

CHAPTER TWO

Mass Nouns and Count Nouns

1. Introduction

In this chapter I discuss the categories of mass and count and how they apply to English location nouns that are used as bare singular nominals. I will show how these nouns help us to determine the point at which speakers decide whether a noun is mass or count; in particular, I question whether putative count nouns such as *school*, *church*, and *camp* should be considered count nouns when they are used in the bare singular form. I explore mass/count in two directions: first, just as definiteness has been shown to have both cognitive criteria (of referent identifiability and activation in the discourse) and formal grammatical markers (determiners, capitalization of proper names) (cf. Lambrecht 1994), so too can countability be analyzed as both a cognitive view (of a referent's individuatedness) and a formal grammatical marking (through determiners or plural morphemes). As with definiteness, the two aspects of the mass/count distinction do not always have a one-to-one correlation in language use. Secondly, in questioning whether the

mass/count distinction is itself oversimplified or inappropriate in the case of some nouns, I conclude that all instances of the mass/count distinction should be determined on the basis of discourse context alone. Thus, mass/count does not affect the word level (i.e., lexical nouns are underspecified for countability); instead, formal mass/count marking is a feature of noun phrases. I conclude that the mistaken association of bare nouns with countability can be clarified by the crucial separation of lexical nouns from sometimes identical full NPs and intermediate N-bar level constituents, each of which encodes a different type of semantic information.¹

2. The Traditional Mass/Count Distinction

2.1 Dividing Languages by Noun Types

According to Gillon (1992), count nouns and mass nouns were first discussed as relevant to English in the second volume of Jespersen's 1909 work on English grammar. Since then, this distinction has played a major role in descriptions of English article use as well as in comparisons of English nominals with those of other languages. Greenberg's work on language universals (1978b), for example, discusses the

1. In this work I am assuming a three level X-bar system for nominals, though my conclusions regarding the interpretation of bare singulars as phrasal rather than lexical items could be accommodated in a DP framework as well.

mass/count distinction as it appears in a number of languages, both those that use noun classifiers and those that do not. He notes that the mass/count distinction interacts in different ways with such morphemes as classifiers, articles, and definiteness markers. Thus, it might seem that a system based on the mass/count distinction is orthogonal to noun class systems.

Gil (1987:255), on the other hand, argues for a division between classifier and non-classifier languages that can be more precisely distinguished by using an NP typology that is “a joint product of the two co-varying parameters of configurationality and the count-mass distinction.” Using this system, English-type languages are characterized by having configurational NPs (which means lexical nouns have a different distribution than either N-bars or full noun phrases) as well as by a distinction between count and mass nouns. Languages such as Japanese, on the other hand, have non-configurational (or flat) NPs and treat all nouns as mass. Gil suggests that obligatory morphosyntactic marking of (in)definiteness and of nominal plurality are just two of seven correlates of the +configurationality and +mass/count parameters, as shown in Table 3.

Table 3
Language Types Correlating with NP Types
(adapted from Gil 1987:256)

	+ configurational + mass/count (e.g., English)	- configurational - mass/count (e.g., Japanese)
Obligatory marking of (in)definiteness	+	-
Obligatory marking of nominal plurality	+	-
Obligatory marking of numeral classification	-	+
Existence of adnominal distributive numerals	-	+
Free NP-internal constituent order	-	+
Existence of stacked adnominal numeral constructions	-	+
Existence of hierarchic interpretations of stacked adjective constructions	+	-

These first two correlates—or rather, their absence—come into play in discussing bare singular nominals, as we will see in the following discussion of the mass/count issue.

2.2 Evidence for the Mass/Count Distinction

In languages like English, which grammatically contrast mass and count nouns, the semantics of the mass/count distinction is reflected in the way that speakers treat nouns whose referents are considered distinct countable things (e.g., *cat*, *table*, and *book*) versus ones whose referents are treated as an uncountable mass (e.g., *water*, *rice*, and *clothing*).² Syntactic evidence for the two types is easy to come by: traditional

2. Mass nouns do not necessarily have referents which are physically indivisible; the referents of *rice* and *clothing*, for example, are both composed of individual units in the real world. Instead, mass nouns are

indicators of count nouns in ESL grammars (e.g., Azar 1981) and reference grammars (e.g., Quirk et al. 1985) list the presence of indefinite determiners *a(n)* or *another* with the singular form, the quantifiers *few*, *many*, *several*, or *some* with the plural form, and the nouns' use as subject with plural verb forms. In addition, Baker (1978) notes that the pronoun *one* can have as its antecedent a count noun, but not a mass noun. These diagnostics are listed in (1). Examples of the markers used with count nouns are given in (2).

(1) Diagnostics for count noun use

- a. indefinite determiners: *a(n)*, *another*
- b. cardinal numbers
- c. these quantifiers with plural nouns: *few*, *many*, *several*, *some*
- d. plural morphemes
- e. use with plural verb forms
- f. possible antecedent for *one(s)*

(2) Count noun examples

- a. Sam has a cat/another cat/*cat.
- b. Sam has sixteen cats.
- c. Sam has many cats/some cats/several cats/few cats/
*too much cat/*little cat/*some cat.
- d. I don't like cats.
- e. The cats are very sleepy.
- f. I was looking for a new couch₁, but I finally bought a used one₁.

those that speakers refer to collectively (e.g., *there is rice on my plate*, vs. *there are 136 rices on my plate*). To speak of individual units of a mass noun material requires something along the lines of a classifier, e.g., *six grains of rice*, *four pieces of furniture*, *five items of clothing*.

Mass nouns, on the other hand, are generally identified by not taking plural morphemes or appearing with plural verb forms, as well as by their use with the modifiers *much*, *little*, *a great deal of*, and unstressed *some* with the singular noun form. Mass diagnostics are listed in (3) and examples of mass noun uses are shown in (4).

(3) Diagnostics for mass noun use

- a. indefinite determiners: zero or unstressed *some*
- b. not used with plural verb forms
- c. not used with plural morphemes; these quantifiers with singular forms: *much*, *little*, *a great deal of*
- d. not a possible antecedent for *one*

(4) Mass noun examples

- a. My house contains *a furniture/*another furniture/
furniture/some furniture
- b. The furniture is very old/*The furniture(s) are very old.
- c. My house contains *furnitures/*many furnitures/
*some furnitures/too much furniture/a great deal of furniture
- d. *I was looking for new furniture_i, but I finally bought (a)
used one_i.

