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Utrecht University

Weak Definites and Bare Singulars: Their Syntactic Peculiarities

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Jolien Scholten
0419605

Supervisor: Prof. dr. N.F.M. Corver
Second Reader: Dr. J.M. van Koppen

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List of abbreviations

1	first person
acc	accusative
def	definite
dim	diminutive
fem	feminine
indef	indefinite
inf	infinite
masc	masculine
neut	neuter
nom	nominative
pl	plural
poss	possessive
possr	possessor
refl	reflexive
sg	singular

Introduction

General Introduction

In this thesis I study the syntactic properties of weakly referential phrases embedded in locative PPs. Weakly referential phrases are noun phrases that do not seem to refer to unique entities. Two types of weakly referential phrases are the so-called weak definites and bare singulars.¹ Weak definites and bare singulars display surprising syntactic and semantic properties. Singular count nouns are normally accompanied by an article. However, bare singulars, as the name suggests, are allowed to appear without an article (1).

- (1) a. Bob is in *town*.
b. Sofie is at *school*.
c. Thomas is at *sea*.

Weak definites on the other hand, are accompanied by a definite article. Normally, the use of a definite article presupposes the existence of a uniquely identifiable object (Russell 1905, Strawson 1950). However, weak definites, like the ones in (2) do not seem to obey this condition and for that reason they are felicitous in contexts in which more than one object can satisfy their content (3) (Carlson & Sussman 2005, Birner & Ward 1994, Löbner 1985).² In other words, they are weakly referential.³ Their weakly referential nature allows ‘sloppy’ readings in VP-ellipsis constructions (4).⁴

- (2) a. John goes to *the hospital*.
b. William is going to *the store*.

¹ The term *bare singular* refers to the singular form of this construction. Bare singulars do not have plural morphology, as opposed to bare plurals (for example: *Cats are mammals*). I will use the term *bare singular* throughout this thesis. This means that these constructions are singular in form, not necessarily that they are singular in meaning. In Chapter 3 the number features of bare singulars will be discussed more extensively.

² Note that weak definites are actually ambiguous between a referential and a weakly referential reading (Carlson & Sussman 2005:6). In that sense, a weak definite is not another type of definite, but rather a particular use of a definite noun phrase.

³ The weakly referential nature of weak definites and bare singulars is supported by experimental evidence. Scholten & Aguilar Guevara (2010) have shown that it is more difficult to refer to a weak definite or a bare singular with a pronoun than to indefinite and non-weak definite noun phrases. However, these results are tentative, because of a methodological problem that was impeding the results.

⁴ In this thesis I use *-w* to indicate that an NP does not have a weak reading.

c. Jack is going to *the cinema*.

(3) Context: William is living in a big city that has several hospitals. On a certain morning he hurts his ankle and he has to go to a hospital.

Sentence: William is going to *the hospital*.

(4) Lola went to the hospital / _w the houses and Alice did too

(Different hospitals are possible/different houses are not possible)

Weak definites and bare singulars seem to be two related constructions. First of all, the two types of structures show parallel behavior syntactically, semantically and in terms of lexical restrictions, as will be explained in the following section. Moreover, it seems that languages have to make a choice between the two constructions. A certain weakly referential phrase is either a weak definite or a bare noun in a certain language; most nouns cannot occur in a weak definite and a bare construction in a single language. There is variation among languages regarding the presence and absence of articles in the noun phrase types that I investigate; in other words, a noun like *prison* in *Sam is in prison* is a bare noun in English while the Dutch equivalent *de gevangenis* in *Sam zit in de gevangenis* ‘Sam is in prison’ is a weak definite.

Despite the parallels that are found between weak definites and bare singulars, their syntactic configurations are different. The examples above show that in PPs a noun need not always be accompanied by an article and that some instances of articles yield unexpected interpretations. These observations lead to the research questions that are central to this thesis:

Research questions:

- i. What determines the presence/absence of an article in weakly referential phrases?
- ii. Why do definite articles sometimes behave in a non-referential way?
- iii. What intra-linguistic and cross-linguistic variation exists in the realization of weak definites and bare singulars?

I will approach these questions from a syntactic point of view, studying the internal syntax of these constructions. The first part of this study consists of data collection of weak definites and bare singulars in different languages. The goal of this thesis is not to give a complete overview of all the

possible weak definite and bare noun constructions in a large range of languages. Rather, it is an attempt to figure out the possible configurations in this syntactic environment and to find out what the restrictions are. To do this, I study a sample of languages from different regions in Europe that display interesting patterns in this syntactic environment. I focus on weak definites and bare singulars in locative prepositional phrases, as the examples in (1) and (2). In order to get a better understanding of these weakly referential phrases, I will examine several European languages (Germanic and Romance languages). With the help of syntactic tests I investigate the internal syntax of these phrases. I will determine the morpho-syntactic behavior in these phrases with respect to adjectival modifiers, plural marking and diminutives. I will also establish the restrictions on the variation found in these structures among all languages. The investigation of weak definites and bare singulars in different languages will give a systematic overview of the relevant constructions and will allow us to place these constructions under close scrutiny.

The second part of this study is devoted to a syntactic analysis that could shed light on the phenomenon of weakly referential phrases. Kiss (2008) argues that at least bare nouns are productive and compositional, which implies that they should receive a syntactic analysis. In this thesis I approach the empirical domain from a perspective offered by Longobardi (1994). I will apply this approach to the data that I collected and evaluate the results. This discussion will give us more insight in the phenomenon and the syntactic properties that should be accounted for. I will conclude that Longobardi (1994) can account for the different kinds of interpretations that weak definites and bare singulars display. Longobardi is also able to explain why weak definites and bare singulars do not allow pluralization and diminutives. However, it is more difficult to find a straightforward explanation for the absence of adjectives. Moreover, some language-specific issues are difficult to explain in Longobardi's framework. Next to Longobardi's (1994) framework I will briefly introduce two alternative approaches that could shed light on this phenomenon as well. However, due to reasons of space, the alternative approaches cannot be extensively discussed.

To conclude, the goals of this study are the following. Firstly, this study offers a systematic overview of weak definites and bare singulars across languages and their internal syntax. This thesis reports a first attempt to determine the syntactic properties of weak definites and bare singulars on the basis of their interpretation and with the help of syntactic tests. In relation to the first goal, the second goal is to find out whether the presence or absence of an article is systematically determined within and across languages. The third goal is to discover a unified account for these two related structures.

Weak Definites and Bare Singulars

In the previous section it was argued that weak definites and bare singulars display parallel behaviour. The following gives an overview of the characteristics of these phrases. First of all, both weak definites and bare singulars have lexical restrictions. They only occur with a restricted class of nouns (5), (11) and they must be governed by a member from a restricted class of verbs or prepositions (6), (12). They typically do not allow modification, but weak definites allow modification that yields a subclass (7), (13). In (7) the weak definite *hospital* can be modified with *psychiatric*, and still keep the weak reading. This is so, because *psychiatric hospital* refers to a class of hospitals, and not necessarily to a particular hospital. Furthermore, sentences that contain a bare noun or a weak definite display semantic enrichment in many cases, that is, they carry more information than is compositionally derived (8), (14). Finally, they take narrow scope (9), (15) and they do not occur in subject position, except with a generic reading (10), (16) (see Carlson & Sussman 2005 for a more extensive discussion; the following examples are based on Scholten & Aguilar Guevara (2010)).

Weak Definites

- (5) You should go to the store vs. _{NP} the shop
- (6) They took the crash victims to the hospital vs. past _{NP} the hospital (Carlson & Sussman 2005:7)
- (7) Max is in _{NP} the big hospital vs. the psychiatric hospital
- (8) Emma is in the hospital = Emma is in a hospital + she gets medical treatment
- (9) Every boxer was sent to the hospital
≈ ‘for every boxer there is a hospital that this boxer was sent to’
- (10) a. _{NP} The hospital is being painted
b. The hospital saves many people’s lives

Bare Singulars

- (11) The ship is at sea vs. *at ocean (Carlson & Sussman 2005:4)
- (12) He is in prison vs. *next to prison (Carlson & Sussman 2005:5)
- (13) Sam goes to *old school
- (14) Lilly goes to school = Lilly goes to a school + she gets education
- (15) Every student goes to school
≈ ‘for every student there is a school that this student goes to’
- (16) a. *School is being painted

b. School gives students the opportunity to develop

The similar pattern of weak definites and bare singulars suggest that these two structures are related. This relationship and the variation that exists among languages in these constructions form the basis for the topic of this thesis.

Outline of the Thesis

In the following chapter I will first present the class of weak definites and bare singulars that will be studied in this thesis. After that, I will justify the idea that the class of weak definites and bare singulars described above, despite their semi-idiomatic nature, are in need of a syntactic analysis. Subsequently, I justify the methodology used in collecting data and the choice of languages. In Chapter 2 I give a descriptive overview of the collected data. Chapter 3 presents Longobardi's (1994) framework. The chapter is introduced by an overview of the theory. The overview is followed by a discussion in which the approach is applied to the obtained data. Chapter 4 briefly discusses two alternative approaches. Chapter 5 concludes this thesis and puts forward questions and ideas for future research.

1. Methodological Issues

In this chapter I discuss the methodological considerations concerning this research project. I first motivate the choice to examine weak definites and bare singulars in locative PP constructions. Subsequently, I defend the view that bare singulars in locative PPs are in need of a syntactic analysis. Finally, I discuss the issues that were involved in the collection of the data. I justify the choice of languages and informants and I give a description of different stages of the data collection and explain the set-up of the questionnaires.

