (type e referring to an entity or type <<e,t>,t>)

denoting a generalized quantifier), bare nominals cannot have that interpretation. For Chierchia, the blocking principle comes on top of his parameterized typology. We can do without the parameters [\neq pred] and [\neq arg], if we combine a blocking mechanism with Krifka's (2004) type-shifting principles. De Swart and Zwarts's (2010) work out this combination in the framework of Optimality Theory. Optimality Theory (OT) is based on the competition between possible output candidates for the same input, and defines the optimal outcome as the candidate that best fits the constraint ranking (Prince & Smolensky, 1997). For de Swart and Zwarts (2010), bare nominals and full DPs are competing nominal forms for the expression of the type-shift from type $\langle e, t \rangle$ (the noun denotation) to type e (definites) or type $\langle \langle e, t \rangle, t \rangle$ (indefinites). They propose soft, violable constraints governing the use of definite articles for uniqueness/familiarity, indefinite articles for the introduction of new discourse referents, and an overall economy principle penalizing functional structure (and thus favoring bare nominals). Although the constraints are universal, their ranking is language specific, and reranking of constraints produces a typology. A high ranking of the economy constraint gives rise to the widespread use of bare nominals in languages like Karitiana (example 13) or Serbo-Croatian (example 5b). A low ranking of the economy constraint leads to the full-fledged article system in St'át'imcets (Matthewson, 1998) or French (example 10). Intermediate rankings are needed for languages like Hindi and English, where full DPs coexist with bare nominals in the grammar (examples 1, 2, 12). Optimization over meanings mirrors optimization over forms, and ensures that the meanings overtly expressed by full DPs are not available for bare nominals.

The OT typology developed by de Swart and Zwarts (2010) has a broader empirical scope than Chierchia's (1998) three-way partition, but it focuses primarily on the definite/indefinite contrast, and is less concerned with kind reference. Interestingly, the OT system does not predict that bare nominals necessarily take narrow scope, in contrast to Carlson (1977), Chierchia (1998), and Krifka (2004), who all build narrow scope of bare nominals into their analysis, in reference to Carlson's original observations.

3.4. Narrow Scope of Bare Nominals

Carlson (1977) establishes that bare plurals in English always take narrow scope, whereas singular indefinites take variable scope (compare examples 8a and 8b). Similar claims have been made for bare nominals in other languages, including Spanish (Espinal & McNally, 2011), Hungarian (Farkas & de Swart, 2003), Russian (Geist, 2010), Albanian (Kallulli, 1999), Hebrew (Doron, 2003), Hindi (Dayal, 2004), Mandarin Chinese (Rullmann & You, 2006; Yang, 2001), and Indonesian (Chung, 2000; Sato, 2009). The contrast between obligatory narrow scope for the bare plural and variable scope for the singular indefinite is illustrated for Spanish in (14) (from Espinal & McNally, 2011):

(14)

- | | | |
|----|---|-----------------------|
| a. | No busco pisos.
not search.1SG flats
'I'm not looking for (any) flats.' | [Spanish]
✓¬∃/ *∃¬ |
| b. | No busco un piso.
not search.1SG a flat
'I'm not looking for any flat. / There is a flat I am not looking for.' | ✓¬∃/ ✓∃¬ |

Obligatory narrow scope does not only arise with bare plurals, but has been reported for bare singulars as well. The Hebrew examples in 15 (from Doron, 2003) illustrate:

(15)

- | | | |
|----|---|----------------------|
| a. | lo noveax kelev
not barks dog
'It is not the case that a dog is barking.' | [Hebrew]
✓¬∃/ *∃¬ |
| b. | lo novxim klavim
not bark dogs
'Dogs are not barking.' | ✓¬∃/ *∃¬ |

In languages that lack a morphological singular/plural distinction as well as definite and indefinite articles, such as Mandarin Chinese, the contrast between a bare nominal (as in 16a) and a numeral phrase (as in 16b) shows the differences in scopal behavior (examples

from Rullmann & You, 2006):

(16)

- a. Meige ren dou du guo guanyu youchong de shu
 every-CL person all read ASP on caterpillar MOD book
 ‘Everyone read books on caterpillars.’ $\checkmark \forall \exists / * \exists \forall$
- b. Meige ren dou du guo yiben guanyu youchong
 every-CL person all read ASP one-CL on caterpillar
 de shu [Mandarin Chinese]
 MOD book $\checkmark \forall \exists / \checkmark \exists \forall$
- ‘Everyone read a book on caterpillars.’

Yet, there are cracks in the picture. Carlson (1977) himself argues that both narrow and wide scope interpretations are available for sentences like (17):

(17)

John didn’t see parts of this machine. $\checkmark \neg \exists / \checkmark \exists \neg$

Kratzer (1980) noted that in contexts like (18) a German bare plural like *Tollkirschen* can take scope over the modal verb *wollte*:

(18)

Otto wollte Tollkirschen in den Obstsalat tun, weil er
 Otto wanted belladonna_berries in the fruit_salad do because he
 sie mit richtigen Kirschen verwechselte. [German]
 them with real cherries confused
 ‘Otto wanted to put belladonna berries in the fruit salad, $\exists > \text{want}$
 because he mistook them for real cherries’.

Example 18 does not convey that Otto aimed to poison the fruit salad, but rather that there were belladonna berries Otto was accidentally going to put into the fruit salad because he thought they were real cherries.

On the basis of examples like the one in 19, Paul (2016) argues that Malagasy bare nominals take variable scope:

(19)

Mitady alika aho.
 at.look-for dog 1sg.NOM. [Malagasy]
 ‘I’m looking for a dog’
 Context 1: I just want a dog, any one will do. look-for $> \exists$
 Context 2: I’m looking for a particular dog. $\exists > \text{look-for}$

The sentence is appropriate in both contexts 1 and 2, so it supports both a narrow and a wide scope interpretation of the bare nominal with respect to the intensional verb.