3. Contexts Influencing Mass or Count Uses

One problem with diagnostics such as those exemplified in (2) and (4), however, is that depending on the situation, many nouns can be used as either a mass or a count form. These mass/count alternations result in “dual words,” with meanings produced by a number of types of metonymy (see Jespersen 1924:198-201). Examples of some dual words from

different semantic categories are given in (5).

	mass use	count use
(5) a. count foods ³	a great deal of apple some potato not much chicken	three apples some potatoes many chickens
b. material	lots of gold a lot of steel was used too much chocolate a great deal of tofu	a metallic gold a steel that weathers six chocolates a firmer tofu
c. makeup	wearing too little chapstick wearing too much lipstick a great deal of rouge	buy a new chapstick hand me a red lipstick a rouge for darker skin
d. abstract terms	much experience a little talent too much theory	many experiences few talents too many theories

Gillon (1992:601) briefly discusses such dual status words but dismisses them as either the result of a special process of type-shifting (see below) or the historical application of such a rule, which leaves more opaque cases of polysemy/homophony. These types of shifting, however, are productive, robust processes. To illustrate, I will discuss three of the contexts which commonly induce this typeshifting: in 3.1, I show how the demolition of a count noun's referent can lead to a part or all of its material being used as a mass form (so-called "grinder effects"); in

3. These are examples of foods that are count nouns before they are ground up, while some other foods are mass nouns when the food is intact and so are often used with classifiers, e.g., *broccoli*, *parsley*—see Mufwene (1995) for a wide range of these.

3.2, I discuss how a setting that requires indicating the size of a serving or purchased unit of a substance can turn a mass noun into a count noun; and in 3.3, I show that referring to a natural kind can turn a mass noun into a count noun. These three situations are discussed in detail below.

3.1 Grinder Effects

Pelletier (1975) first proposed the idea of a huge “universal grinder” able to pulverize any object. The ground-up output of this device can be referred to by the same word as the original object, but now is used as a mass noun. Hence you could felicitously utter the examples in (6) concerning the output of such a grinder.

- (6) a. Be careful not to let any bits of **table** get mixed in with the sand.
 b. Look, you’ve got **shoe** all over your sleeve.

Other works have investigated the grinder scenarios. For example, Akiyama and Wilcox (1993) studied children’s choice of lexical form for referring to material before and after being ground. A grinder test was presented in which mass substances (e.g., water) were shown to maintain identity through transformation, while objects (e.g., cup) do not. Children were asked if the same name could be used for the same item

after it was ground up. Children accepted the same name for food, ignoring syntactic mass/count information; they accepted the same name for objects, but here relied on mass/count markers. When they were asked if the same name could be used after transformation of unfamiliar hardware items and food items that had been labeled by nonsense mass and count nouns, children still tended to use the same name for food, relying this time on perceptual information concerning the object's shape.

As Akiyama and Wilcox's study shows, although any number of items can go into the universal grinder, some objects, such as food, are more likely to occur in a whole or ground-up state in the real world. This exposure influences our sense that some referents are inherently more mass or count. However, there is a large measure of arbitrariness in the assignment of an object to a mass or count type word.⁴ In many cases the same entity can be named by both mass and count forms, as shown by the following examples:

4. The choice of words a speaker uses to refer to carbonated soft drinks varies by region in the U.S. In some dialects, however, these terms are not always used interchangeably. In my dialect at least, *soda* can be either a mass or count term, while *pop* is only mass.

	mass	count
(7)	clothing	garments
	cattle	cows
	equipment	tools
	spaghetti	noodles
	footwear	shoes

(examples from Mufwene 1984:201; McCawley 1975)

3.2 Serving Size

The second instance of typeshifting, this one taking words from mass to count forms, occurs often, though not exclusively, with foods, beverages, or cosmetics. For example, the substance that is in my glass at dinner is water, which is generally referred to by a mass form, as in, “I’ll have some water.” However, if three people at my table order glasses of water, then the substance is saliently considered as divided into servings, and we can speak of ordering “three waters,” using a count form. The examples in (8) and (9) further illustrate contexts allowing a count reading from a traditionally mass noun.

- (8) a. Red **meat** has more fat than chicken or fish. (mass)
 b. Donna’s diabetic diet required her to eat two starches and one **meat** in the early evening. (count)
- (9) a. There is **cola** in this glass, not iced tea! (mass)
 b. We’d like two diet **colas** and one beer. (count)

3.3 Natural Kinds

A third instance of typeshifting from mass to count forms occurs when mass nouns are used to refer to a type or natural kind. It is especially frequent with material terms, as shown in (11a), and with color terms, illustrated in (11b).

- (10) a. There are only three bottled **waters** on the market (count)
 that I like.
 b. The samples brought in to the lab represent (count)
 three different **waters**.
- (11) a. I need a **steel** that will not rust. (count)
 b. I am deciding between two **reds** for the kitchen wall. (count)

Bunt (1985:11) characterizes this mass into count mapping as a “universal sorter,” in contrast to Pelletier’s universal grinder. Bunt (1985:11) describes the context for this typeshifting as follows:

Conversely, we can imagine a machine that takes as input a continuous stream of any substance (wine, linen, etc.), performs inspections according to colour, alcohol percentage, strength, etc., and issues qualifications like ‘This is an excellent wine; This is a strong linen’, etc.

Pelletier and Schubert (1989:343) call the same device a “universal objectifier.”

3.4 Interfacing with the Real World

Casey (1997) notes that while examples such as (5)-(11) are problematic

for the intuitive view that count nouns are used to refer to discrete objects and mass nouns to refer to non-solid substances, they are not necessarily evidence of complete semantic arbitrariness. According to him, “the real world extensions of *bullets* and *ammunition* may be identical, but the corresponding concepts need not be. The difference may lie in how we construe these entities” (Casey 1997:19). He follows recent theorists (e.g., Carroll 1978; Lakoff 1987; Bloom 1990, 1994a; Jackendoff 1991; Mufwene 1984; Wierzbicka 1988; Wisniewski et al. 1996) in suggesting that “count/mass syntax maps not simply to entities in the world, but rather to the cognitive construal of those entities as individuals or unindividuated entities” (Casey 1997:20). Casey calls this view, which holds that the count/mass distinction is grounded in a cognitive rather than an ontological distinction between individuals and unindividuated entities, the “cognitive individuation hypothesis.”⁵ Casey does not exclude syntactic features such as modifier type or number from

5. Of course, the mass/count distinction should not be considered our only lexical representation of cognitive categories. In a LINGUIST posting relating how Whorf’s original explanation of different words for snow has been misinterpreted, Tony Woodbury lays out several such categorizations that speakers encode in language:

Words don't merely match pre-existing things in the world. Rather, they shape and encapsulate ideas about things—how they are categorized (compare *dog* vs. *canine*), how we are interacting with them (compare *sheep* vs. *mutton*), how the word functions grammatically (compare the noun *cow* vs. the adjective *bovine*), and how we wish to represent our attitudes about them (compare *critter* vs. *varmint*).

playing a role in generating semantic differences in count/mass constructions, but suggests that such markers alone cannot adequately account for all meaning differences; in other words, conceptual differences in count/mass category representations also exert significant influence.