1.1 Locative PPs

The class of weak definites and bare singulars studied in this paper is a restricted subset of these phrases. First of all, I focus on weak definites and bare singulars that appear in prepositional phrases. The PPs are an interesting class, because the article use in PPs is more restricted and less consistent

than in other grammatical positions (Himmelman 1998:324). Languages that have articles mostly use them in subject and object position, while the article is more often absent in PPs. Stvan (2007) also recognizes the PP as the environment in which articles are most frequently omitted. PPs are thus an interesting environment to study the presence and absence of articles. While Himmelman (1998) approaches the interaction between nouns and PPs from a diachronic, syntactic perspective, I will study this phenomenon from a synchronic point of view.

The second criterion for the class of phrases that I investigate is a locative interpretation. Languages exhibit many different kinds of bare singulars in PPs. Within the class of bare singulars there are different categories. In order to get an orderly data set, I chose a particular class of bare singulars. An orderly set of data helps to get a univocal picture which allows me to approach it from a theoretical perspective. As such, this criterion has a practical approach. Although the final result of this study in the first place only applies to this particular class of bare singulars, it could perhaps be extended to other categories of bare singulars. Even though the criterion of having a locative interpretation is partly based on practical issues, it is also theoretically supported. The bare singulars in locative PPs seem to constitute a syntactically motivated class. Zwarts (2009) defines this class as idiomatic, in which the noun needs to be governed by another element in the phrase.⁵ In this case the governor is the preposition. The locative PPs constitute a class since they do not allow modification at all (Zwarts 2009:48), as opposed to other governed bare nouns that do allow basic modification or even full modification. Another property that distinguishes the locative bare nouns from other governed bare nouns is that locative bare nouns are lexically restricted to a fixed set of nouns, whereas other governed bare nouns are used more productively. More specifically, some other “bare constructions” permit nouns that belong to a semantic class and in some other constructions the nouns that can occur in “governed bare positions” constitute an open class.

Other languages have classes of bare singulars that are distinct from locative PPs as well. In German, for instance, there are a lot of bare singulars that are mostly used in written language, like *auf Anfrage* ‘after being asked’, *auf Aufforderung* ‘on request’, *durch Beobachtung* ‘through observation’ (Keßelmeier et al. 2009:1). However, this class of bare singulars deviates from other bare singulars, since they can be easily modified like other nominal projections: *auf parlamentarische Anfrage* ‘after being asked in parliament’, *bei absolute klarer Zielsetzung* ‘given a clearly present aim’, *unter sanfter*

⁵ Zwarts (2009) understands idiomatic phrases in this case as nouns that do not freely occur in various argument positions, but are rather restricted to occur in combination with one or a small subset of governors. As such, these bare nouns occur in set combinations of governor + complement. Zwarts (2009:49) hypothesizes that these fixed combinations are idiomatic.

Androhung ‘under gentle threat’ (Keßelmeier et al. 2009:1). For this reason I excluded this type of bare singulars from the data set. Another typical bare noun construction in Spanish is also excluded from the empirical domain. In Spanish and Catalan, there is a cluster of bare nouns that is assigned a particular analysis by Espinal and McNally (2010). These bare nouns appear with ‘have’-predicates: verbs of having (*tener / tenir* ‘have’, *poseer / posseir* ‘possess’); verbs that entail a ‘have’ relation (*necesitar / necessitar* ‘need’); or verbs that entail a possessive or locative relation (*obtener / obtenir* ‘obtain’, *recibir / rebre* ‘receive’); and the existential verb *haber / haver-hi* ‘there be’. (1) Shows some examples of this use of bare nouns.

- (1) a. Encontramos taxi
 found.1pl taxi
 ‘We found a taxi.’
- b. Ha obtenido permiso de trabajo
 has obtained permit of work
 ‘(S)he has obtained a work permit.’

This group of bare singulars shares a semantic property, namely the involvement of a possession relation. Espinal & McNally (2010) analyze this relation by including an operator ‘HAVE’ that represents this relation. Since these bare singulars constitute a particular semantic class that is different from the locative bare singulars that are examined in this study, the Spanish and Catalan bare singulars of this type are excluded.

Finally, the relation that I want to examine between weak definites and bare singulars restricts the empirical domain. In order to study the relation between weak definites and bare singulars, only those bare singulars that have a weak definite counterpart in one language or another are included. The class of nouns that is investigated in this thesis consists of complementarily distributed forms between weak definites and bare singulars. The classes that are distinguished in the previous paragraph do not all have a weak definite counterpart, which is another reason to exclude them from the data set. For most of the relevant nouns it holds that a certain language can use such a noun either in a weak definite construction or a bare noun construction, but not in both. I will study those constructions that show variation across languages, so that there is certainty regarding the complementary distribution status of these nouns. In other words, I am investigating forms that across languages either appear as weak definites or bare singulars. It seems that there is a choice

within a language to express the same thing (i.e. a weakly referential phrase) in a different way syntactically.

1.2 Regularity in Semi-idiomatic Expressions

It has been hypothesized for certain bare singulars that they have an idiomatic nature (Zwarts 2009:49). These bare nouns belong to the class of the so-called “Governed bareness”, according to Zwarts. Almost all of the nouns in this class “involve some sort of *governor* (typically a preposition, sometimes a noun, verb, conjunction or more abstract element)” (Zwarts 2009:48). These bare singulars often have a very restricted distribution across various argument positions. As explained in the previous section, these bare nouns, mostly in locative PP-constructions, are investigated in this study. Zwarts hypothesizes that certain combinations of governor and complement can be idiomatic.

Others have described the exceptional use of bare singulars and their restricted productivity. Stvan (2007) shows that locative bare singulars are most frequently used in a prepositional phrase. However, bare singulars do not only show up in PPs. They are also acceptable in subject position, although the occurrence in this position is more limited (Stvan 2007:174). Stvan also illustrates that bare singulars can appear in direct object position. However, their occurrence in this position is also restricted, for instance by the set of verbs that can take objects that lack an article. The fact that bare singulars do not occur freely in different syntactic positions confirms their special status. The fact that they do not occur productively with all kinds of prepositions affirms this conclusion even more. However, bare singulars are not completely banned from different syntactic positions. The following examples (from Stvan 2007:174,175) show that bare singulars do appear in subject position (2) and direct object position (3).

(2) Well, your winter of '35 was a mild winter... **School** never closed and I don't believe we got more than forty inches of snow.

(3) They – whoever they is – think I've left **town** and I want to keep it that way.

This leads Stvan (2007:176) to conclude that bare singulars are more than just idiomatic. Moreover, the locative bare singulars display evident regularity in their structure. In this exceptional class of nouns, all constructions have a similar structure, indicating that this class of nouns should receive a syntactic analysis.

Although bare singulars and weak definites have a touch of idiomaticity, their interpretation is not as independent of their syntactic form as is the case with idioms in the narrowest sense like *kick the bucket* ‘die’, for example. Whereas *kick the bucket* receives a completely different interpretation than can be derived from the independent units, the interpretation of weak definites and bare singulars is always related to the meaning of the noun. For instance, *going to school* means that one is educated, which is an activity typical for schools; *going to the hospital* means that one gets medical care, an activity typically executed in hospitals. Although there is no consensus about the characteristic properties of idioms, it is evident that idioms like *kick the bucket* can receive an interpretation that cannot be directly derived from its lexical elements, that they seem to behave as units and that syntactic operations are sometimes restricted. Everaert et al (1995:4) show that there are more types of fixed expressions that are not idioms in this narrowest sense, but still have an idiomatic-like flavor. Perhaps weak definites and bare singulars might be classified as such. However, Everaert et al. (1995) argue that idioms are idioms not because they do not have any syntactic structure, but because of convention. Whatever the definition of idioms, I will argue that weak definites and bare singulars require a syntactic analysis.

Weak definites and bare singulars are more opaque for syntactic processes than nouns with a “regular” use of articles. Moreover, their distribution is limited. However, the fact that the distribution of weak definites and bare singulars seems to display similarities, also across languages, asks for an explanation. If weak definites and bare singulars are just idioms listed in the lexicon, there is no explanation for this relation. Languages could well be listing different idioms. If we want to account for the complementary distribution of weak definites and bare singulars and the distribution of weak definites and bare singulars in the same lexical classes, we have to come up with a proper syntactic and semantic analysis. Himmelmann (1998:316) states that the irregular use of articles in PPs shows a very regular pattern across languages. In addition, Stvan (2007:173) argues that this bare singular form shows productivity in certain domains. This means that they require a syntactic analysis, as advocated by Kiss (2008) as well. Although I will assume with Kiss (2008) that bare singulars require a syntactic analysis, we have to be cautious. The class of bare nouns that he analyzes is different from the class I am investigating in this study. Whereas the German bare nouns that Kiss investigates seem to be easily modified (as the ones like *auf parlamentarische Anfrage* ‘after being asked in parliament’), the class in the present study is more restricted. In this sense, the bare singulars in this study seem to be a bit more idiomatic-like. On the other hand, the same bare singulars show

regularity in this construction within and across languages. Therefore, it seems clear that the present class of bare singulars should receive a syntactic analysis.

1.3 Data Collection

In this section I justify the choice of languages that I investigated and the selection of the informants that participated in this study. In addition, I describe the different stages of the data collection. Finally, I illustrate the course of the interviews and the design of the questionnaires.