Le Bruyn, Que, and de Swart (2012) report an experiment that compares the scopal behavior of English bare plurals (Ns) with that of singular indefinites (*a* N) and negative polarity items (*any* N). Participants had to evaluate the coherence of discourses like 20:

(20)

Eve and Flynn work for the same company. One of their colleagues has recently been fired.

Eve: Do you know why they sent Geoffrey packing?

Flynn: Well, he has not cooperated with colleagues on his team since last Christmas.

Eve: His team, that's Judy, Vikash and Alexander, right?

Flynn: That's right. He did work with Alexander, but he flat out refused to even talk to Vikash and Judy.

Flynn's last utterance only makes sense in the context if his earlier statement means that there are some colleagues he has not cooperated with. Singular indefinites are fine with the wide scope (\exists^{-}) interpretation triggered by discourses like 20. As expected, negative polarity items result in low ratings of coherence, because they take narrow scope with respect to negation. Interestingly, bare plurals behave more like singular indefinites than like negative polarity items. This result shows that the scopal behavior of English bare plurals is more flexible than generally assumed.

The data in 17–20 suggest that a more nuanced view of the scope of bare nominals is called for, notwithstanding the massive, cross-linguistic evidence that supports the narrow scope only interpretation (cf. 8, 14–16). The theoretical implications of wide scope readings of bare nominals for the various approaches of bare nominals in the literature remain to be explored.

3.5. Other Semantic Features: Aspect and Dependent Readings

Verkuyl (1972, 1993) and Krifka (1989) contrast the aspectual behavior of bare plurals with that of singular indefinites, definites, numerals, and quantificational noun phrases in a compositional theory of aspect:

(21)

- a. Mary solved the puzzle/two puzzles/all the puzzles in an hour/*for an hour.
- b. Mary solved puzzles *in an hour/for an hour.

Verkuyl analyzes the contrast between 21a and b in an interval-based semantics, whereas Krifka develops an event-based semantics, but the underlying intuitions are very similar. In Krifka's terms, noun phrases like *the puzzle*, *two puzzles*, *all the puzzles* have quantized reference: Their denotation holds for the whole, not for parts of it. In contrast, the bare plural *puzzles* refers to more than one puzzle, but does not delimit the quantity of puzzles. Bare plurals have divisive reference (parts of *puzzles* still qualifies as *puzzles*, until one reaches the level of individual puzzles) and cumulative reference (*puzzles* plus more *puzzles* still qualifies as *puzzles*). The difference between quantized and divisive/cumulative reference has aspectual implications. When a noun phrase like *the puzzle* combines with the verb *solve*, it indicates the inherent end point of the action: Once the puzzle has been solved, Mary cannot go on solving it. Building on Krifka (1989) and Dowty (1991), Tenny (1994) emphasizes that the argument measures out the event. A bare plural does not measure out the event: When *puzzles* combines with *solve*, there is no inherent endpoint of the action: In principle, Mary can go on solving ever more puzzles, thus solving puzzles forever. The aspectual differences are reflected in the combination with aspectually sensitive time adverbials: *In an hour* indicates the time frame within which the activity must reach its inherent endpoint, so it can modify *solve the puzzle* 21a but not *solve puzzles* 21b. In contrast, *for an hour* measures out the duration of the activity, so it can modify *solve puzzles* in 21b but not *solve the puzzle* in 21a. The cross-linguistic approach in de Swart (2016) extends this compositional aspect theory to bare singulars.

Divisive and cumulative reference also comes into play in the ability of bare plurals to function as dependent plurals (de Meij, 1981):

(22)

Unicycles have wheels.

Chomsky's (1975) example in 22 has a distributive reading under which different unicycles each have their own (single) wheel. Bare plurals can have singular interpretations when embedded under another bare plural (as in 22), but also in questions, or embedded under negation:

(23)

- Anne Do you have children?
 Brandon (i) Yes, I have a daughter.
 Brandon (ii) No, I only have one daughter.
 Brandon (iii) No, I don't have children.

Suppose Brandon has one child. If the bare plural *children* in Anne's question necessarily refers to multiple children, one would have expected (ii) as Brandon's answer. In reality, (i) is a more likely answer, and (iii) would have misled Anne into thinking Brandon is not a father. In view of the inclusive readings of 22 and 23, Krifka (1989) and Sauerland, Anderssen, and Yatsushiro (2005) propose that plurals are less specific than singulars: They range over singular as well as plural entities. The exclusive plural interpretation of 21b emerges as an implicature of the underspecified plural in episodic context. Farkas and de Swart (2010) argues that the pragmatic approach is too weak, as it would predict a felicitous use of the bare plural in contexts when plural reference is excluded by world knowledge:

(24)

- a. Sam has a Roman nose.
 b. #Sam has Roman noses.

People do not have multiple noses, but if the plural interpretation of 24b is just an implicature, plural reference should be cancellable, and 24b should be fine. Yet native speakers strongly prefer the singular indefinite in 24a. In an attempt to restore the correspondence between plural morphology and plural meaning, Farkas and de Swart (2010) assign plural morphology an inclusive plural semantics. The strongest meaning hypothesis assigns the plural the strongest possible meaning in context. In questions and under negation (23), this is an inclusive plural interpretation, but in episodic contexts an exclusive plural interpretation emerges as the strongest meaning, which explains the infelicity of 24b.

Much of the debate on semantic features of bare nominals focuses on bare plurals, because English does not allow argumental bare count nouns, as we noticed in the introduction. However, the cross-linguistic picture is expanding, so more and more research is carried out on bare singulars, in languages that productively use them in subject and object position. We have already seen this with the debate on narrow scope. Interestingly, this development has led to a renewed interest in configurations in which bare count singulars appear in English, such as the examples in 3.