Similarly, in considering whether the domain of the count-mass distinction is semantic or pragmatic, Gil (1987:267) concludes on the basis of shifts like the three mentioned above that the distinction is pragmatic, albeit showing grammatical reflexes. His evidence includes the way that a speaker's acknowledgement of "a natural unit of enumeration depends on a number of contextual factors," which is why in languages that reflect the mass/count distinction, "an appropriate context can be constructed to convert almost any mass noun into a count noun" (Gil 1987:267).

3.5 Conclusion to Section 3

Gil's language typology, with its seven possible ways in which noun phrases may be used in a language (shown above in Table 3), works well in systematizing the pertinent differences among languages and allowing

(Tony Woodbury, Message 2/75 From The Linguist List, Subject: 5.1239 Eskimo "snow," Nov. 6 1994, Subject: 'Snow' lexemes in Yup'ik)

an examination of definiteness and mass nouns that does not rely solely on English forms. But like many discussions of the mass/count distinction, it makes overly broad claims concerning the obligatory marking of mass/count and plurality. In particular, it fails to account for a language like English having forms in which a count noun occurs without either plural markers or articles. What we find further muddies the water(s) is that not only do some nouns seem to fit into both mass and count categories in different contexts (e.g., the dual status nouns created by typeshifting contexts), but that the bare singular forms appear in contexts which seem to fit into neither category.

On the basis of experiments with superordinate terms, Casey (1997:107) argues that “syntax affects both the ease with which we instantiate categories and the inferences we make about them.” His work indicates that “the contexts in which count and mass terms are used vary systematically, with count nouns used in describing individual interactions or parts, and mass nouns used in relating group interactions” (Casey 1997: 107). He concludes that “much of the existing evidence supports the contention that count and mass entities are distinguished by an abstract principle of individuation, with count items marking individuals and mass terms signifying unindividuated portions or groups” (Casey

1997:2). Again, however, the truly problematic terms are those that appear in settings where they lack syntactic identifiers as either mass or count.

Gil's inclusion of NP-internal configurationality, however, offers a way out of this situation. As I noted earlier (Chapter 1, Section 2.2), bare singular nominals have much in common with maximal rather than lexical projections, thus we should consider that the marking of mass/count does not apply at the NP level. That is, if bare singular nominals are NPs, we would not expect them to take articles or plural markers. Nonetheless, the nouns that make up the bare singular nominals are unusual in not formally revealing their mass/count status.

4. Nouns That are Neither Mass nor Count

In addition to the typeshifting contrasts, other noun uses occur in which the nouns are not identifiably either mass or count. Pelletier and Schubert (1989:343) list examples which include the following types:

(12) Modifier nouns in N-N compounds

- a. Lee ran into the **brick** wall while she was sniffing **nose** drops.
- b. The **water meter** man hit the **snow** man which held the **tape** recorder.

(13) Location nouns in PPs

While in **prison**, Lee felt at **home** only when he was in (the) **hospital**.

As instances of mass or count forms, most of these examples are unclear because they lack individuating determiners, our main syntactic identifier of noun type. A further example is shown by constructions consisting of “groups of nouns, either in enumerations or when the words are arranged in pairs connected by a conjunction or a preposition” (Ahlgren 1946:190; also see Quirk et al 1985:28). These nouns generally also appear in the bare form; some examples are shown in (14).

- (14) a. Kerens could remember the unending succession of green twilights that had settled behind them as he and Riggs moved slowly northward across Europe, leaving one city after another, the miasmatic vegetation swamping the narrow canals and crowding from **rooftop to rooftop**.
(J. G. Ballard, *Drowned World*, Garden City, NY, Doubleday, 1962, p. 17)
(cf. *vegetation crowding to rooftop)
- b. walking from **kitchen to bathroom**
(cf. *he walked to bathroom)
- c. Silkowitz had a hand in everything, running from **corner to corner**, his long girlish hair rippling, the sliver thumb ring reddening in the light of the “Exit” sign whenever he glided past it. (Cynthia Ozick, “Actors,” *The New Yorker*, Oct. 5, 1998, p. 89-90)
(cf. *running to corner, his girlish hair rippling...)

- d. In her despair Tess sprang forward and put her hand upon the hole, with the only result that she became splashed from **face** to **skirt** with the crimson drops.
(Thomas Hardy, *Tess of the d'Urbervilles*, New York: Bantam Books, 1971 [1891], p. 27)
(cf. *She became splashed to/at/on skirt)
- e. Since 1987, it's been a Performance Today tradition to journey through the country, from **church** to **auditorium** to **town hall**, sharing in celebration of the holidays.
(<http://www.npr.org/programs/pt/command/CDs.html>)
(cf. *to journey through the country to auditorium)
- f. They led me down **hall** after **hall**, until, ahead, I saw a double set of doors marked MORGUE.
(Philip K. Dick, *Radio Free Albemuth*, 1985, New York: Arbor House, p. 201)
(cf. *They led me down hall, until)

In addition, predicate nominals are often found in bare singular form:

- (15) a. Tom was both **father** and **mother** to the child.
- b. She was **president** for two terms.
- c. He was **best man** at his brother's wedding.

All of the uses in (12)-(15) could be considered bare singular nominals, although it is the location nouns in PPs, with their particular added sense of Activity and Familiarity, that will be the focus of this work.

Should bare forms be considered inherently count nouns that shift to mass forms in certain contexts? If not, how do we explain their behavior? Are they count or mass forms at all when they are in the bare form? Since information from determiners and affixes is lacking, syn-

tactic distribution offers another perspective. By checking the positions in which the nouns occur and the modifier types with which they can co-occur, Soja (1994) shows that the bare nouns act like neither mass nor count forms—not like lexical nouns at all—but like full noun phrases.