1.3.1 Languages

In this study, I investigate languages that, like English and Dutch, also display variation in their weakly referential NPs: Scandinavian languages (Icelandic and Norwegian), West-Germanic languages (English, Dutch, German and Frisian) and Romance languages (French, (Mexican) Spanish and Italian). The West-Germanic languages are an important source for this project. This sample of languages includes closely related languages that share certain properties in the nominal domain. The sample also includes some languages that have different structural properties. First of all, I included some languages closely related to Dutch, namely English, German and Frisian, because the nominal expressions in these languages display certain similarities to Dutch nominal phrases, so that potential subtle differences will be detected more easily. What these languages have in common is the availability of a free-standing article. This free-standing article is not necessarily morphologically independent. Articles have a clitic-like status, as they cannot appear on their own, but free-standing articles can be separated from the noun it introduces by adjectives. This is impossible with suffixed articles. In the remainder of this thesis I use the term ‘free-standing article’ to refer to an article that can be separated from the noun by an intervening adjective. Another property that Dutch, English, German and Frisian have in common is the relative order of adjectives and nouns in noun phrases. The Scandinavian languages interestingly deviate from the West-Germanic languages in having a suffixed definite article. The position of the article in these languages could give clues for the analysis of the article present in weak definite constructions. Moreover, Norwegian is known for its “double definiteness construction” (Strandskogen & Strandskogen 1986; Delsing 1988), in which a free-standing article precedes the noun and the noun has a suffixed article as well. An independent article is required when the noun is modified by an adjective. The example in (4) illustrates a double definite construction (example from Strandskogen & Strandskogen 1986:46). The noun *bil* ‘car’ has a suffixed

article and the adjective *store* 'big' is preceded by the definite article *den* (Strandskogen & Strandskogen 1986:46). An adjective that is not preceded by an independent article yields an ungrammatical structure, as in (5) (example from Strandskogen & Strandskogen 1986:47).

(4) den store bil-en
 the big car-the
 'the big car'

(5) *store bil-en
 big car-the

Perhaps the double definiteness structure provides information about the status of the suffixed article that can be related to the article in weak definites.

Whereas Germanic languages typically place an adjective in front of a noun, in Romance languages an adjective often follows a noun. This difference in relative order of adjective and noun could also provide information about the internal structure of noun phrases and movement that takes place in these structures.

Another reason to include German in the language sample is that in German prepositions and articles undergo contraction where possible (Curme 1974:58; Waldmüller 2008:2). Especially the contraction of *dem* (neuter and masculine Dative) and *das* (Accusative) with a preceding monosyllabic preposition are very common (Curme 1974:58). The following table shows the possible contractions in Standard and non-Standard German (based on a table in Waldmüller 2008:2, amplified with forms discussed in Curme 1974:58).

	Masc.Sg	Fem.Sg	Neut.Sg
P-DAT	am (an dem), beim (bei dem), im (in dem), vom (von dem), zum (zu dem)	zur (zu der)	
colloquial	hintern (hinter dem), überm (über dem), unterm (unter dem), vorm (vor dem), aufm (auf dem)	(beir (bei der))	
P-ACC			ans (an das), ins (in das), aufs (auf das), fürs (für das), gegens (gegen das)
colloquial	hintern (hinter den), übern (über den), untern (unter den), vorn (vor den)		hinters (hinter das), übers (über das), unters (unter das), vors (vor das)

Figure 1. Contracted forms found in Standard and non-Standard German

The only possible feminine contractions are *zur* for *zu der* and in non-Standard German *beir* for *bei der*. The feminine definite article *die* cannot contract with prepositions. The empirical domain of this study consists of prepositional phrases, because there seems to be a relation between prepositions and the presence or absence of definite articles. The German contraction facts could shed light on this phenomenon and for that reason this language is included in the sample.

The languages chosen for this study represent the European languages to a great extent. A group of languages that is missing in the sample are the Slavic languages. It would have been interesting to include Bulgarian in the sample, since the Bulgarian definite article can appear on different elements of the noun phrase (Scatton 1984:314). I will leave the examination of Bulgarian with respect to this topic to future research. In addition, the Slavic languages that do not have articles are not included either in this study. Since this thesis studies the syntactic properties of weak definites and bare singulars and the relation between these two weakly referential phrases, the discussion of the nominal system in languages without articles lies beyond the scope of this paper. The sample for this study consists of European languages, because they are to a greater or lesser extent related to each other. As the studied languages are related, they share certain properties of nominal expressions, so that potential subtle differences will be detected more easily. This strategy serves to achieve the main goal of this study: namely, to determine the internal syntax of weak definites and bare singulars. Further, this strategy is suitable for answering the other research

questions and could possibly be a starting point for further research in other languages and related constructions.

1.3.2 Informants

For every language, with the exception of Dutch (as I used my own intuitions for this language), one informant was consulted, which resulted in cooperation with eight informants. Every informant is a linguist or a linguist in training, excepting one informant. The first selection criterion is that an informant is a native speaker of the relevant language. As such, all the informants are a native speaker of one of the languages in the sample. Secondly, I preferred to cooperate with linguists, or at least people with some knowledge of linguistics, because of the information I wanted to obtain. The issues that I want to figure out appeal to linguistic knowledge. The most convenient situation was to discuss the relevant topics with people that are known with syntactic notions and concepts.

1.3.3 Phasing of the Data Collection

The collection of the data comprised four different stages. The initial step consisted of the study of reference grammars. Subsequently, three interviews took place, which were followed by written questionnaires that had to be filled out by the informants. The empirical domain was completed by additional questions directly addressed to the informants.

In order to gain insight into the kinds of nouns that appear in weak definite and bare noun constructions, the empirical part of this study began with the study of reference grammars of different languages. The grammars were searched for nouns that can occur without articles and for nouns that occur with a definite article that receive a weak, a more “abstract”, reading. I also looked for nouns with definite articles that in grammars were said to occur without an article in other languages. Since the mention of weak definites and bare nouns in the discussion of article use in reference grammars is often very brief and far from complete, reference grammars did not provide a structural basis for this study. For that reason, the study continued with interviews and questionnaires to extract more constructions in different languages.

The first step was to interview two linguists, who are native speakers of Icelandic and Spanish, and a native speaker of German. I chose this set of languages, since they represent a majority of the set of languages to be investigated (Scandinavian, West-Germanic and Romance

languages). During the interviews I examined weak definite and bare noun constructions (obtained from different sources, among others: Carlson & Sussman 2005, De Swart & Zwarts 2009, Aguilar Guevara 2008, Zwarts 2009) and formulated questions about their syntactic properties. Further, I asked the informants to think about interesting properties related to these constructions, hoping to find interesting topics to investigate. The information obtained from the interviews was used to construe questionnaires for different languages. Every questionnaire started with a translation task in which informants were asked to translate weak definites and bare singulars into their own language. The set of weak definites and bare singulars that are investigated were presented in complete sentences, since it is difficult to judge the grammaticality of such phrases when they are presented in isolation (Dömges et al. 2007:2). Every questionnaire also contained questions about diminutives, adjectives, pluralization, postpositions, interpretation and coordination. As every language investigated in this study has its own properties that might be particularly interesting for our understanding of the syntactic structure of weak definites and bare singulars and the amount and locus of variation that may occur in these constructions, language-specific questions were included as well. Since I applied the questionnaires mostly to linguists, it was possible to include questions about syntactic concepts, such as adjectives, plurals and diminutives. Further, the questionnaire included a task in which the informants had to indicate whether a noun is weakly referential or not. To be able to extract such information, it was good to have informants with some linguistic background.

When the translations and answers provided by the informants gave rise to further questions or clarifications, the same informants were contacted again. In those cases they got some follow-up questions that were intended to get a complete picture of the relevant issues in this empirical domain. This strategy allowed me to ask relevant questions and to complete the picture.

Applying questionnaires allowed us to find relevant data on this phenomenon that could not be easily found in a corpus: namely, “negative data, data that rarely occur in a corpus, minimal pairs” (Borthen 2003:18), a methodology advocated by Borthen (2003) for this kind of research. These types of data are extremely relevant for this study, since they can reveal syntactic properties of weak definites and bare singulars. For instance, questions about adjectives can reveal something about the position of the nouns and elements that these parts of speech trigger (they almost always require an article in a language that has articles).

1.3.4 Questions

In order to find out whether the weakly referential phrases in English and Dutch are also weakly referential in other languages, the questionnaires started with a translation task, in which the informants were requested to translate the weak definites and bare singulars into their own language and gloss the translations. The task description explicitly asked the informants not to give a literal translation of the English sentences. The informants were asked to indicate whether a certain weakly referential phrase is expressed as a weak definite or a bare singular in his language. The informants also indicated whether the relevant phrases are indeed weakly referential. The questionnaire offered a couple of tests to check for this – for instance the VP-ellipsis test, as in (6).

(6) John is going to the hospital, and Mary too.

→ could be different hospitals

If the informants interpreted such a sentence as *John* and *Mary* possibly going to different hospitals, then the relevant noun phrase was labelled ‘weak’. Further, the informants were allowed to use other prepositions than in the English examples if these were more adequate.

The questionnaires continued with, where applicable, some language-specific questions about the nominal system and in particular the position of articles and the possible or obligatory process of contraction.

Subsequently, there were questions about the internal syntax of noun phrases. These topics examined elements that occupy a certain position in the structure of a DP that could tell something about the position of an article or the reason for the absence of the article. These topics included diminutives, plural morphology and adjectives. Adjectives are particularly interesting for this study, because there is an interesting correlation between the use of articles and the presence of an adjective. In Norwegian, nouns normally have a suffixed article. However, when an adjective precedes the noun, the phrase also requires a free-standing article, as can be observed in (4) and (5) above (Strandskogen & Strandskogen 1986). Icelandic has a similar process. Normally, the article is suffixed to the noun, but when an adjective modifies the noun, the phrase may have a free-standing article (Thráinsson 2007; Delsing 1988).⁶ The suffixed article and the independent article are in complementary distribution (Thráinsson 2007). Romanian exhibits a construction in which a noun

⁶ The free-standing article in Icelandic is very formal and is nowadays mostly used in written language and in titles of books.

phrase receives a specific meaning, while there is no definite article present. However, when the noun is modified by an adjective, the definite article is required. A first look at bare singulars and weak definites in Dutch shows a similar pattern. Bare singulars in general do not allow adjectives. Once a noun is accompanied by an adjective, an article is obligatory.⁷ Weak definites do allow adjectives, but they are said to lose their weak reading in most of the cases. To test the validity of the claim, I tested the effect of an adjective when combined with a bare noun or a weak definite in different languages.