3.6. Bare Singulars in Special Configurations

Danish, French, Romanian, Hungarian, and other languages productively use bare nominals next to full indefinites in predicative position, often with a difference in interpretation, as illustrated in 25 (from Lundskaer-Nielsen & Holmes, 1995):

(25)

- | | | |
|----|---|-----------------------------|
| a. | Olivier var skuespiller.
Olivier was actor
'Olivier was an actor.' | [Danish]

(literally) |
| b. | Din lille pige er en skuespiller.
Your little girl is an actress
'Your little girl is an actress.' |

(figuratively) |

Bare predication gives rise to literal readings with lexical nouns describing professions, religions, or nationalities (Matushansky & Spector, 2005, p. 25a). Full indefinites are used with other nouns, or trigger other meanings (such as the figurative interpretation of 25b). De Swart and Zwarts (2009) observe that such meaning enrichments are the hallmark of many bare singular configurations. Beyssade and Dobrovie-Sorin (2005) and de Swart, Winter, and Zwarts (2007) posit different structures for the two configurations at the syntax-semantics interface: Bare predication lacks a number projection and implies ascription of properties (Beyssade & Dobrovie-Sorin, 2005) or capacities (de Swart, Winter, & Zwarts, 2007). Indefinite predication projects a full DP (including NumP), and is analyzed in terms of set membership.

Predicative positions are quite different from subject and object position (Longobardi, 1994; Partee, 1987), so the bare nominals in 3b and 26a presumably do not qualify as argumental. Bare nominals in the object position of verbs cannot be so easily dismissed, so examples like 3b are particularly challenging. Meaning enrichment comes into play here as well: *Play piano* refers to a proper musical performance, not to a toddler randomly hitting the keys. Bare objects come with reduced referentiality features. Discourse anaphoric pronouns are not excluded in sequences like 26a, but the bare nominal in the first sentence does not provide a straightforward antecedent for the pronoun *it*, as illustrated by the contrast with 26b:

(26)

- a. Phil is playing piano_i for the choir. #He complains it_i is out of tune.
 b. Phil bought a piano_i. He complains it_i is out of tune.

The “weak referentiality” of bare objects comes with more abstract reference to types, kinds, or frames. Aguilar, Le Bruyn, and Zwarts (2014) extend the weak referentiality label to the range of special configurations in which bare singulars appear.

Bare nominals in object position are exceptional in English, but quite common in other languages, and extensive research has been carried out on incorporation or pseudo-incorporation. In languages that freely use argumental bare nouns, it may be hard to distinguish pseudo-incorporation from regular object position, but workable criteria have been developed to keep the two apart by Mohanan (1995) (for Hindi) and Déprez (2005) (for Haitian Creole).

Classical incorporation as studied by Baker (1988) or Rosen (1989) involves special verb–noun configurations at the borderline of morphology and syntax, but there are different kinds of incorporation (Mithun, 1984). Most current research focuses on pseudo-incorporation, as found in Niuean (Massam, 2001):

(27)

Ne	inu	kofe	kono	a	Mele		[Niuean]
PAST	drink	coffee	bitter	ABS	Mele		
‘Mele drank bitter coffee.’							

The bare nominal in 27 clearly occupies an argumental position, and it is arguably an NP rather than just an N: It tolerates adjectival modification, and in certain languages it bears case morphology (e.g., 29b). Pseudo-incorporation has also been studied in West Greenlandic (Van Geenhoven, 1998), Norwegian (Borthen, 2003), Hungarian (Farkas & de Swart, 2003), Maori and Chamorro (Chung & Ladusaw, 2004), Romanian (Dobrovie-Sorin, Bleam, & Espinal, 2006), Spanish and Catalan (Espinal, 2013; Espinal & McNally, 2011) and Hindi (Dayal, 2011b). Besides meaning enrichment and weak referentiality, narrow scope and number neutrality are recurring notions in the debate on pseudo-incorporation.

Narrow scope is a familiar feature of bare nominals, and the incorporated bare noun in the Spanish example 28 patterns with its bare plural counterpart in 14a:

(28)

No	busco	pisos.		[Spanish]
not	search.1SG	apartment		
‘I’m not looking for an(y) apartment.’				✓¬∃/ *∃¬

Number neutrality means that the unmarked bare noun can refer to either singular or plural entities. As embedding under negation favors an inclusive interpretation, reference to singular or plural entities by means of unmarked bare nouns is further illustrated in 29:

(29)

- a. Busco piso. Un a Barcelona i un a Girona. [Spanish]
 search.1SG flat one in Barcelona and one in Girona
 ‘I am looking for an apartment, one in Barcelona and one in Girona.’
- b. Mari bélyeget gyűjt. [Hungarian]
 Mari stamp.ACC collect
 ‘Mari collects stamps/#a stamp.’

The incorporation analyzes in the literature differ in their technical details, but most of them treat bare nominals in examples like 27–29 as property denoting. Except for Dayal (2011b), who assigns singular reference to Hindi incorporated nouns, most proposals take incorporated bare nominals to lack grammatical number.

Special mechanisms account for the combination of the verb with a property-denoting argument. Some analyses shift the type of the verb by means of a lexical operation (Espinal & McNally, 2011; Van Geenhoven, 1998), others posit syntactic mechanisms in addition to regular function application (Chung & Ladusaw, 2004; Farkas & de Swart, 2003). The existential quantifier over instantiations of the property is posited low in the compositional interpretation, so it never scopes over other scope-bearing operators in the sentence. Existential closure must be interpreted in such a way that it does not imply discourse referential force, as incorporated bare nominals do not easily antecede anaphoric pronouns (26a) (Farkas & de Swart, 2003).

Bare nominals do not only appear as complements to verbs, but also as complements to prepositions:

(30)

- a. Bob is in prison/at school/in bed/in *(the) attic/at *(the) office.
 b. Bob went to church/to sea/to *(the) museum.
 c. Bob is behind *(the) prison/went towards *(the) school.