Starting with the observation that these words show unusual behavior for count nouns, Soja argues that when they appear without determiners, nouns such as *church*, *camp*, *school*, etc. are, in fact, not count nouns, but represent a third type of common noun, distinct from either mass or count nouns. As evidence, she points out that although they appear in bare form, something only mass nouns usually do, these nouns differ from mass nouns in not being able to appear with the mass-noun determiner *much*:

	with no determiner	nominal type
(16)	a. Evidence was called for.	mass noun
	b. Camp lasted a month	bare singular
	c. * Cat stayed in the house	regular count noun
	with mass noun modifiers	nominal type
(17)	a. *They owned much cats .	count noun
	b. *They placed it in much buckets .	count noun
(18)	a. *She is in much school .	bare noun
	b. *He is at too much camp .	bare noun

The examples in (17) and (18) do show a similarity of bare nouns to count nouns—particularly when they describe a single moment in space or time. For uses of the bare forms that do not occur in locative PPs, however, Soja’s determiner contrast does not hold up. As the examples in (19) show, in a context where enough time has accumulated to produce a quantity of experiences at a site, or where the noun can be interpreted as an activity rather than a location, mass noun modifiers are more acceptable with the same nouns:

- (19) a. He had been to so much **camp** that he could always find the North star.
 b. He attended too much **church** last year; now he wants to be a priest.
 c. Too much **school** is hard on a kid.

In addition to the similarities seen in (17) and (18) of bare singular forms in PPs to count nouns, Soja notes that bare nominals, unlike many types of full noun phrases, sometimes appear with count noun determiners such as a:

- | | with count noun determiners | nominal type |
|---------|------------------------------------|---------------------|
| (20) a. | * This is an evidence . | mass noun |
| b. | This is a camp . | bare singular |
| c. | This is a cat . | regular count noun |

The determiner tests, rather than indicating that bare forms are neither count nor mass, might also be considered evidence that they can be construed as either. I suggest that the tests in (16)-(20) simply show that context and the choice of determiner can force a mass or count reading on an ambiguous nominal form.

A more revealing set of tests that Soja presents are the ones that show that bare nominals share the distribution of full noun phrases, including pronouns and proper nouns, two lexical noun types which serve as full noun phrases. In particular, bare singular nominals cannot appear with pronominal adjectives, yet do appear with predicate adjectives (Soja 1994:268). These properties are illustrated in (21) and (22).

	with prenominal adjectives	nominal type
(21)	a. *This is nice camp . b. *This is nice the building . c. *This is nice lamp . d. This is nice water .	bare noun full noun phrase regular count noun mass noun
	with predicate adjectives	nominal type
(22)	a. Camp is nice. b. This building is nice. c. * Lamp is nice. d. Water is nice.	bare noun full noun phrase regular count noun mass noun

The examples in (16)-(22) show that the bare forms sometimes have the

distribution of count nouns—in (17), (18), (20), and (21)—and sometimes have the distribution of mass nouns—in (16), (19), and (22). Notably, in (21) and (22), their distribution is the same as that of full noun phrases. Soja (1994) accordingly refers to the group of nouns that can occur as bare singular nominals as ‘NP-type nouns’.

4.1 More X-Bar Level Tests for Bare Singular Nominals

To further verify that bare singular nominals are indeed full phrasal constituents, consider the following evidence. Syntacticians have long noted that a single unmodified noun can have the same distribution as a noun phrase when it is a plural noun such as *cars* or a mass noun such as *clothing* (e.g., Bloomfield 1935, Harris 1946). But bare forms are more unusual in the singular. To see if bare singular forms could indeed be functioning as a phrasal category, as Soja’s diagnostics suggest, I tested the nominals using the full array of diagnostics enumerated by Radford (1988:84-90) for constituency and X-bar status. These are listed in (23). The results are demonstrated in (24)-(28).

(23) Only full phrases

- can be coordinated with another full XP (ordinary coordination)
- can share a constituent in coordination
- can be replaced by a pro-XP constituent
(for NPs this would be pronouns)
- can be preposed
- can serve as sentence fragments

In the examples that follow, the material in brackets was added to an attested example.

(24) **Ordinary Coordination**⁶

Camp and **her grandmother's farm** were where she was happiest.

In (24) the bare singular nominal *camp* is conjoined to the full noun phrase *her grandmother's farm*, showing that *camp* is serving as a full phrasal constituent here.

(25) **Shared Constituent Coordination**

- a. She got up and walked slowly toward **camp** [and **the comfort of a hot meal**] (Steven Utley, "The Wind over the World," *Asimov's Science Fiction*, Oct./Nov. 1996, p. 118)
- b. The men can defeat immunities that states often assert in **court** [and **other legal settings**] by showing that officials knew or should have known that design of the structure was defective and that they failed to make reasonable changes. (Anne Newman, "Asbestos Once Used in Kent Filters Led To Workers' Cancer Deaths, Group Says," *Wall Street Journal*, Nov. 2, 1989)

In (25a), the preposition *toward* can be shared by the bare form *camp* as well as the full noun phrase used in the following phrase. Likewise, in

6. This test is different from the paired bare forms in (14) in that it includes an overt full noun phrase as one coordinated element.

(25b) the bare form *court* shares the preposition *in* with the full noun phrase *other legal settings*. The examples in (25), then, show that the bare singular nominal forms *camp* and *court* are functioning as full noun phrase objects within their PPs.

(26) **Substitution by a Pro-NP**

- a. Not that I had any special reasons for hating **school**.
(Max Beerbohm, *Going Back to School*, in The Oxford Dictionary of Quotations, 2nd ed. London: Oxford University Press, 1959, p.39)
- b. Not that I had any special reasons for hating **it**.
- c. Need help setting up **camp**?
(Bill Amend, *Fox Trot* cartoon, Aug. 15, 1996.)
- d. Need help setting **it** up?

In (26), the pro-form *it* is used to replace *school* and *camp* showing that these words are NPs here.

(27) **Preposing**

- a. Manson will undoubtedly never leave **jail**, but the book that maintains his infamy also maintains his fame. (Alex Ross, "The Shock of the True," *The New Yorker*, Aug. 19, 1996, p. 71)
- b. **Jail** Manson will undoubtedly never leave.

In (27), the fact that *jail* can be preposed shows it must be a complete phrasal category here, hence it must be an NP.

(28) **Sentence Fragments**

- a. **College** was not necessary, nor was a well-paying job.
(Garrison Keillor, *Lake Wobegon Days*, New York: Viking, 1985, p. 118)
- b. What wasn't necessary? College. (NP type noun)
- c. What wasn't necessary? *Job. (Bare regular count noun)
- d. What wasn't necessary? A well-paying job. (full noun phrase)

In (28b), the bare singular nominal *college* suffices as a fragment answer, just as the full noun phrase does in (28d). This contrasts with the count noun fragment in (28c). In (28a), therefore, *college* acts like a maximal projection.