Further, the questionnaire contained questions about the possibility of postposition and of coordination of weak definites and bare singulars, since these issues could shed some light on the structure of these weakly referential phrases. The questionnaire also included a question about the possibility of having sloppy readings in constructions like the one in (7), a reading that seems to be typically present in these kinds of phrases.

(7) Everybody is at school

→ everybody is at his own school

An example of the questionnaires that were used in this study can be found in Appendix I.

Now that the empirical domain has been established, I will continue with the results of the empirical research. In the following chapter I give a descriptive overview of the obtained results. In the remainder of this thesis the notion *bare singular* refers to a noun in singular form, embedded in a locative PP, unless indicated otherwise. Another notion that deserves some explanation is that of noun phrases. During the past few decades people used the abbreviation NP to refer to noun phrases. This term is based on the prevailing analysis of nouns in the Principles and Parameters framework, in which the noun is the head of the noun phrase hosting determiners and prenominal genitive phrases in its spec-position (Coene & D'hulst 2003:1). However, since Abney (1987) consensus has been reached to analyze noun phrases as DPs. The lexical category N is dominated by the functional category D. Since the D-projection is nowadays seen as the head of noun phrases, it is possible to refer to noun phrases as DPs. Now the abbreviation NP has become a more technical term, since it seems to refer to the lexical projection within the DP. On the other hand it is still used

⁷ There are a few exceptions to this claim. Van der Beek (2005) shows that some bare nouns require a fixed adjective, for instance: *op *(slinkse) wijze* 'on (sneaky) way' (Van der Beek 2005:109), *naar *(eigen) zeggen* 'according to him/herself', lit. 'after own saying' (Van der Beek 2005:111).

to refer to noun phrases in general. In order to preclude misunderstandings of this sort, I use the following terms in this thesis. When I discuss nominal phrases, either with or without determiners, adjectives and other contingent DP-internal material, I will use the notion *noun phrase*. I use *NP* and *DP* as technical terms, referring to particular projections in a syntactic tree.

2. Descriptive Overview

The results that I obtained from the questionnaires are the empirical basis for this study. For every language the first part of the questionnaire consisted of a translation task and the second part contained questions about adjectives, pluralization, diminutives, postpositions and interpretation. Some questionnaires asked language-specific questions; for instance about double definiteness in Norwegian or P-N contraction in German. After the presentation of the translations I discuss the major findings on the basis of the table. Following this I discuss the syntactic tests that were applied to (some of the) weak definites and bare singulars. The data are discussed per syntactic test.

2.1 Weak Definites and Bare Singulars per Language

Figure 2 shows per language the translations for 21 English nouns that are identified as weakly referential in English or in other languages (among others, Carlson & Sussman 2005, De Swart & Zwarts 2009, Aguilar Guevara 2008, Zwarts 2009). The nouns are listed in arbitrary order. Articles are presented in italics.

	Nouns	English	Dutch	Icelandic⁸	Norwegian	Frisian	German⁹	French¹⁰	Spanish	Italian
1	hospital	<i>the</i> hospital	<i>het</i> ziekenhuis	sjúkrahús <i>id</i>	sykehus	<i>it</i> sikehús	in <i>s</i> Krankenhaus	à <i>l'</i> hôpital	<i>el</i> hospital	<i>all'</i> ospedale
2	store	<i>the</i> store	<i>de</i> winkel	búð (weak?)	<i>butikk</i> en	<i>de</i> winkel	<i>zum</i> Supermarkt	<i>au</i> magasin	<i>a la</i> tienda	<i>al</i> negozio
3	cinema	<i>the</i> cinema	<i>de</i> bioscoop	bíó (weak?)	kino	<i>de</i> film	in <i>s</i> Kino	<i>au</i> cinéma	<i>el</i> cine	<i>al</i> cinema
4	town	town (not weak)	<i>de</i> stad	bæinn/ bænum	<i>by</i> en (not weak)	<i>de</i> stêd	In <i>die</i> Stadt	<i>en</i> ville	<i>el</i> centro (weak?)	città
5	jail	jail	<i>de</i> gevangenis	fangelsi (weak?)/ steininnu/ jailinu	fengsel	<i>de</i> finzenis	in <i>s</i> Gefängnis	<i>en</i> prison	<i>a la</i> carcel	prigione
6	church	church	<i>de</i> kerk	kirkju (weak?)	<i>kirke</i> n	<i>de</i> tsjerke	In <i>die</i> Kirche	à <i>l'</i> église	<i>a la</i> iglesia	chiesa
7	toilet	<i>the</i> toilet	<i>de</i> WC	klósett <i>id</i>	do	<i>it</i> húske	auf <i>s</i> Klo	<i>aux</i> toilettes (plural)	<i>el</i> baño	bagno/ <i>al</i> bagno
8	supermarket	<i>the</i> supermarket	<i>de</i> supermarkt	stórmarkaðinn/ matvöruverslun (grocery-store)	supermarkedet (not weak?)	<i>de</i> supermerk	<i>zum</i> Supermarkt	<i>au</i> supermarché	<i>el</i> super	<i>al</i> supermercato
9	pub	<i>the</i> pub (not weak)	<i>de</i> kroeg	krána	pub	<i>de</i> kroech	in <i>den</i> Club	<i>au</i> pub	<i>a la</i> cantina	<i>al</i> bar
10	home	home	huis	heim/heima (weak?)	hjem	hús/thús	nach Hause	-	<i>a casa/ la</i> casa	casa
11	school	school	school	skólann/ skólanu	skolen/skole	skoalle	zur Schule	à <i>l'</i> école	<i>al/en el</i> colegio/escuela	scuola
12	office	<i>the</i> office (not weak in A. English)/office	kantoor	skrifstofuna/ skrifstofu <i>ni</i>	kontoret	kantoar	in <i>s</i> Büro	<i>au</i> bureau	en <i>la</i> oficina (weak?)	ufficio
13	bed	bed	bed	rúminu/rúmi <i>ð</i>	sengs	bêd	<i>im</i> Bett	<i>au</i> lit	en cama/ <i>la</i> cama	letto
14	street	<i>the</i> street	straat	götunni	gata	<i>'e</i> strjitte	auf <i>der</i> Straße	dans <i>la</i> rue	en <i>las</i> callas (plural)	strada
15	sea	sea	zee	sjó (weak?)/ sjónu	sjøen/sjø	see	auf See	<i>en</i> mer	en <i>el</i> mar (weak?)	mare
16	table	table	tafel	borð <i>id</i>	bords	<i>de</i> tafel	<i>am</i> Tisch	à table	en <i>la</i> mesa	tavola
17	kindergarten	kindergarten	<i>de</i> kleuterschool	leikskólann/ leikskólanu	barnehagen/barne- hage	<i>it</i> pjutteboartersplak	in <i>den</i> Kindergarten	à <i>la</i> maternelle	<i>al/en el</i> kinder	<i>all'</i> asilo
18	prison	prison	<i>de</i> gevangenis	fangelsi (weak?)	fengsel	<i>'e</i> finzenis/ <i>de</i> finzenis	in <i>s</i> Gefängnis	<i>en</i> prison	en/ <i>a</i> prisión	prigione/ <i>dalla</i> prigione
19	studio	studio	<i>de</i> studio	stúdíói (weak?)/ upptökuveri (weak?)	studio	<i>de</i> studio	in <i>dem</i> Studio (not weak)	<i>en</i> studio	en <i>el</i> estudio	studio
20	synagogue	synagogue	<i>de</i> synagoge (weak?)	sýnagógu (weak?)	synagogen	<i>de</i> synagoge	<i>die</i> Synagoge (not weak)	à <i>la</i> synagogue	<i>a la</i> sinagoga	<i>alla</i> sinagoga
21	temple	temple	<i>de</i> tempel (weak?)	hof/ hofi (weak?)	templet (not weak)	<i>de</i> timpel	in <i>den</i> Tempel (not weak)	<i>au</i> temple	<i>al</i> templo	<i>al</i> tempio
	#bare singulars ¹¹	12	7	10	12	5	2	1	3	12

Figure 2. Translations of weak definites and bare singulars in the investigated languages, and the number of bare singulars allowed in every language

⁸ The nouns in Icelandic are presented with the case-marking they received in the sentences that were translated by the informant.

⁹ The nouns in German are accompanied by prepositions in this table, since in weak definites in German, if possible, the preposition and the article are contracted. Free-standing articles do not yield weak readings in these cases. In order to do justice to the weak reading, I included the prepositions in all the German translations.

¹⁰ In French *le* (the.sg) and *les* (the.pl) contract with prepositions *à* 'to' and *de* 'of'. Like in the German examples, I included the prepositions in the table for French. The same holds for Spanish, in which the article *el* (the) contracts with prepositions *a* 'to' and *de* 'of' and Italian, in which articles contract with prepositions *a* 'to' and *di* 'of'.

¹¹ This row shows the number of bare nouns that a language has in this set. In some cases a language allows both a weak definite and a bare noun construction for a single noun. I counted all the possible bare nouns, also the ones that have a weak definite counterpart in the same language.

2.2 Major Findings

I will first discuss the major findings that can be deduced from the data in this table. At first sight, this table does not provide a unified picture with respect to the realization of weakly referential phrases. Although this thesis does not aim at giving a complete overview of weak definites and bare singulars in every language, the data will be discussed in terms of absolute numbers in this section, as to find possible patterns within this set of weakly referential phrases. However, the numbers referred to in this section should not be taken as conclusive facts, as they only apply to a subset of weak definites and bare singulars.