Stvan (1998, 2009), Pérez-Leroux and Roeper (1999), and Baldwin et al. (2006) report lexical restrictions on the nouns (lexical classes like religious and educational institutions, as in 30a,b, but also means of transportation as in *by plane, by bike*), as well as on the prepositions (only simple, general locative prepositions like *in, at, to* in 30a but not *behind, into, towards* in 30c). Bare nominals in prepositional phrases display the familiar features of obligatory narrow scope (31a), number neutrality (31b), and weak referentiality (31c):

(31)

- a. Each student came by train.
 b. Bob came by train, first the A train, then the B train.
 c. #Let’s go by train and smash it up.

English also uses bare nominals in more complex prepositional environments:

(32)

- a. Student after student complained about the exam.
 b. She read the book from cover to cover.

The reduplicated bare noun in 32a, b is related to semantic plurality (Beck & von Stechow 2007; Jackendoff, 2008; Zwarts, 2013). Reduplication in prepositional environments is a language-specific phenomenon, but it is reminiscent of bare noun coordination, a configuration that is found in a wide range of typologically different languages:

(33)

- a. A black cat and a brown dog were fighting in the street. Cat and dog were equally filthy.
- b. Je kunt zelf je tijd indelen, er zijn geen vergaderingen nodig, en je kunt het gewoon thuis doen (mits je beschikt over computer en printer). [Dutch]
You can organize your own time, no meetings are required, and you can work from home (if you have computer and printer).
- c. After a long and difficult night, mother and baby daughter are doing well.

Based on examples like 33a, Heycock and Zamparelli (2003, 2005) and Roodenburg (2004) build an analysis of bare coordination as plural definites. However, examples like 33b (from Le Bruyn & de Swart, 2014) show that existential interpretations are possible as well. All analyses of bare coordination develop a special interpretation of the conjunction as building pairs of entities, rather than denoting set intersection. Meaning enrichment comes into play in the especially tight connection between the conjuncts: *Mother and child* in 33c can only refer to a mother and her child (not someone else's child).

English makes extensive use of bare nominals in the complement position of prepositions, as illustrated in 30–32, but even in closely related languages like Dutch, German, French, and Norwegian the process is much less productive (Grønn, Le Bruyn, de Swart, & Zwarts, 2011, Kiss, 2015). Hindi imposes strict lexical constraints on verb–noun combinations (Dayal, 2011b), and West Greenlandic has just a handful of verbal roots that allow incorporation (Van Geenhoven, 1998). Spanish and Catalan (Espinal & McNally, 2011) allow pseudo-incorporation with a wide range of “have” verbs (Le Bruyn, de Swart, & Zwarts, 2016), and Hungarian pseudo-incorporation does not impose lexical restrictions on either verbs or nouns (Farkas & de Swart, 2003). This cross-linguistic variation is reminiscent of the overall variation we find in the distribution of bare nominals across the languages of the world. Since argumental bare nouns share semantic features with (pseudo-) incorporated bare nouns, and bare singulars in predicative positions and prepositional phrases, it is not always clear whether we are dealing with distinct phenomena or rather a continuum of properties (Borik & Gehrke, 2015; Carlson, 2006; Mithun, 2010; Van Geenhoven, 1998).

3.7. Widening Perspective

Bare nominals are nouns without an article or other determiner that are used in positions where we also find full DPs. As the D projection is associated with argumenthood, and ensures reference, syntacticians and semanticists have long been concerned with the question of how bare nominals can be used in subject and object position, and what they refer to. The linguistic debate originated in observations made about English bare mass nouns and bare plurals, but over the years, empirical data from a range of different languages have contributed to a more balanced view of the typology of bare nominals. Dayal (2011a) provides a recent overview.

The extension to bare count singulars has led to a renewed interest in special constructions such as predication, pseudo-incorporation, and coordination. New insights are currently obtained by application of more data-intensive methods, including fieldwork on underdescribed languages (monolingual, multilingual, and parallel) corpus research, and psycho-linguistic experimentation.

Further Reading

For a concise overview of definiteness and indefiniteness:

Abbott, B. (2006). Definite and indefinite. In K. Brown (Ed.), *Encyclopedia of language and linguistics* (2d ed., Vol. 3, pp. 392–399). Oxford: Elsevier.

Find this resource:

For more extended references, consult the OUP bibliographies on definiteness (von Heusinger) and indefiniteness (de Swart):

Von Heusinger, K. (2011). *Definiteness*. Retrieved from <http://www.oxfordbibliographies.com/view/document/obo-9780199772810/obo-9780199772810-0063.xml?rskey=LfMNAJ&result=2&q=definiteness#firstMatch>.

de Swart, H. (2013). *Indefiniteness*. Retrieved from <http://www.oxfordbibliographies.com/view/document/obo-9780199772810/obo-9780199772810-0102.xml?rskey=nzpzQX&result=1&q=indefiniteness#firstMatch>.

For a classic overview of issues in the domain of genericity:

Carlson, G., & Pelletier, F. (Eds.). (1995). *The generic book*. Chicago: The University of Chicago Press.

Find this resource:

For a classic overview of issues in the grammar of number:

Corbett, G. (2000). *Number*. Cambridge, U.K.: Cambridge University Press.

Find this resource:

For an introduction to type shifting in the nominal domain:

Partee, B. H. (1987). Noun phrase interpretation and type-shifting principles. In J. Groenendijk, D. de Jongh, & M. Stokhof (Eds.), *Studies in discourse representation theory and the theory of generalized quantifiers* (pp. 115–144). Dordrecht, The Netherlands: Foris.

Find this resource:

For an introduction to scope and scope-bearing operators:

Steedman, M. (2012). *Taking scope: The natural semantics of quantifiers*, Cambridge, MA: MIT Press.

Find this resource:

For a typological overview of indefinite articles in the languages of the world (Dryer) and in Europe (Schroeder), and an account in Optimality Theory (de Swart & Zwarts):

de Swart, H., & Zwarts, J. (2010). Optimization principles in the typology of number and articles. In B. Heine & H. Narrog (Eds.), *Handbook of linguistic analysis* (pp. 555–581). Oxford: Oxford University Press.