Tests such as those in (24)-(28) redirect our focus concerning one of the puzzles related to the bare forms, which is, why do these count nouns show up without articles? The answer is that they are not count nouns. In fact, the term *count noun* itself is misleading, for, as I will argue, *nouns* are not the units that represent count/mass at all—some higher constituent, N-bar, or NP does so (see Allan 1980). In addition, while syntactic countability markers like articles are one way to indicate NP status, I will argue that other factors such as the semantic subset of the noun, and the discourse context in which the noun is found, also influence the interpretation.

4.2 Some Traditional Mass Nouns Also Serve as Bare Singular Nominals

As we saw, certain contexts, like the three typeshifting scenarios discussed in Section 3, allow many words to have both a count noun reading and a mass noun reading. It is on the basis of such ‘dual word’ contrasts that Soja seeks to show a contrast between NP-type nouns and count nouns, as shown in (29).

- (29) a. Did you enjoy **camp** last summer?
(NP-type noun sense)
b. Did you visit three **camp**s in June?
(count noun sense)

While it is clear that many ostensible count nouns used in the bare form should actually fall into this new NP-type noun category, it is also important to consider the converse. What about ostensible mass nouns—could some of these also have NP-type noun uses? I propose that there are also a few traditional mass nouns, including *work*, *day-care*, and *property*, which, like the NP-type nouns, are found as bare singular nominals. Such nouns are a much smaller percentage of the bare nominal collection than the putative count nouns. However, they are likely candidates to be bare singular nominals because they are found in the same constructions (locative PPs) and have the same semantic features (habitual, socially identified spaces) that the putative count noun

tokens do in their most distinct bare singular instances. That is, unlike most of the mass nouns that appeared in the CHILDES data that Soja examined, which mainly contained mass nouns naming artifacts or material (*clay, bread, grass*), likely bare singular nominals that might at first appear to be mass nouns would name community locations.

In (30)-(32) below, I show that while the location senses of *work, day-care, and property* are not normally considered count nouns, by observing their use with the indefinite article *a*, we can see that in some uses, neither are they mass nouns. In other words, the bare form of a noun is not necessarily a sign of a mass noun. Thus, there are not just bare/count, but also bare/mass alternations.

- (30) a. They say the Republican reliance on tax credits for families wouldn't provide enough overall assistance and wouldn't do anything to improve the quality, or increase the supply, of **day care**.
(Cathy Trost, "Legislation Faces Reshaping With Senate Conferees, And Bush's Opposition," *Wall Street Journal*, Oct. 6, 1989)
- b. The first thing women want is more **day care** for their children.
(Urban Lehner and Kathryn Graven, "Quiet Revolution: Japanese Women Rise In Their Workplaces, Challenging Tradition," *Wall Street Journal*, Sept. 6, 1989)

- (31) a. Of the five who completed the program, four were receiving Aid to Families with Dependent Children at the beginning of the program. Four were also working at least part-time and the other was volunteering at a neighborhood **day care**.
(Clarence Page, *Chicago Tribune*. Sept. 4, 1996, Section 1, p.19)
- b. If your kids are in daycare, or if you run a **daycare**, ...
[here's something you want to hear]
(KARE 11 News, Minneapolis, Jan. 24, 1997)
- (32) a. Nahoko Hayashida says her bosses at Japan's national television network, NHK, let her leave work a few minutes early to retrieve her son from **day care**, but the 32-year-old production coordinator believes this concession is extended in return for her tacit agreement not to compete with men for certain top jobs.
(Urban Lehner and Kathryn Graven, "Quiet Revolution: Japanese Women Rise In Their Workplaces, Challenging Tradition," *Wall Street Journal*, Sept. 6, 1989)
= **his daycare center**
- b. She's [the young child of an ill mother] having some problems in **daycare**.
(K. Schmitt, phone conversation, Sept. 1996)
= **her daycare center**

The examples in (30) show traditional mass uses of *daycare* (the most common use) in which the noun is used to refer to a kind of service; those in (31) show the count noun use formed via a clipping of the compound *daycare center*; while those in (32) show bare singular uses in which a particular institution is anchored to one of the discourse participants.

As will be shown in Chapter 3, in addition to fitting the general semantic

sense for bare social/geographical spaces, namely, as a place where a person habitually spends a set amount of time, *daycare* also fits into one of the main semantic subsets, that of educational settings, a category which also includes *school*, *college*, *kindergarten*, *junior high*, *yeshiva*, and many other bare singular nominal types.

Further examples in (33) and (34) involve *work* and *property*, two other words which are often considered to be mass nouns. Although the sense of *work* synonymous with *labor* is normally used as a mass noun (e.g., “some work and some play is necessary each day”), there is also a location sense that acts more like a shortened form of *one’s work place*. This possessive use will be discussed in Chapter 4, but for now the aspects that are relevant are that the word can occur as a bare singular nominal in which the referent is identified as a specific place:

- (33) a. On Monday morning, Nathan drives Penny to **work**.
 (Susan Sheehan, “Kid, Twelve,” *The New Yorker*, Aug. 19, 1996, p. 53)
 = **her work place**
- b. Seventeen-year-old Junko Furuta was riding her bike home from **work** last spring when a gang of teen-age boys kidnapped her.
 (Damon Darlin, “Japanese Fear New Juvenile Violence Is Sign of Spreading ‘American Disease,’” *Wall Street Journal*, Aug. 2, 1989)
 = **her work place**

- c. I brought a portable radio in to **work**.
(Radio talk show transcript)
= **my work place**
- d. He put in a call to Cunningham from his hotel room. The maid answered and he decided Nancy must be at **work**.⁷
(Brown Corpus, L07 0020)
= **her work place**

Property is also generally used as a mass noun, as we see when homeowners speak of “owning a little bit of property.” Realtors, however, conceptualize property as an individuated commodity, and so speak of “showing six properties” in a certain region. As a bare singular nominal, however, the form is used in a way that designates a particular piece of property:

- (34) a. Here’s a package of things to do on **property**.
(Check-in clerk at a resort in Cape Cod, July 28, 1996)
- b. For guests who are staying “on **property**,” the effect is to feel always within an environment controlled and made safe for them. They imagine themselves sealed off from the rest of the state, its crime and encroaching poverty, though technically they are not.
(The Project on Disney, *Inside the Mouse: Work and Play at Disney World*, Durham and London: Duke University Press, 1995, p. 114)

In summary, *daycare*, *work*, and *property* are all putative mass nouns that also have bare singular nominal uses, and occur in PPs where they

7. This sense of *at work* is distinct from the non-locational sense where it is opposed to *at play*.

are used to designate a particular location that is anchored to one of the discourse participants—the meaning of other bare singular nominals used in Familiarity Implicature. What is notable is that, unlike all other bare singular nominals discussed so far (e.g., *school*, *camp*, *home*, *prison*), these are putatively mass nouns.