2.2.1 *Number of Bare Singulars per Language*

Let us first have a look at the number of bare singulars that appears in every language. English, Icelandic, Norwegian and Italian have the most bare singulars. Around half of the nouns or a few more are bare singulars in these languages. On the other side of the spectrum are German, French and Spanish that barely allow bare singular constructions like the ones investigated in this study. Dutch and Frisian are in the middle of the scale. There is no clear pattern that can be extracted from these facts on the basis of their geographical location. The North-Germanic languages Norwegian and Icelandic pattern alike, but they also pattern with the West-Germanic language English. Although Frisian is also classified as a West-Germanic language and is considered to be closely related to English, these two languages differ with respect to the number of bare singulars that appear in these languages. The difference is not very great, however. The same holds for the difference between English and Dutch. Within the class of West-Germanic languages, there are differences as well, although they are perhaps not very important. In Dutch and Frisian some bare singulars exist, whereas in German bare singulars are limited to two instantiations. The two Romance languages French and Spanish pattern alike, but the third Romance language in the sample, Italian, rather patterns like the Scandinavian languages than like the other Romance languages with respect to the number of bare singulars. To conclude, the distribution of weak definites and bare singulars does not show a certain comparative linguistic pattern. There are Germanic languages that realize a great deal of the nouns in Figure 2 as bare singulars, whereas other Germanic languages realize more weak definites. Romance languages realize more weak definites, except Italian, that patterns like some of the Germanic languages. On the basis of Figure 2, it does not seem to be the case that Romance

languages behave differently in a systematic way from Germanic languages. Rather, the distribution of weak definites and bare singulars seems to be determined arbitrarily.

2.2.2 *Variation within Languages*

As for the variation within the languages, we observe the following pattern. German, French and Spanish clearly prefer weak definites over bare singulars. The bare singular construction for the weakly referential phrases in this study is hardly used in these languages. For the other languages in the sample there does not seem to be a lucid preference for either weak definites or bare singulars. Both types of constructions are to a greater or lesser extent used in these languages. The choice for a particular construction for a certain noun seems to be reasonably arbitrary, as we will see below.

2.2.3 *Variation across Languages*

Let us now have a look at the particular nouns that occur in weak definite and bare singular constructions. In this section I discuss the data based on the number of particular instances of bare singulars, not the number of weak definites. This strategy does not imply that the focus is on bare singulars only. It is rather a practical guide to obtain a clear summary of the above table. Since the weak definites and bare singulars mostly appear in complementary distribution in this data set, the number of weak definites can be derived from the number of bare singulars. There are at least three nouns that in many languages may be realized as a bare singular: namely, *home*, *bed* and *sea*. *School* and *table* appear as bare singular in half of the languages. The rest of the nouns only occur as bare singulars in a minority of languages. If we look at the particular nouns that can be bare singulars in the languages from the sample, it appears that there are very few systematic patterns. First of all, in German, French and Spanish, the languages that have very few bare singulars, there are almost no analogous bare singulars. Both in German and Spanish the equivalents of *home* are bare, but the other bare singular constructions in these languages concern different nouns. Two languages that have a more or less similar set of bare singulars are Dutch and Frisian. If we take a look at the Germanic languages that allow the most bare singulars (English, Icelandic and Norwegian), we can observe that the distribution of bare singulars seems to be quite arbitrary and unpredictable. In some cases, English patterns with Icelandic and in other cases with Norwegian. In total there are four corresponding nouns that are realized as bare singulars in these three languages. Surprisingly, English

and Italian have a more or less similar distribution of bare singulars (nine instances). Norwegian and Italian share eight bare singulars, whereas Icelandic and Italian share fewer bare singulars. English, Norwegian and Italian are thus three languages that pattern similarly with respect to the distribution of weak definites and bare singulars. At this point, I have no explanation for the picture that emerges from this table and in particular why the distribution of weak definites and bare singulars is similar in these languages, while differing from more closely related languages. Another interesting fact is that bare singulars in languages like Dutch and Frisian (that do not have that many bare singulars) do not constitute a subset of the bare singulars that appear in languages like English, Norwegian, Icelandic and Italian (that have more bare singulars). In Dutch, for instance, *kantoor* ‘office’ and *straat* ‘street’ may be realized as bare singulars, but cannot be bare in (American) English.¹² At this point, the data seem to suggest that languages arbitrarily choose one of the two constructions for a certain noun. There does not seem to be an underlying systematic pattern for these structures on the basis of these data.

2.2.4 *Non-weak Nouns*

Finally, the weak interpretation of some nouns is questionable in some languages: namely, *town*, *pub*, *office*, *synagogue*, *temple*, *supermarket*, *studio* and *sea*. For the nouns *town* and *temple* the questionable weak interpretation was indicated most often by the informants, that is, in three languages. Although some nouns are perhaps not weak in every language, I included those nouns in the counting above, because they still have the same structure as the other nouns in the same language and the corresponding nouns in other languages. Moreover, in Chapter 3 it will be argued that bare singulars can receive a specific interpretation in some cases. Future research is necessary to study the interpretation of weak definites and bare singulars in these languages more thoroughly.

2.2.5 *Notes on Icelandic Bare Singulars*

For Icelandic it is difficult to determine whether bare singulars have a weak reading like the ones in the other languages. Icelandic does not have indefinite articles. As a consequence, bare nouns in Icelandic are commonly used, also with indefinite interpretations. The question is whether the interpretation of bare singulars in our data set resembles the interpretation of Icelandic bare nouns.

¹² In some varieties of British English *office* may appear as a bare singular (Stvan 2007:173).

At least in some cases there seems to be a difference between the bare nouns that are studied in this thesis and the Icelandic ones.

(1) Vilhjálmur er að fara í kirkju
William.NOM is to go.INF in church.ACC
'William is going to church.'

(2) Vilhjálmur er að fara í byggingu
William.NOM is to go.INF in building.ACC
'William is going to a building.'

The sentence in (2) is slightly awkward when expressed out of the blue, as opposed to (1), and becomes better when a quantifier is inserted, as in (3).

(3) Vilhjálmur er að fara í einhverja byggingu
William.NOM is to go.INF in some.ACC building.ACC
'William is going to some building.'

Besides the difference between (1) and (2) in being felicitous expressed out of the blue, there is semantic enrichment in (1), but not in (2). That is, in (1) William not only goes to some building that is a church, but he goes there in order to attend a church service. There is no such semantic enrichment in (2). Even in a sentence with a noun that provides more information about the denoted object, semantic enrichment does not seem to be as directly accessible as is the case with *kirkju* 'church'.

(4) Vilhjálmur er að fara í háhýsi
William.NOM is to go.INF in skyscraper
'William is going to a skyscraper.'

In the remainder of this thesis I will assume that the bare singulars in PPs in Icelandic have a similar interpretation as the bare singulars in the other languages from the sample.

2.3 Diminutives

Only a subset of the languages in Figure 2 has productive diminutive suffixes available: namely, Dutch, Frisian, German, French, Spanish and Italian. Although diminutives in spoken Spanish are commonly used (Batchelor & San José 2010:45), the informant has indicated that it is difficult to test whether they can be attached to bare singulars, since Spanish only has a few bare singulars of the type that this study is investigating. Two conflicting cases make it difficult to make a generalization about the presence of diminutives in Spanish bare singulars. The diminutive *-chen* in German cannot be attached to any noun. It is not used with nouns that end in *-ch* and generally not with nouns that end in *-ng* (Hammer 1971:402). Further, the German informant has indicated that diminutives in German are mostly attached to monosyllabic or at least relatively short words. The French informant has indicated that not all French words allow a diminutive suffix. The nouns in the present study especially do not allow diminutive suffixes, probably for other reasons than their weakly referential nature.

2.3.1 Bare Singulars

For the languages that have diminutive suffixes the overall picture is that bare singulars do not allow diminutives at all and that weak definites do allow diminutives, but that the weak reading disappears once the suffix is added to the noun. The following examples show the unacceptability of having a diminutive in combination with a bare singular.

- (5) *Jan gaat naar school-tje (Dutch)
John goes to school-DIM
'John goes to little school.'
- (6) *Jan giet nei skoaltsje (Frisian)
John goes to school-DIM
- (7) *Gianni è andato a scuol-etta (Italian)
Gianni has gone to school-DIM
- (8) *Die Marinesoldaten sind auf See-chen (German)
the marines are at sea-DIM
'The marines are at little sea.'

- (15) John va al _{-w} hospital-ito (Spanish)
 John goes to-the hospital-DIM
 'John goes to the little hospital.'

As indicated in the examples above weak definites lose their weak reading as soon as a diminutive suffix is attached to them. That the weak definites indeed lose their weak reading can be seen in (11), (12) and (14), where the sloppy reading is lost. In other words, the two participants in each sentence must necessarily go to the same hospital and the same church. Also in this case there seems to be an exception to the rule. The exception comes from German. German has a weak definite that seems to preserve the weak reading when a diminutive suffix is added (16).

- (16) Ich liege im Bett-chen und Marie auch
 I lie in bed-DIM and Mary too
 'I lie in the little bed and Mary does too.'

Whereas in English the VP-ellipsis test can be used to determine the referential properties of nouns, it could be the case that the VP-ellipsis test in German is not a suitable test for weak referentiality. It lies beyond the scope of this thesis to find out whether this is the case or not. On the basis of the observations in this section, and abstracting away from the single exception from German, we may conclude that bare singulars do not permit diminutive suffixes and that weak definites in general lose their weak reading when a diminutive suffix is added to them.

2.4 Adjectives

As already mentioned in the introduction, weak definites and bare singulars are known for the inability to occur with adjectival modifiers. In order to establish this observation, the questionnaires contained a question about adjectives. Again, the picture arises in which bare singulars generally do not allow adjectives, whereas weak definites do allow them, but lose their weak reading as soon as they are modified.