Find this resource:

Dryer, M. (2011). Indefinite articles. In M. Dryer & M. Haspelmath (Eds.), *The world atlas of language structures online*. Munich: Max Planck Digital Library. Retrieved from <http://wals.info/chapter/38>.

Find this resource:

Schroeder, C. (2006). Articles and article systems in some areas of Europe. In G. Bernini & M. L. Schwartz (Eds.), *Pragmatic organization of discourse* (pp. 545–614). Berlin: De Gruyter.

Find this resource:

For a diachronic analysis of the grammaticalization path of indefinite articles:

Givón, T. (1991). On the development of the numeral “one” as an indefinite marker. *Folia Linguistica Historica*, 2, 35–53.

Find this resource:

For an overview of Carlson’s kind-based analysis:

Carlson, G. (1977). **A unified analysis of the English bare plural**. *Linguistics and Philosophy*, 1(3), 413–457.

doi:10.1007/BF00353456

Find this resource:

Carlson, G. (2003). No lack of determination. In L. Cheng & R. Sybesma (Eds.), *The second GLOT International state-of-the-article book: The latest in linguistics* (pp. 149–178). Berlin: Mouton de Gruyter. Retrieved from

<http://www.degruyter.com/view/product/48742>.

Find this resource:

For an overview of bare nominals across languages in Chierchia’s neo-Carlsonian framework:

Dayal, V. (2011a). Bare noun phrases. In K. von Stechow, C. Maienborn, & P. Portner (Eds.), *Semantics: An international handbook of natural language meaning* (pp. 1087–1108). Berlin: De Gruyter. Retrieved from <https://www.degruyter.com/view/serial/20596>.

Find this resource:

For recent discussions on incorporation and pseudo-incorporation:

Borik, O., & Gehrke, B. (2015). Introduction. In O. Borik & B. Gehrke (Eds.), *The syntax and semantics of pseudo-incorporation* (pp. 1–33). Leiden, The Netherlands: Brill. Retrieved from <http://www.brill.com/products/book/syntax-and-semantics-pseudo-incorporation>.

Find this resource:

Mithun, M. (2010). **Constraints on compounding and incorporation**. In I. Vogel & S. Scalise (Eds.), *Cross-disciplinary issues in compounding* (pp. 37–56). Amsterdam: John Benjamins. doi:10.1075/cilt.311.05mit

Find this resource:

For a special journal issue on noun incorporation:

Mathieu, E., Chen, C.-H., Geber, D., & Manouilidou, C. (Eds.). (2009). Special issue on Noun incorporation and its kind. *Lingua*, 119(2), 141–388.

Find this resource:

For an overview of bare singulars in special constructions in English and related languages:

de Swart, H. (2015). **Constructions with and without articles**. In O. Borik & B. Gehrke (Eds.), *The syntax and semantics of pseudo-incorporation* (pp. 126–156). Leiden, The Netherlands: Brill. Retrieved from <http://www.brill.com/products/book/syntax-and-semantics-pseudo-incorporation>.

Find this resource:

References

Abney, S. (1987). *The English noun phrase in its sentential aspect* (PhD thesis). Cambridge, MA: MIT.

Find this resource:

Aguilar-Guevara, A., Le Bruyn, B., & Zwarts, J. (Eds.). (2014). **Weak referentiality**. Amsterdam: John Benjamins. doi:10.1075/la.219

Find this resource:

Baker, M. C. (1988). *Incorporation: A theory of grammatical function changing*. Chicago: University of Chicago Press. Retrieved from <http://www.ai.mit.edu/projects/dm/theses/baker85.pdf>.

Find this resource:

Baldwin, T., Beavers, J., van der Beek, L., Bond, F., Flickinger, D. & Sag, I.A. (2006). **In search of a systematic treatment of determinerless PPs**. In P. Saint-Dizier (Ed.), *Computational linguistics dimensions of syntax and semantics of prepositions* (pp. 163–179). Berlin: Kluwer Academic Publishers. doi:10.1007/1-4020-3873-9

Find this resource:

Beck, S., & von Stechow, A. (2007). **Pluractional adverbials**. *Journal of Semantics*, 24, 215–254. doi:10.1093/jos/ffm003

Find this resource:

Beysade, C., & Dobrovie-Sorin, C. (2005). **A syntax-based analysis of predication**. *Proceedings of SALT*, 15, 44–61. doi:10.3765/salt.v15i0.2936

Find this resource:

Borer, H. (2005). *Structuring sense, volume 1: In name only*. Oxford: Oxford University Press. Retrieved from <https://global.oup.com/academic/product/structuring-sense-9780199263905?cc=nl&lang=en&>.

Find this resource:

Borik, O., & Gehrke, B. (2015). Introduction. In O. Borik & B. Gehrke (Eds.), *The syntax and semantics of pseudo-incorporation* (pp. 1–33). Leiden, The Netherlands: Brill. Retrieved from <http://www.brill.com/products/book/syntax-and-semantics-pseudo-incorporation>.

Find this resource:

- Borthen, K. (2003). *Norwegian bare singulars* (PhD diss.). Norwegian University of Science and Technology, Trondheim. Retrieved from <http://www.diva-portal.org/smash/get/diva2:123836/FULLTEXT01.pdf>.
- Find this resource:
- Bošković, Ž. (2008). What will you have: NP or DP? *Proceedings of NELS, 37*, 101–114. Retrieved from <http://web.uconn.edu/boskovic/papers/nels.illinois.proceedings.final.pdf>.
- Find this resource:
- Carlson, G. (1977). *Reference to kinds in English* (PhD thesis). University of Massachusetts, Amherst. Retrieved from <http://scholarworks.umass.edu/dissertations/AAI7726414/>.
- Find this resource:
- Carlson, G. (2003). No lack of determination. In L. Cheng & R. Sybesma (Eds.), *The second GLOT International state-of-the-article book: The latest in linguistics* (pp. 149–178). Berlin: Mouton de Gruyter. Retrieved from <http://www.degruyter.com/view/product/48742>.
- Find this resource:
- Carlson, G. (2006). **The meaningful bounds of incorporation**. In S. Vogeleer & L. Tasmowski (Eds.), *Non-definiteness and plurality* (pp. 35–50). Amsterdam: John Benjamins. doi:10.1075/la.95
- Find this resource:
- Cheng, L., & Sybesma, R. (1999). **Bare and not so bare nouns and the structure of NP**. *Linguistic Inquiry, 30*, 509–542. doi:10.1162/002438999554192
- Find this resource:
- Chierchia, G. (1998). **Reference to kinds across languages**. *Natural Language Semantics, 6*, 339–405. doi:10.1023/A:1008324218506
- Find this resource:
- Chomsky, N. (1975). Questions of form and interpretation. *Linguistic Analysis, 1*, 75–109. Retrieved from <http://www.degruyter.com/view/product/173477>.
- Find this resource:
- Chung, S. (2000). **On reference to kinds in Indonesian**. *Natural Language Semantics, 8*, 157–171. doi:10.1023/A:1026527925514
- Find this resource:
- Chung, S., & Ladusaw, W. (2004). *Restriction and saturation*. Cambridge, MA: MIT Press. Retrieved from <https://mitpress.mit.edu/books/restriction-and-saturation>.
- Find this resource:
- Dayal, V. (2004). **Number marking and (in)definiteness in kind terms**. *Linguistics and Philosophy, 27*, 393–450. doi:10.1023/B:LING.0000024420.80324.67
- Find this resource:
- Dayal, V. (2011a). Bare noun phrases. In K. von Stechow, C. Maienborn, & P. Portner (Eds.), *Semantics: An international handbook of natural language meaning* (pp. 1087–1108). Berlin: De Gruyter. Retrieved from <https://www.degruyter.com/view/serial/20596>.
- Find this resource:
- Dayal, V. (2011b). **Hindi pseudo-incorporation**. *Natural Language and Linguistic Theory, 29*, 123–167. doi:10.1007/s11049-011-9118-4
- Find this resource:
- Déprez, V. (2005). **Morphological number, semantic number and bare nouns**. *Lingua, 115*, 857–883. doi:10.1016/j.lingua.2004.01.006
- Find this resource:
- Diesing, M. (1992). *Indefinites*. Cambridge, MA: MIT Press. Retrieved from <https://mitpress.mit.edu/books/indefinites>.

Find this resource:

Dobrovie-Sorin, C., Bleam, T., & Espinal, M. T. (2006). **Bare nouns, number and types of incorporation**. In S. Voegeler & L. Tasmowski (Eds.), *Non-definiteness and plurality* (pp. 51–79). Amsterdam: John Benjamins. doi:10.1075/la.95

Find this resource:

Doron, E. (2003). **Bare singular reference to kinds**. *Proceedings of SALT*, 13, 73–90. doi:10.3765/salt.v0i0.2881

Find this resource:

Dowty, D. (1991). **Thematic proto-roles and argument selection**. *Language*, 67(3), 547–619. doi:10.2307/415037

Find this resource:

Espinal, M. T. (2013). **Bare nominals, bare predicates: Properties and related types**. In J. Kabatek & A. Wall (Eds.), *New perspectives on bare noun phrases in romance and beyond* (p. 63–94). Amsterdam: John Benjamins. doi:10.1075/slcs.141.03esp

Find this resource:

Espinal, M. T., & McNally, L. (2011). **Bare singular nominals and incorporating verbs in Spanish and Catalan**. *Journal of Linguistics*, 47, 87–128. doi:10.1007/s11049-011-9118-4

Find this resource:

Farkas, D., & de Swart, H. (2003). *The semantics of incorporation*. Stanford, CA: CSLI Publications. Retrieved from <http://press.uchicago.edu/ucp/books/book/distributed/S/bo3627615.html>.

Find this resource:

Farkas, D., & de Swart, H. (2010). The semantics and pragmatics of plurals. *Semantics and Pragmatics*, 6, 1–54.

Find this resource:

Geist, L. (2010). **Bare singular NPs in argument positions: Restrictions on indefiniteness**. *International Review of Pragmatics*, 2, 191–227. doi:10.1163/187731010X528340

Find this resource:

Grønn, A., Le Bruyn, B., de Swart, H., & Zwarts, J. (2011). *Bare PPs in a cross-linguistic perspective*. ms. Oslo/Utrecht.

Find this resource:

Heim, I. (1982). *The semantics of definite and indefinite noun phrases* (PhD thesis). University of Massachusetts, Amherst. Retrieved from <http://scholarworks.umass.edu/dissertations/AAI8229562/>.

Find this resource:

Heycock, C., & Zamparelli, R. (2003). **Coordinated bare definites**. *Linguistic Inquiry*, 34, 443–469. doi:10.1162/002438903322247551

Find this resource:

Heycock, C., & Zamparelli, R. (2005). **Friends and colleagues. Plurality, coordination and the structure of DP**. *Natural Language Semantics*, 13, 201–270. doi:10.1007/s11050-004-2442-z

Find this resource:

Jackendoff, R. (2008). **Construction after construction and its theoretical challenges**. *Language*, 84(1), 8–28. doi:10.1353/lan.2008.0058

Find this resource:

Kallulli, D. (1999). *The comparative syntax of Albanian. On the contribution of syntactic types to propositional interpretation* (PhD thesis). Durham University, Durham, NC. Retrieved from <https://core.ac.uk/download/files/32/108644.pdf>.

Find this resource:

Kamp, H. (1984). A theory of truth and semantic interpretation. In J. A. G. Groenendijk, T. M. V. Janssen, & M. Stokhof (Eds.), *Truth, interpretation, and information* (pp. 1–43). Dordrecht, The Netherlands: Foris. Retrieved from <http://www.degruyter.com/view/product/12375>.

Find this resource:

Kamp, H., & Reyle, U. (1993). *From discourse to logic. Introduction to modeltheoretic semantics, formal logic and discourse representation theory*. Dordrecht, The Netherlands: Wolters Kluwer Uitgeverij. doi:10.1007/978-94-017-1616-1

Find this resource:

Kiss, T. (2015). *Determiner omission in German prepositional phrases*. ms. Bochum.