Lack of formal markers of countability, then, does not indicate that the NP's referent is unindividuated (i.e., that it is a mass use), but only that count/mass is not highlighted as a relevant feature in this use. The same nouns in other NPs may be marked for countability. This is not surprising if we consider the bare forms to be not nouns, but NPs.

As further support for positing a new noun type, Soja (1994:280) presents evidence from language acquisition, suggesting that children are able to distinguish NP-type nouns from both count nouns and mass nouns at around the same time that they are working out the mass/count distinction. However, this distinction could also be accounted for by concluding that what she really has evidence of is that children distinguish NPs from lexical nouns at the same time they distinguish mass and count nouns.

5. Questioning the Mass/Count Dichotomy

While a system such as that laid out in Gil (1987) is useful in describing the differences between English and classifier languages by indicating that English has obligatory marking of nouns as either mass or count, we have seen that a number of situations arise in which nouns are used in English without being formally marked for definiteness or indefiniteness and also without being marked as singular or plural. This means that identifying the nouns as either mass or count is difficult. The set of bare singular nominals, culled from a corpus of naturally occurring data, provides an interesting testing ground for fine tuning a theory of noun categorization, including the issues listed in (35).

- (35) • Is the mass/count distinction only binary?
 • Is its marking obligatory for each noun use?
 • Is one form of dual status words the primary one?
 • Can words be considered underspecified for either mass or count?

Before presenting the way in which I see bare singular nominals as clues to how we should answer the questions in (35), I will first examine four previous approaches, sketched in 5.1-5.4 below, which have argued for a revision of the traditional view of the mass/count distinction, examining each to see how it accounts for bare singular nominal uses.

5.1 A Third Co-hyponym to Count and Mass

Soja (1994) is the first to treat the supposed count forms, which most often appear in PPs, as a separate class of nouns. Soja's findings in analyzing language acquisition data suggest a need to break out of the binary opposition. Her solution is to posit a third type of noun; these nouns at first appear to be count nouns, but in certain constructions do not fit the behavior of either mass or count. Her evidence is consistent with Gil's connection of countability to nominal configurationality, since her third noun category is identified by having the distribution of a full phrasal category, which she calls "NP-type nouns."

Soja starts on the right path by noting that bare singular nominals exhibit marked syntactic behavior, but does not go on to treat bare singular nominal forms as NPs or to fully distinguish the nouns from the NPs that contain them. Finally, her analysis falls short by continuing to maintain that count/mass is a distinction at the noun level.

The NP-like distribution of bare singular nominals is important to note, although clearly other word types are capable of standing alone as NPs: proper nouns (*Mary*), plural count nouns (*cats*), and mass nouns (*water*). What is more unusual is the fact that by not occurring in mass

noun distribution and by lacking determiners, bare singular forms do not show syntactic signs typical of either mass or count forms, definite or indefinite uses. On the other hand, these bare singular forms do show meanings that, like definite and indefinite NPs, can be shown to correspond to particular referring functions. For example, the ability of some bare singular nominals to pick out specific places (as in the case of those used for Familiarity Implicature) means these nominals also have NP-like definite referring abilities. Understanding the referential uses of the bare marked forms of these “nouns,” therefore, is another clue that it is the English NP typology, rather than its noun typology, that is under discussion. However, since not all nouns appear as bare singular nominals, a study of the particular nouns so used—what could truly be called a study of NP-type nouns—is necessary, as I will show in Chapter 3. To do that, however, it is important to distinguish between the nouns and their uses as NPs.

5.2 The Contrast Exists, But Not in the Nouns

Another approach to altering traditional thinking on the mass/count distinction is presented by Muromatsu (1995). She suggests that the mass/count distinction is not inherent in nouns at all, but instead, that countness and massness are characteristics conferred by classifiers and

measure words, respectively, elements which she finds in English as well as Japanese-type languages. Under her system, like Soja's, bare nouns are neither mass nor count. Muromatsu suggests that bare nouns differ from mass and count nouns in that they cannot refer to physical entities but only denote qualities (1995:145). To illustrate this, she cites the examples in (36) (= her (3) and (5)):

- (36) a. She has more sense than Mary, **child** though she is.⁸
 (Jespersen 1933:130)
- b. This is **cotton**, not wool.
 (Jespersen 1933:129)

Muromatsu presents a scheme according to which nouns are labeled as “non-referable” nouns (neither mass nor count), mass nouns (quantifiable and referable), or count nouns (individuates). However, her claim that bare nouns are never used to refer, but only to name qualities, is oversimplified. While it correctly accounts for predicate nominals, like those in (36), as well as for some predicative uses of the bare nouns in

8. The bare use of *child* in (36) is less felicitous when the nominal comes after the verb:

- (i) ? Mary, though she is **child**.

The reading in (i), however, becomes more acceptable when *child* is considered a role, along the lines of the following examples:

- (ii) Mary, though she is president/ambassador
 (iii) Mary, though she is child, is also teacher.

PPs (i.e., those used in Activity Implicature), her system does not account for the specific deictic functioning of the bare singular forms used in Familiarity Implicature. While Muromatsu does note that the bare forms may also occur in PPs (1995:176), she does not adequately address the full range of behavior of the nouns used in this position. In her account, bare forms are simply homogeneously non-referential and hence neither mass nor count. Since I will show, however, that some types of bare singular nominals are used to refer, her approach—of locating the mass/count distinction solely in classifiers and measure words and of prohibiting bare singular nominal forms from being used to refer—must be rejected.

5.3 English and Japanese Types Are Not Clearly Contrasted

Some authors have been led by exceptions in the mass/count system to pursue a way to revise its use. Mufwene (1981, 1984, 1995), for example, suggests that the mass/count distinction in nouns (which he refers to as the classifier vs. singulative distinction) is not so clearly shown in English as to make this a good criterion for language typology:

According to the relevant linguistic literature, English is a “singulative” language, with only a handful of classifiers used typically with mass nouns. I argue that the distinction between numeral-classifying and singulative languages is not as clear-cut as has been suggested. English has many classifiers, some of which are used also with count nouns and are distinct from quantifiers. These classifiers are more transparent than in the classic numeral-classifying languages and may shed light on the status and function of numeral classifiers. (Mufwene 1995, abstract)

Conversely, Cresti (1997:2) argues that “a closer look at Chinese and Japanese reveals that... as far as countability is involved, classifiers are completely vacuous... that Chinese and Japanese have [some] genuine count nouns.”

Both Mufwene and Cresti, approaching the mass/count distinction from different directions, accurately conclude that the traditional division of languages according to whose nouns are syntactically countable is overly simplified. As I will suggest in Section 6 below, this is partly due to considering all non-NP level nominals to be nouns. I propose that the larger point for which Mufwene and Cresti have found evidence is that to discuss mass/count at all requires introducing an N-bar level.