2.4.1 Bare Singulars

Let us first have a look at bare singulars that are modified by a descriptive adjective. In the following languages bare singulars cannot be modified by an adjective.

- (17) *Lucy gaat naar groot kantoor (Dutch)
Lucy goes to big office
'Lucy goes to big office.'
- (18) *Austin goes to old prison (English)
- (19) *Jan gong nei âlde skoalle (Frisian)
John went to old school
'John went to old school.'
- (20) *Ich gehe in großes Haus (German)
I go in big house
'I'm going to a big house.'
- (21) *Il-y-a beaucoup de rapports à grande table (French)
there-are many of community at big table
'There is a lot of community at big table.'
- (22) *Lola está en cama grande (Spanish)
Lola is in bed big
'Lola is in big bed.'
- (23) *Gianni è in prigione grande (Italian)
John is in prison big
'John is in big prison.'

The examples in (17)-(23) illustrate that the majority of languages discussed in this thesis do not allow bare singulars to be modified. Once a noun is modified, an article is required as well. There are two languages that are an exception to this generalization: Norwegian and Icelandic.

2.4.2 Norwegian Bare Singulars and Adjectives

Norwegian bare singulars seem to allow adjectives to some extent. (24) Shows an example of a modified bare singular.

- (24) Emma er i lukket fengsel.
 Emma is in closed prison
 ‘Emma is in closed prison.’

Lukket fengsel ‘closed prison’ is a high security prison where there are sharp restrictions on visitors. *Lukket fengsel* is thus a particular type of prison, a subkind of the institution ‘prison’. The interpretation of this phrase seems to be on a par with the English weak definite example *psychiatric hospital*. In this sense, it could be argued that *lukket fengsel* is a compound. However, the informant has indicated that both *lukket* and *fengsel* receive word-level stress and have separate tonal contour (Norwegian has a tonal contrast on syllables with word-level primary stress). Real compounds, like *kejempéfengsel* ‘huge prison’, receive primary stress on *kejem* and secondary stress on *feng*, and the tone is lost on *fengsel*. As both *lukket* and *fengsel* have their own tonal contour, we can conclude that *lukket fengsel* is not a compound. Moreover, *lukket fengsel* can also be preceded by an adverb (25), indicating that we are dealing with a “real” adjective here that is not part of a compound. Finally, the adjective can also be used as a predicate (26), also indicating that *lukket* is a “real” adjective and thus modifies *fengsel*.

- (25) Emma er i veldig lukket fengsel
 Emma is in very closed prison
- (26) Dette fengsel-et er lukket
 this prison-the is closed

However, in (26) it is difficult to interpret *lukket fengsel* as ‘a high security prison’. The most natural interpretation of this bare singular here is that of a ‘closed down prison’. When the phrase is embedded in a suitable context, it is possible to get the ‘high security’ interpretation, but the most natural interpretation is still the one in which the prison is closed down.

- (27) Fange-ne her får aldri besøk, for dette fengsel-et er
 prisoners-the here get never visit because this prison-the is
 lukket
 closed

Although these examples indicate that in Norwegian it might be possible to modify bare singulars, it is questionable whether bare singulars in general can be modified by an adjective in Norwegian. The sentences in (28) show that descriptive adjectives that modify the bare singular *fengsel* ‘prison’ are not completely unacceptable, but it is at least awkward.

- (28) ?Emma er i stort/gammelt fengsel (Norwegian)
 Emma is in big/old prison
 ‘Emma is in big/old prison.’

The informant points out that the sentences do not sound truly terrible, but that it is difficult to get a sensible interpretation out of them. The phrases seem to refer to types of prisons, but it is difficult to understand what type of prison that is. The sentences do not receive the interpretation that *Emma* is in a particular prison. It seems that in Norwegian there is less difficulty in modifying bare singulars than in the languages described above. This observation is further supported by the sentences in (29) and (30).

- (29) Emma bor i stort hus, så hun har plass til alle
 Emma lives in big house, so she has space to all
 bok-ene sine
 book-the.pl refl.poss
 ‘Emma lives in a big house, so she has the space for all her books.’
- (30) Emma bor i gammelt hus, så hun bruker alle
 Emma lives in old house, so she uses all
 peng-ene sine på vedlikehold
 money-the.pl refl.poss on maintenance
 ‘Emma lives in an old house, so she uses all her money on maintenance.’

However, whereas in (26) and (27) it was difficult to get a “type” interpretation, the noun phrases in (29) and (30) do seem to have a “type” interpretation. In other words, *hus* ‘house’ does not refer to Emma’s house in particular, but rather to types of houses with specific properties. In these cases there thus seems to be a weak reading; in other words, the modified bare singulars seem to yield subclasses. The Norwegian examples show different patterns. Modification of bare singulars is

possible, but in some cases there is no weak reading, whereas in other sentences the weak reading seems to be preserved. The sentences in which the weak reading is preserved (in (24), (29), (30)) are grammatical, whereas sentences that do not refer to a clear subclass sound awkward. These observations suggest that bare singulars may not be freely modified, but that modification is acceptable when the modified form yields a subclass. This empirical domain needs to be more closely investigated in order to make more robust statements.

Like Norwegian, German also seems to allow adjective modification with bare singulars. However, it has to be noted that German has very few bare singulars in the class that is investigated here, so it is difficult to make a generalization for bare singulars in German.

- (31) Die Marinesoldaten sein auf blauer See
 The marines are on blue Sea
 ‘The marines are at blue sea.’

2.4.3 Icelandic Bare Singulars and Adjectives

In Icelandic, in contrast to most other languages in this study, bare singulars can be modified by adjectives (32), (33) and (34).

- (32) Jón fer í gamalt fangelsi
 John.NOM goes to old.NEUT.SG.ACC prison.ACC
 ‘John goes to old prison.’
- (33) Jón fór í litla búð
 John.NOM went to small.NEUT.SG.ACC store.ACC
 ‘John went to a small store.’
- (34) Jón er að fara í gamla kirkju
 John.nom is to go.INF in old.FEM.SG.ACC church.ACC
 ‘John went to an old church.’

These data show that Icelandic freely allows bare singulars to be modified. The apparently exceptional behavior can be explained by the lack of an indefinite article in Icelandic. Icelandic

exhibits definite articles, but not indefinite articles. This means that in fact, bare singulars are very common in Icelandic. Bare nouns are used to express indefinite phrases. It is therefore expected that bare singulars in Icelandic do allow adjectives. The informant indicates that the bare singulars lose their weak reading when they are modified, but they do not necessarily refer to a specific object. In (32), for example, *gamalt fangelsi* ‘old prison’ does not refer to one specific prison. Rather, it has an existential reading and *gamalt fangelsi* can refer to any prison, as long as it is old. However, modified bare singulars in Icelandic cannot refer to objects in the way bare singulars in other languages do; that is, they do not have the typical weak reading (i.e. a “type”-reading, possibly with semantic enrichment), but can have an existential meaning.

To conclude the discussions about Norwegian and Icelandic modified bare singulars, we could say that these two North-Germanic languages differ from the other languages in the sample with respect to the possibility of being modified. Whereas modification is impossible with bare singulars in the other languages, Icelandic and Norwegian do allow modified bare singulars. However, the interpretation of modified bare singulars in these languages is different. In Icelandic, bare singulars lose their weak reading when they are modified, whereas Norwegian modified bare singulars rather seem to constitute subclasses of the noun. In other words, in Norwegian modified bare singulars seem to have a weak reading. Thus, although Icelandic and Norwegian seem to be a set of languages that is distinguished from other languages in this respect, the way in which they deviate from other languages is different.

2.4.4 *Weak Definites*

Weak definites do allow adjectives, but lose their weak reading. This pattern is observed in every language that is investigated in this study.

- (35) Jan gaat naar het grote _{–w} ziekenhuis (Dutch)
 John goes to the big hospital
- (36) John goes to the old _{–w} hospital (English)
- (37) Jón fór á litla _{–w} sjúkrahús-ið (Icelandic)
 John.NOM went on small.NEUT.SG.ACC hospital-the.ACC
 ‘John went to the small hospital.’

- (38) John skal på det gamle _{-w} sykehus-et (Norwegian)
 John shall on the old hospital-the
- (39) Jan gong nei it âlde _{-w} sikehûs en Mary ek (Frisian)
 John went to the old hospital and Mary too
- (40) Er ist in das alte _{-w} Kino gegangen (German)
 He is in the old cinema gone
 ‘He went to the old cinema.’
- (41) Jean va au grand _{-w} hôpital (French)
 John goes to-the big hospital
- (42) Lola está en el _{-w} hospital privado (Spanish)
 Lola is in the hospital private
 ‘Lola is at the private hospital.’
- (43) Gianni va alla _{-w} chiesa grande (Italian)
 John goes to-the church big
 ‘John goes to the big church.’

The sentences in (35)-(43) show that every language allows weak definites to be modified. However, weak definites lose their weak reading when modified, indicated by _{-w}. The modified definite forms refer to specific objects.

2.4.5 *A note on Modified Weak Definites in Norwegian*

Norwegian is known for its “double definiteness” phenomenon (Strandskogen & Strandskogen 1986; Delsing 1988). Normally, Norwegian definite nouns have a suffixed definite article. However, an additional free-standing article is obligatory when a noun is modified by an adjective or a relative clause. Norwegian thus seems to have two structural positions that can establish unique reference, namely a position suffixed to the noun and a position preceding the noun. With the help of Norwegian it might be possible to determine particular properties of “higher” and “lower” articles. Perhaps it is the case that the different positions for articles have different properties. As we have seen in the Norwegian example (38) weak definites are formed with a suffixed article. A free-standing article without an article suffix is not allowed: **den kirke* ‘the church’. It is only possible to have a free-standing article and an indefinite noun when a noun is modified by an adjective or relative

clause, although these constructions are very formal. It also seems possible to have a definite free-standing article, an adjective and a noun without a suffixed article. This works for some abstract nouns or institutions: *den katolske kirke* ‘the catholic church’.