Find this resource:

Kratzer, A. (1980). Die Analyse des bloßen pPlurals bei Gregory Carlson. *Linguistische Berichte*, 70, 47–50. Retrieved from <https://buske.de/monographien-und-reihen/linguistische-berichte-lb.html>. doi:10.13140/RG.2.1.2398.4489

Find this resource:

Krifka, M. (1989). Nominal reference, temporal constitution, and quantification in event semantics. In R. Bartsch, J. van Benthem, & P. van Emde Boas (Eds.), *Semantics and contextual expressions* (pp. 75–115). Dordrecht, The Netherlands: Foris. Retrieved from <http://www.degruyter.com/view/product/12367>.

Find this resource:

Krifka, M. (2004). **Bare NPs: Kind-referring, indefinites, both or neither?** *Proceedings of SALT*, 14, 180–203. doi:10.3765/salt

Find this resource:

Krifka, M., Pelletier, F. J., Carlson, G. N., ter Meulen, A., Chierchia G., & Link, G. (1995). Genericity: An introduction. In N. C. Gregory & F. J. Pelletier (Eds.), *The generic book* (pp. 1–24). Chicago: The University of Chicago Press. Retrieved from <http://press.uchicago.edu/ucp/books/book/chicago/G/bo3631829.html>.

Find this resource:

Le Bruyn, B., & de Swart, H. (2014). **Bare coordination: The semantic shift**. *Natural Language and Linguistic Theory*, 32(4), 1205–1246. doi:10.1007/s11049-014-9237-9

Find this resource:

Le Bruyn, B., Que, M., & de Swart, H. (2012). The scope of bare nominals. In A. Mari, C. Beyssade, & F. Del Prete (Eds.), *Genericity* (pp. 116–139). Oxford: Oxford University Press. Retrieved from <https://global.oup.com/academic/product/genericity-9780199691807?cc=nl&lang=en&>.

Find this resource:

Le Bruyn, B., de Swart, H., & Zwarts, J. (2016). From HAVE to HAVE-verbs: Relations and incorporation. *Lingua*, 182, 49–68.

Find this resource:

Longobardi, G. (1994). Reference and proper names: A theory of N-movement in syntax and logical form. *Linguistic Inquiry*, 25(4), 609–665. Retrieved from https://www.researchgate.net/publication/243742435_Reference_and_Proper_Names_A_Theory_of_N-Movement_in_Syntax_and_Logical_Form.

Find this resource:

Lundskær-Nielsen, T., & Holmes, P. (1995). *Danish: A comprehensive grammar*. London: Routledge. Retrieved from <https://www.waterstones.com/book/danish-a-comprehensive-grammar/tom-lundskær-nielsen/philip-holmes/9780415491945>.

Find this resource:

Massam, D. (2001). **Pseudo noun incorporation in Niuean**. *Natural Language and Linguistic Theory*, 19, 153–197. doi:10.1023/A:1006465130442

Find this resource:

Matthewson, L. (1998). *Determiner systems and quantificational strategies: Evidence from Salish*. The Hague: Holland Academic Graphics. doi:10.14288/1.0087844

Find this resource:

Matushansky, O., & Spector, B. (2005). Tinker, tailor, soldier, spy. In E. Maier, C. Bary, & J. Huitink (Eds.). *Proceedings of Sinn und Bedeutung*, 9, 241–255. Nijmegen, The Netherlands: NCS. Retrieved from

<http://semanticsarchive.net/Archive/zY3ZDk2N/sub9proc.pdf>.

Find this resource:

de Meij, S. (1981). The dependent plural and the analysis of tense. *Proceedings of NELS, 11*, 58–78.

Find this resource:

Mithun, M. (1984). **The evolution of noun incorporation**. *Language, 60*, 847–894. doi:10.2307/413800

Find this resource:

Mithun, M. (2010). **Constraints on compounding and incorporation**. In I. Vogel & S. Scalise (Eds.), *Cross-disciplinary issues in compounding* (pp. 37–56). Amsterdam: John Benjamins. doi:10.1075/cilt.311.05mit

Find this resource:

Mohanan, T. (1995). **Wordhood and lexicality: Noun incorporation in Hindi**. *Natural Language and Linguistic Theory, 13*, 75–134. doi:10.1007/BF00992779

Find this resource:

Müller, A., & Bertucci, R. (2012). Sintagmas nominais nus expressam a distinção definido vs indefinido? O caso do karitiana. In P. R. de Oliveira & P. M. Mezari (Eds.), *Nominais Nus. Um olhar através das línguas* (pp. 149–180). Campinas SP, Brazil: Mercado de Letras. Retrieved from <http://www.mercado-de-letras.com.br/livro-mway.php?codid=279>.

Find this resource:

Munn, A., & Schmitt, C. (1999). **Against the nominal mapping parameter: Bare nouns in Brazilian Portuguese**. *Proceedings of NELS, 29*, 339–353. doi:10.1.1.37.4907

Find this resource:

Partee, B. H. (1987). Noun phrase interpretation and type-shifting principles. In J. Groenendijk, D. de Jongh, & M. Stokhof (Eds.), *Studies in discourse representation theory and the theory of generalized quantifiers* (pp. 115–143). Dordrecht, The Netherlands: Foris. Retrieved from <http://www.abebooks.com/9789067652674/Studies-Discourse-Representation-Theory-Generalized-9067652679/plp>.