5.4 Mass/Count is Only One Ingredient

Finally, Behrens (1995) presents an extensive review of work on count nouns in order to determine whether mass/count is a distinction at the lexical or syntactic level. Examining the assumptions linguists have made concerning categorization of nouns, she attempts to look at nominals in the same way that recent researchers (e.g., Levin 1993) have approached verb classes: as instances of lexical subregularities showing “recurrent contrasts or alternations which show a correlation between different senses and different syntactic contexts” (Behrens 1995:3). She concludes that various possible interpretations of the same noun form make “the categoriality of the MASS/COUNT distinction doubtful” (Behrens 1995:12). Like Gil, Behrens looks at languages besides English to examine the validity of the mass/count distinction. She concludes that mass/count per se cannot be considered a universal contrast (at either the syntactic or semantic level), but that the “semantic ingredients of [that] category can be expected to be conflated and integrated in different ways in the lexico-grammar of other languages” (Behrens 1995:106). Even in English, as I will argue, some of the elements we think of as mass/count information may emerge in other ways than just through articles and plural markers.

5.5 Conclusion to Section 5

Earlier assumptions that some languages mark all nouns as either mass or count, while others do not make this distinction, have proven to be too hasty since within the putative mass/count languages some nouns seem to show neither feature, while within the putative non-count languages, some but not all, words seem to take count classifiers. Further, the nouns themselves may not bear the feature of countability, and nouns that seem to be count can have their countability vary with other qualities of the noun. These situations lead me to question which element is involved when we use the labels mass and count in English, the topic of the next section.

6. Determining the Level at Which the Mass/Count Distinction Applies

Thus far, I have discussed nouns and how they differ from NPs because, as noted in Gil (1987), in languages such as English, hierarchical nominal levels co-occur with the mass/count distinction in nouns. Now I suggest we further explore the role of nominal configurationality in this issue by exploring the idea that it may not be nouns that show the mass/count distinction, but either NPs or some mid level, N-bar type. It is worth noting that, assuming a three-level version of X-bar theory (e.g.,

Chomsky 1970, 1986), there are three nominal levels that can be the affected unit when mass and count are being assigned. Pelletier and Schubert (1989) note that cases have been made for assigning countability to both word level, making it a syntactic issue, and to the NP level, where count or mass is determined by the noun's occurrence in a real utterance. At the word level (in the syntactic expression approach), lexical nouns are marked as mass or count, but then allowed by lexical extension rules to be used in shifted meanings (Pelletier and Schubert 1989:346). This would be illustrated by the grinder examples in (6) and (7), for instance. In the occurrence approach, on the other hand, the whole NP is considered to be count or mass depending on its use in a given utterance. Although it is not as crucial for the mass forms Pelletier and Schubert are examining, they hint that some mid level between N and NP may be the most appropriate place for mass and count to be determined (Pelletier and Schubert 1989:375). Cresti (1997) presents evidence along these lines, finding unexpected cases where Japanese, a language with apparently nonconfigurational NPs, has subsets of nouns that show countability in certain groupings, thus showing that as far as the mass/count distinction is concerned, Japanese has more relevant sublevels within its NPs than expected if we assume a correlation of countability with NP configurationality.

In this section I will pursue the suggestion of Pelletier and Schubert (1989) by trying to locate the mass/count distinction within units at a higher nominal level than N, while at the same time determining which of these levels best represents the bare singular nominals.

6.1 Descriptions Using Features

Gillon (1992) proposes two binary syntactic features CT (count) and PL (plural) to describe the differences between mass and count phrases in English, suggesting that these are features of nouns that percolate up to the NPs containing them. Pelletier and Schubert (1989) dispute this approach, noting that number alone is sufficient to syntactically select the correct form (since mass forms take singular verbs). So while they exclude PL from the semantic domain, Pelletier and Schubert consider CT to be a purely meaning-related distinction. They present convincing evidence for removing the mass/count distinction from syntax; the question then becomes: at which point can the independent contributions of semantics and pragmatics be seen?

Another approach worth investigating is that the CT feature is privative—that is, that a nominal is either unmarked for CT or is +CT, rather than being marked by a binary CT feature. Although the uses of mass

and count forms are such that a word's interpretation can easily alternate between the two categories, as illustrated in the typeshifting examples in (6)-(7) and (9)-(12) above, there is no danger of adding and then erasing the +CT feature for an individual word sense (a difficulty if the goal is a monotonic system of feature changing), because it is with each new use of a word that countability is determined. I suggest that semantically, all nouns are unmarked and that either syntax creates a unit which is treated as count or mass (typically by an article or morphology in English), or pragmatics marks a use as count or mass (as seen in the typeshifting contexts discussed above). Under this system, we may observe that other languages may not have syntactic marking of count forms, and thus may appear to have only mass forms; likewise, they may rely on a wider range of pragmatic settings than English to influence the mass/count reading. In summary, I am proposing that nouns themselves are unmarked, but either syntax or context can create mass and count nominals of a higher constituent level out of unmarked nouns, based on the noun's use in a given utterance.

6.2 What Level Is a Mass/Count Nominal?

Because individual words can be interpreted in different ways depending on context, as the evidence in Section 3 indicates, I argued above that

nouns themselves should not be considered either mass or count. In other words, to use the labels of “mass” or “count,” a context in which the noun is used must first be established. At the word level, then, nouns are neutral, or underspecified for count. However, some contexts are so much more common in real usage that we take certain uses to be the default ones for certain nouns, e.g., water is more often discussed as a mass substance, cats are most often encountered as countable units, so we talk of *water* being a mass noun and *cat* being a count noun. But contexts do occur in which the opposite interpretation holds. Allan (1980:566) observes that “even though countability is characteristic of NPs, not of nouns, it is nonetheless a fact that nouns do show countability preferences—insofar as some nouns more often occur in countable NPs, others in uncountable NPs, and still others seem to occur freely in both.” Yet as Casey (1997) observes, it is not an ontological distinction we indicate, but a cognitive construal of entities as mass or count forms in a particular instance.

6.3 N-bar Tests

Since it is not a noun on which we encode mass/count, then, under a traditional X-bar theory of NPs, that leaves two levels of nominals available: it is either an N-bar constituent that shows mass/count, or it is

the NP that does so. As a first step I propose that the relevant level is the N-bar. One of the first indications that some more complex level of configurationality must enter the picture comes from the use of *one* substitution, mentioned in Section 2 in the diagnostics for identifying mass and count uses. This test is usually introduced as evidence for the existence of a constituent level between that of the word and the phrase. For example, Baker (1978) at first suggests that *one* replaces a count noun, but later presents an analysis in which a “Nom” node is introduced, a precursor to an N-bar node. He establishes that *one* can substitute for the whole Nom node if the head noun is count. That is, *one* is a pro-constituent that replaces the N-bar (Nom) node rather than just N.⁹ This is illustrated in the contrast between (37) and (38).