A double definite construction without an adjective or relative clause is possible, but in that case there can no longer be a weak reading. Such a construction receives an interpretation similar to an English demonstrative construction: *den kirken* means ‘that church’ (literally: ‘the church-the’). This means that double definite constructions are never weak. *Han går i kirken* ‘He regularly goes to the church’ has a weak reading, while *Han går i den kirken* ‘He regularly goes to that church (the church-the)’ has a specific interpretation.

In Chapter 3 I will pick up this discussion and relate it to the interpretation of definite articles.

2.5 Plurals

Another syntactic process that is restricted in the case of bare singulars and weak definites, or that changes the interpretation of this kind of phrases, is pluralization.

2.5.1 Bare Singulars

The bare nouns that are investigated in this study are called *bare singulars* because they appear in singular form. As a matter of fact, many of them become ungrammatical when they are pluralized. Some bare singulars can be transformed into a bare plural, but in those cases the enriched meaning of the noun that is typical for bare singulars, is no longer present.

- | | | | | | |
|------|--------------------------|------|-----|---------|-----------|
| (44) | *Samuel | ligt | in | bedden | (Dutch) |
| | Samael | lies | in | bed.PL | |
| | ‘Samuel is in beds.’ | | | | |
| (45) | *Samuel is going to beds | | | | (English) |
| (46) | *Matthew | giet | op | bêden | (Frisian) |
| | Matthew | goes | to | bed. PL | |
| (47) | *Die Marienesoldaten | sind | auf | Seen | (German) |
| | the marines | are | at | see. PL | |

(48) *Il-y-a beaucoup de rapports à tables (French)
 there-are many of community at table. PL
 ‘There is a lot of community at tables.’

(49) *Lola està en camas (Spanish)
 Lola is in beds

These pluralized bare singulars are definitely ungrammatical. One could ask whether some of these sentences are indeed ungrammatical, or if only the interpretation is awkward. For instance, in (47) it is not possible to be at more than one sea at a time. Similarly, it is weird to be on more than one bed at a time. Besides these ungrammatical or infelicitous sentences it seems that there are some bare singulars that could be pluralized, provided that they are embedded in a suitable context: for instance, in Frisian and Dutch.

(50) Sofie sil nei skoallen ta
 Sofie goes to school.PL to
 ‘Sofie goes to schools.’

(51) Hy giet by kantoaren lâns #(as Arbo-kontroleur)
 he goes at office. PL along (as working conditions-controller)
 ‘He visits offices (as controller of industrial safety).’

In (50) and (51) the bare nouns are followed by plural suffixes. These sentences are grammatical, but no longer have a weak reading. This means that the nouns have lost their semantic enrichment. Whereas people normally go to school to learn something and go to the office to work, these sentences imply that the visits at different schools and different offices have nothing to do with the typical activity that is carried out there. Therefore, the sentences are a bit weird without additional context (especially (51)), but with a suitable context the pluralized bare nouns are grammatical. Similar observations can be made for the Dutch sentences in (52) and (53).

(52) Jan gaat naar scholen #(om daar te vertellen over AIDS)
 John goes to schools (to there to tell about AIDS)
 ‘John goes to schools (in order to talk about AIDS).’

- (53) Jan gaat naar kantoren # (om medewerkers voorlichting te geven
 John goes to office (to employees information to give
 over RSI)
 about RSI
 ‘John goes to offices (in order to give employees information about RSI).’

The Dutch sentences would be very awkward without the extra context, but seem to be fine when these contexts are provided.

2.5.2 Icelandic Bare Singulars and Pluralization

Icelandic commonly uses bare nouns. As a consequence, the bare singulars in this study can also be pluralized (54).

- (54) Matthew er farinn í búðir
 Matthew.NOM is gone.MASC.SG in store.PL
 ‘Matthew went to stores.’
- (55) Soffía er farin í kirkjur
 Sofie is gone.FEM.SG in church.PL.ACC
 ‘Sofie went to churches.’

The effect of pluralization on the interpretation of bare nouns is not completely clear. In (55) the noun loses its weak reading due to the plural morphology. Typically, people go to church to attend a church service. However, in (55) the plural *kirkjur* ‘churches’ cannot receive that interpretation. In that case the church is visited for other, non-typical activities. However, this interpretation shift as a result of the pluralization does not necessarily appear in (54). (54) Still has the interpretation that Matthew is going to do some shopping, in different stores. On the other hand, it can also have a non-typical interpretation: for instance, going to stores to promote the separation of different kinds of garbage. To conclude this paragraph, there is no conclusive answer to the question whether bare singulars in Icelandic are subject to a shift in interpretation when they are pluralized. An interpretation shift is possible, but not always present.

2.5.3 Norwegian Bare Singulars and Pluralization

It is hard to judge whether Norwegian bare singulars allow bare singulars to be pluralized. There is an example that seems to show that it is allowable. This example is a phrase that the Norwegian informant added to the list of nouns investigated here (56).

- (56) Ellen jobber in buttik
Ellen works in store
'Ellen works in a store.'

Whereas the bare singulars from the list in figure 2 cannot be pluralized in Norwegian, the bare singular in (56) can receive plural morphology. However, as noted before, it is hard to conclude that bare singulars indeed can get plural morphology. Norwegian only has two forms of this noun in the plural: *butikk* (indefinite) 'stores', and *butikkene* (definite) 'stores'. It is difficult to discover whether *-er* in *butikk* is a plural morpheme only, or a plural indefinite morpheme. If the latter is the case, it might be argued that the noun in (57) is no longer bare.

- (57) Ellen jobber i butikker
Ellen works in store.PL.INDEF
'Ellen works in stores.'

2.5.4 Weak Definites

Weak definites can take plural morphology. However, weak definites cannot preserve their weak reading when they are pluralized.

- (58) Lucie gaat naar _{PL} de ziekenhuizen (Dutch)
Lucy goes to the hospital.PL
'Lucy goes to the hospitals.'

- (59) Lucy is going to _{PL} the hospitals. (English)

- (60) Thomas er på _{PL} sjøene (Norwegian)
Thomas is on sea/lake.PL.DEF
'Thomas is at seas.'

- (61) Lucy giet nei _{-w} de sikehuzen ta (Frisian)
 Lucy goes to the hospital. PL to
- (62) Ich gehe zu¹⁴ _{-w} den Gefängnissen (um die Wärter
 I go to the prison.PL in-order-to the guard.PL
 zu sprechen) (German)
 to speak
 ‘I’m going to the prisons in order to speak with the guards.’
- (63) *William va aux églises (French)
 William goes to-the.PL church.PL
 ‘William goes to the churches.’
- (64) ?Sofie va aux _{-w} écoles (French)
 Sofie goes to-the.PL school.PL
 ‘Sofie goes to schools.’
- (65) John va a _{-w} los hospitals (Spanish)
 John goes to the.PL hospital.PL
 ‘John goes to the hospitals.’
- (66) Gianni va ai _{-w} supermercati (Italian)
 John goes to-the. PL supermarket.PL
 ‘John goes to the supermarkets.’

The interpretation of (60) clearly illustrates that the definite form no longer has a weak reading. (60) Might mean, given the right context, that Thomas works on a boat, travelling on some lakes. The reading is not weak, but the plural noun must refer to a specific set of lakes: The Great Lakes in the US, for instance.

The French sentence in (63) is ungrammatical. It is not possible to use the weak definite *l’église* ‘the church’ in a plural form. (64) Is more acceptable, but also a bit awkward. In any case, (64) does not have the typical interpretation of *école* ‘school’ anymore. The sentence cannot mean that

¹⁴ This non-weak reading of the definite noun triggers another preposition. Normally, the preposition *in* ‘in’ is used in German to express that somebody is incarcerated:

i. Ich gehe ins Gefängnis
 I go in-the prison
 ‘I’m going to prison.’

However, the plural form in (62) does not allow a weak reading. As a consequence, another preposition (*zu* ‘to’) is used instead of *in*.

Sofie goes to schools as a student, but she goes there for a different reason, for instance to compare them.

3. N-to-D Movement and Expletive Articles

3.1 Introduction

The empirical domain that has been described in the previous chapter will be placed under closer scrutiny in this chapter by submitting it to Longobardi's (1994) theory. Longobardi argues that arguments are necessarily DPs. The distribution of empty Ds is severely restricted by three conditions. For that reason particular classes of noun phrases have to resort to N-to-D movement or insertion of an expletive article in order to fill the D-position. Weak definites and bare singulars will be analyzed according to the notions of expletive articles and N-to-D movement.

The following section first gives a more extended overview of Longobardi's (1994) framework. This summary is followed by an analysis of the data in Chapter 2 along the lines of the theory. It will be argued that weak definites and bare singulars can receive three different interpretations. It turns out that Longobardi can at least account for two of the three possible readings. The discussion about the interpretation of weakly referential phrases is followed by possible explanations for the presence or absence of plurals, diminutives and adjectives. The absence of plurals and diminutives in weak definites and bare singulars naturally follows from Longobardi (1994), but he has no satisfactory solution for the absence of adjectives. Further, Longobardi also faces some problems in accounting for double definiteness constructions, but on the other hand the German contraction facts nicely fit in his theory. This chapter will be concluded with a summary and an evaluation of the advantages of Longobardi's theory and the problems that the theory faces.