Find this resource:

Paul, I. (2016). **When bare nouns scope wide. The case of Malagasy**. *Natural Language and Linguistics Theory, 34*, 271–305. doi:10.1007/s11049-015-9302-z

Find this resource:

Pérez-Leroux, A., & Roeper, T. (1999). **Scope and the structure of bare nominals: Evidence from child language**. *Linguistics, 37*, 927–960. doi:10.1515/ling.37.5.927

Find this resource:

Prince, A., & Smolensky, P. (1997). **Optimality: From neural networks to universal grammar**. *Science, 275*, 1604–1610. doi:10.1126/science.275.5306.1604

Find this resource:

Rizzi, L. (1986). Null objects in Italian and the theory of PRO. *Linguistic Inquiry, 17*(3), 501–557. Retrieved from https://www.jstor.org/stable/4178501?seq=1#fndtn-page_scan_tab_contents.

Find this resource:

Roodenburg, J. (2004). **French bare nouns are not extinct**. *Linguistic Inquiry, 35*, 301–313. doi:10.1162/002438904323019093

Find this resource:

Rosen, S. T. (1989). **Two types of noun incorporation: A lexical analysis**. *Language, 65*, 294–317. doi:10.2307/415334

Find this resource:

Rullmann, H., & You, A. (2006). General number and the semantics and pragmatics of indefinite bare nouns in Mandarin Chinese. In K. von Stechow & K. Turner (Eds.), *Where semantics meets pragmatics* (pp. 175–196). Amsterdam: Elsevier. Retrieved from <http://www.brill.com/where-semantics-meets-pragmatics>.

Find this resource:

Sato, Y. (2009). Radical underspecification, general number, and nominal mapping in Indonesian. *Proceedings of the Austronesian Formal Linguistics Association, 16*, 197–209. Retrieved from http://westernlinguistics.ca/afla/meetings/afla16/papers_afla_16/Sato.pdf.

Find this resource:

Sauerland, U., Anderssen, J., & Yatsushiro, J. (2005). The plural is semantically unmarked. In S. Kepser & M. Reis (Eds.), *Linguistic evidence*. Berlin: Mouton de Gruyter. Retrieved from <http://www.degruyter.com/view/product/20156>.

Find this resource:

Stowell, T. (1989). Subjects, specifiers and X-bar theory. In M. Baltin & A. Kroch (Eds.), *Alternative conceptions of phrase structure* (pp. 232–262). Chicago: University of Chicago Press. Retrieved from <http://press.uchicago.edu/ucp/books/book/chicago/A/bo3642928.html>.

Find this resource:

Stvan, L. S. (1998). *The semantics and pragmatics of bare singular noun phrases* (PhD thesis). Northwestern University, Evanston, IL. Retrieved from http://www.uta.edu/faculty/stvan/stvan98_frontmatter.pdf.

Find this resource:

Stvan, L. S. (2009). **Semantic incorporation as an account for some bare singular count noun uses in English**. *Lingua, 119*(2), 314–333. doi:10.1016/j.lingua.2007.10.017

Find this resource:

de Swart, H. (2016). **Telicity features of bare nominals**. In G. Legendre, M. Putnam, H. de Swart, & E. Zaroukian (Eds.), *Optimality-theoretic syntax, semantics and pragmatics* (pp. 248–273). Oxford: Oxford University Press. doi:10.1093/acprof:oso/9780198757115.001.0001

Find this resource:

de Swart, H., & Zwarts, J. (2009). Less form, more meaning: Why bare nominals are special. *Lingua, 119*, 280–295.

Find this resource:

de Swart, H., & Zwarts, J. (2010). **Optimization principles in the typology of number and articles**. In B. Heine & H. Narrog (Eds.), *Handbook of linguistic analysis* (pp. 555–581). Oxford: Oxford University Press. doi:10.1093/oxfordhb/9780199544004.001.0001

Find this resource:

Swart, H. de, Winter, Y., & Zwarts, J. (2007). **Bare nominals and reference to capacities**. *Natural Language and Linguistic Theory, 25*(1), 195–222. doi:10.1007/s11049-006-9007-4

Find this resource:

Tenny, C. (1994). *Aspectual roles and the syntax-semantics interface*. Dordrecht, The Netherlands: Kluwer Academic Publishers. doi:10.1007/978-94-011-1150-8

Find this resource:

Van Geenhoven, V. (1998). *Semantic incorporation and indefinite descriptions. Semantic and syntactic aspects of noun incorporation in West Greenlandic*. Stanford, CA: CSLI Publications. Retrieved from <http://press.uchicago.edu/ucp/books/book/distributed/S/bo3645122.html>.

Find this resource:

Verkuyl, H. (1972). *On the compositional nature of the aspects*. Dordrecht, The Netherlands: Reidel. doi:10.1007/978-94-017-2478-4

Find this resource:

Verkuyl, H. (1993). *A theory of aspectuality: The interaction between temporal and atemporal structure*. Cambridge, U.K.: Cambridge University Press. Retrieved from <http://www.cambridge.org/at/academic/subjects/languages-linguistics/grammar-and-syntax/theory-aspectuality-interaction-between-temporal-and-atemporal-structure?format=PB&isbn=9780521564526>.

Find this resource:

Wilhelm, A. (2008). **Bare nouns and number in Dëne Sùliné**. *Natural Language Semantics*, 16, 39–68. doi:10.1007/s11050-007-9024-9

Find this resource:

Yang, R. (2001). *Common nouns, classifiers, and Iuantification in Chinese* (PhD thesis). Rutgers University, New Brunswick, NJ. Retrieved from <http://ling.rutgers.edu/images/downloads/RYThesis.PDF>.

Find this resource:

Zwarts, J. (2013). **From N to N: The anatomy of a construction**. *Linguistics and Philosophy*, 36(1), 65–90. doi:10.1007/s10988-013-9131-7

Find this resource:

Bert Le Bruyn

Universiteit Utrecht

Henriëtte de Swart

Universiteit Utrecht

Joost Zwarts

Universiteit Utrecht

PRINTED FROM the OXFORD RESEARCH ENCYCLOPEDIA, LINGUISTICS (linguistics.oxfordre.com). (c) Oxford University Press USA, 2016. All Rights Reserved. Personal use on applicable Privacy Policy and Legal Notice (for details see Privacy Policy).

Subscriber: Utrecht University Library; date: 22 January 2018