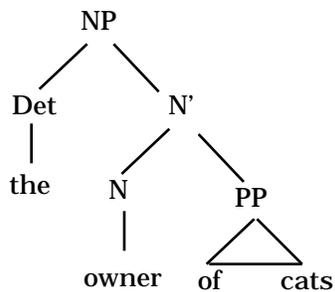
- (37) a. I met the owner of six cats who was allergic to fur. (count noun)
 b. *I met the one of six cats. *one* replaces N only
 c. I met the one who was allergic to fur. *one* replaces N-bar
- (38) a. I saw evidence of six cats in that house. (mass noun)
 b. *I saw one of six cats. *one* replaces N only
 c. *I saw one. *one* replaces N-bar

As shown in the phrase structure tree in (39), while the determiner itself

9. Of course, one-word Ns can be immediately dominated by an N-bar, and N-bars can be immediately dominated by an NP node, so in that sense, one-word constituents are also ultimately NPs, so that replacing the N-bar in such a case would be the same as replacing the N.

is not part of an N-bar constituent, the choice of which determiner to attach in order to make a full noun phrase would rely on information (such as number and countability) at the N-bar level. This indicates that it is an N-bar, and not an N or NP, which is marked as +CT. (37c) is grammatical because *one* replaces a string that both contains a count nominal and is an N-bar. It contrasts with (37b), (38b), and (38c), none of which meets both of these qualifications.

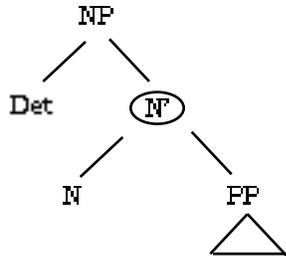
(39)



In short, the claim I put forth in this chapter is that to understanding the relevant level for the mass/count distinction requires that we separate lexical forms from higher level projections. I also claim that the unit involved in mass/count is one that does not yet contain the determiner, a mid-level unit: N-bar under a traditional three-level X-bar system.

N-bar (not N) is the count/mass node under a three-tier nominal system:

(40)



The point of raising these NP-internal configurationality issues is to fine-tune our level of thinking about these nouns. I started by noting that the forms under discussion were unusual constructions for count nouns. I then showed that nominals should only be considered +CT once they are within noun phrases. Hence, this dissertation is not looking at ‘count nouns’ per se, but at larger constituents that contain nouns. For bare singular nominals, then, being designated as +CT could only be relevant if the nominals, too, are N-bars or NP forms rather than nouns. One use of the bare singular form is to show distinctions similar to individuatedness, while not being formally marked for mass/count.

7. Conclusion to Chapter 2

The discussion of the mass/count distinction in this chapter has shown that uses of most common nouns can have both mass and count interpretations depending on context, with the consequence that a noun's \pm CT feature, often taken to be a semantic feature based on qualities of the referent, is actually, in part, determined pragmatically on the basis of the speaker's presentation of the referent in a particular context. Additional evidence of the NP as the relevant constituent is a nominal's ability to serve as a full noun phrase. Most mass and abstract nouns (e.g., *water*, *peace*, and *fabric*) have the distribution of full NPs, as can be seen by their ability to serve as subject or object without the addition of an article, plural morpheme, etc. Lexical count nouns, on the other hand, generally require another element (an article, modifier, or plural morpheme), before they can serve as an NP. Location nouns from certain semantic subsets, however (including institutional words such as *school*, *church*, *camp*) or temporal events such as *break*, *sabbatical*, *breakfast*), can also be used alone as full noun phrases. Thus, these special nouns have both the regular count noun distribution, where they occur within an NP, and a use as a bare singular noun phrase, where they are used to convey certain referential information.

This means that this bare noun phrase construction does not merely represent the result of a typeshifting process for turning count nouns into mass nouns (which would then produce a noun like *camp* having all the semantic characteristics of unindividuatedness ascribed to mass nouns). Rather, the bare construction reflects a categorization of groups of certain referents that are presented in the discourse with certain aspects highlighted. It is not surprising, therefore, that some words which are generally considered to be mass nouns (e.g., *work*, *property*, *daycare*) might also come from the same semantic category (social/geographical spaces) as count nouns that serve as bare NPs. These allegedly mass forms involve the same pragmatic factors when used in the bare form to create implicated meaning. So we see two aspects of pragmatics at play concerning nominal types. One is the type shifting that emphasizes either a mass or count reading for a noun's given use. The other is a conventional implicature created by the use of certain bare forms to convey Activity and Familiarity senses which direct the hearer to a particular type of referent.

Soja (1994) suggests a new category of noun, one that is neither mass nor count. I suggest that bare singular nominals are not co-hyponyms of mass and count nouns, but that they represent a meaning/form pair-

ing that is used to convey other aspects of referents. Previous researchers (Muromatsu 1995, Mufweme 1981, 1984, 1995, Cresti 1997) have suggested that the labeling of a language according to whether it marks count nouns is too distinctly drawn; proposed solutions have tried either to make a third noun category or to show that the mass/count distinction is not universally valid (Behrens 1995). The existence of bare singular noun phrases does not eliminate the role of countability from the grammar; the ability to mark our conceptualizations of a mass/count distinction has a place, but it should not be confused with other referential functions in discourse.

I suggest that one reason these bare singular nominals are often mislabeled as being mass or count nouns is due to their range of referential possibilities. One use—semantically count-like—serves to pick out one particular identifiable referent (e.g., *Will you be on campus tomorrow?*). The other bare singular nominal uses are both non-referential; no particular referent is identified, but only characteristics of the natural kind are indicated (*It's more difficult to keep fit in prison; Tom doesn't go to church*). These uses seem more mass- or set-like. However, these are not semantic issues, but rather, a pragmatic question of referent identification.

To discuss mass/count at all requires introducing multiple levels of phrasal projections. As we will see, languages have ways to mark information at the noun, N-bar and NP level. In English, countability is only relevant at certain levels, while referentiality is relevant at another. The term 'count noun,' then, can be considered to mean the head noun in an NP that it is used in an individuating way in a given utterance, rather than a noun with a particular semantic feature. However, the nouns used in bare singular nominal constructions can be analyzed by other semantic features, as I will show in the next chapter.