Where possible, the analyses in this chapter are based on the data from different languages obtained in the questionnaires. However, since some topics were not always covered in the questionnaires or not thoroughly studied, some issues discussed in this chapter heavily rely on Dutch examples.

3.2 Introduction to the theory

Longobardi (1994) develops an analysis of different kinds of noun phrases that appear either with or without an article. His main claim is that “there exist instances of N-movement to D in the syntax of Western Romance” (Longobardi 1994:609). In his article he compares the syntactic and semantic properties of bare nouns and proper names. Both types of noun phrases can appear without articles, although proper names can be accompanied by an article in some varieties of Italian. Another class of nouns that Longobardi investigates are generics. In the syntactic analysis that Longobardi advocates the interpretation of nouns plays a significant role. That is, evidence for a certain syntactic structure partially comes from the way in which a noun is interpreted (i.e. as existential, specific, generic).

3.2.1 *Distribution of Nouns*

The first part of Longobardi’s article is dedicated to the semantic and distributional properties of Ns and Ds. Typically, singular count nouns must be introduced by an overt determiner in argument positions. In other contexts, for instance in PPs, bare nouns may appear. In regular argument position one finds singular mass nouns, bare plurals and some singular count nouns. These bare nouns seem to have some properties in common with indefinite, existentially quantified noun phrases (Longobardi 1994:613). However, Longobardi also observes some differences between bare nouns and indefinite noun phrases. First, number specification is sometimes irrelevant for bare nouns. Second, bare nouns always display narrow scope, unlike existential determiners. Longobardi (1994:614) concludes that bare nouns do not simply instantiate the null version of a partitive article, which is also limited to mass nouns and plurals. Although bare nouns exist in Italian, they can only be expressed under special conditions. Longobardi (1994:616) shows that the distribution of bare nouns is restricted to governed positions. Bare nouns need to be governed by a suitable element and in that sense they parallel other empty categories that need to be governed as well. As a consequence, Romance bare nouns mostly appear in internal argument position. However, they barely appear in preverbal subject position. The fact that bare nouns only appear in governed positions suggests that bare nouns are accompanied by an empty category and Longobardi (1994:617) concludes that it is very conceivable that bare nouns that are in argument position are introduced by an empty determiner. With respect to empty determiners, Longobardi (1994:617,618) assumes the conditions in (1).

- (1) a. Empty determiners are restricted to plural or mass head nouns.
- b. Empty determiners are subject to a lexical government requirement.
- c. Empty determiners receive an indefinite interpretation, unspecified for number and taking narrow scope.

Singular count nouns rarely appear in argument position, but singular mass nouns and bare plurals do. On the basis of these observations, and taking the conditions in (1) into account, Longobardi (1994:620) states the principle in (2).

- (2) A “nominal expression” is an argument only if it is introduced by a category D.

3.2.2 *Proper Names*

In light of this principle, proper names become an interesting class of nouns. Proper names in Italian (and in many other languages) occur freely in argument positions without being introduced by a determiner. Proper names cannot be introduced by an empty D, since they do not obey the conditions in (1), that is, they are not a mass or a plural noun, they may occur in lexically ungoverned positions and they do not receive an indefinite interpretation. If we take the theoretical framework into account as defined by Longobardi, we can only conclude that in (3) a D-position must be present in this case, introducing the subject argument.

- (3) Gianni mi ha telefonato
 Gianni called me up
- (4) Il Gianni mi ha telefonato
 the Gianni called me up

In (4) Longobardi observes that proper names can occur with an article in some varieties of Romance languages. With respect to the position of the proper name in (3) Longobardi hypothesizes that it has moved from N to D. In (4) *Gianni* stays in N. In order to find evidence for these hypotheses, Longobardi studies proper names that are modified by possessives and adjectives. In Italian, adjectives and possessives may occur between D and N, or in postnominal position, but never before D, as shown in (5).

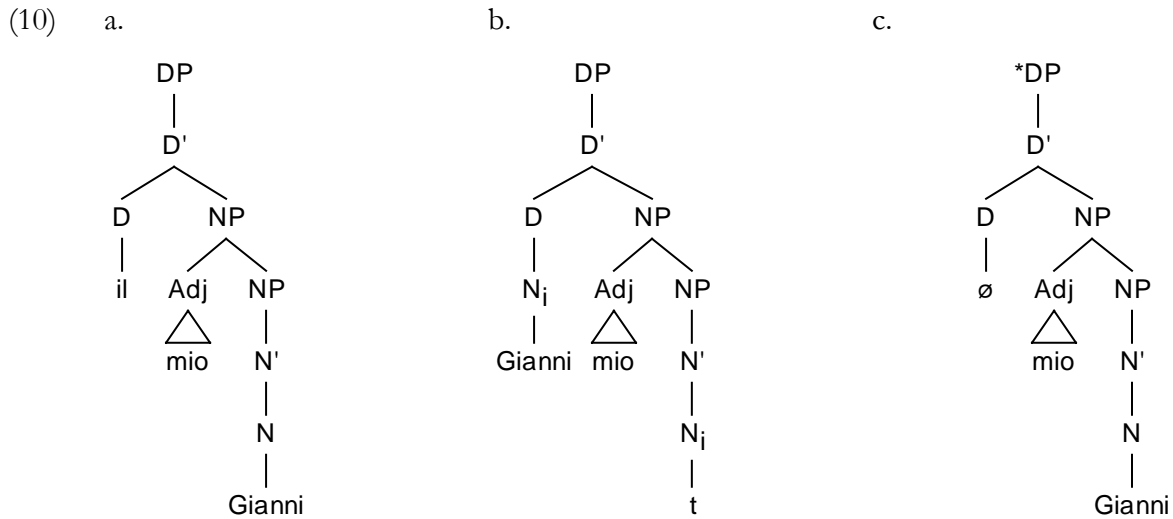
- (5) a. *mio il Gianni
 my the Gianni
 b. *vecchio il tavolo
 old the table

On the basis of the following sentences, Longobardi (1994:623) determines the position of proper names.

- (6) Il mio Gianni ha finalmente telefonato.
 the my Gianni finally called up
- (7) *Mio Gianni ha finalmente telefonato.
 my Gianni finally called up
- (8) Gianni mio ha finalmente telefonato.
 Gianni my finally called up
- (9) Il Gianni mio ha finalmente telefonato.
 the Gianni my finally called up

This paradigm, structurally represented in (10), shows that in cases in which the proper name is introduced by an article, the adjective can precede the proper name (6), but can also follow it (9). When there is no article present, the adjective cannot precede the proper name (7), but must follow it (8). This set of data shows that the lack of a determiner forces an N-initial order. This picture can be easily explained if we assume that the proper name has to move from N to fill the empty D.¹⁵

¹⁵ Note that one could argue that the order in 3(8) is derived by moving the adjective to a postnominal position. However, there is semantic evidence that argues against this claim. Postnominal adjectives in Italian have a strong contrastive meaning. That is the case in 3(9), in which the adjective appears after *Gianni*, who is in its original position (since the determiner is present here). However, in 3(8) there is not necessarily a contrastive interpretation for *mio* 'my', indicating that the adjective does not appear after N, but that the proper name has moved to D, retrieving the order noun-adjective. This is a piece of semantic evidence in favor of the hypothesis that N moves to D in Italian (Longobardi 1994:623).



The following examples with non-possessive adjectives show the same pattern as above for proper names, in this case a family name (examples taken from Longobardi 1994:624).

- (11) E' venuto il vecchio Camerese.
 came the older Camerese
- (12) *E' venuto vecchio Camerese.
 came older Camerese
- (13) E' venuto Camerese vecchio.
 came Camerese older
- (14) E' venuto il Camerese vecchio.
 came the Camerese older

Longobardi (1994:626) concludes that for article-less proper names it is obligatory to move to D, because they need to be introduced by a D-projection and the D-position cannot be left empty if we do not want to derive an existential interpretation. However, proper names are not mass nouns or plurals and they can appear in ungoverned positions, also indicating that they cannot stay in N. The N-initial order observed in these paradigms is absent with non-argument nominals. Adjectives that modify nouns in non-argument positions can precede and follow nouns that are not introduced by a determiner, establishing the proposal that non-arguments are NPs and that arguments must be DPs that are subject to the conditions in (1).

3.2.3 Parametric Variation

The conclusions drawn by Longobardi cannot be immediately extended to other languages. In English, for instance, proper names can never occur before an adjective (16). Longobardi assumes that Italian and English bare nouns and proper names should be analyzed in a similar way. As a consequence, English bare nouns and proper names in argument positions are considered to be DPs, as is concluded for Italian. Since English empty determiners seem to be allowed, as (15) suggests, we have to assume that the licensing conditions for English empty determiners are more relaxed.

(15) Old John came in

(16) *John old came in

In order to explain the apparent differences between Italian and English Longobardi (1994:640) proposes a parameter distinguishing these languages with respect to the presence and absence of determiners and the position of nouns. The parameter is as follows:

(17) N raises to D (by substitution) in the Syntax in Italian but not in English.

In combination with the two following universal principles, the parameter in (17) distinguishes Italian from English with respect to movement in the nominal domain.

(18) [_D e] = default existential interpretation

(19) An empty head must be lexically governed.

Longobardi assumes that the principles in (18) and (19) are checked at S-Structure in Italian and at the level of LF in English. This means that proper names in Italian already have to move to D if this head is empty, in order to check the principles in (18) and (19). In English nouns also move to D if this position is empty, but in English this process is postponed until LF. As a consequence, both semantic principles are checked, but the movement is invisible. The assumption that the application of the two principles already takes place at S-Structure in Italian and can be delayed until LF in English can be considered as a consequence of the parameter in (17).

On the basis of the possibility of LF movement we expect that other types of nouns may move to D at LF in addition to the visible syntactic movement in Italian. For instance, we may assume that in

English bare plurals and mass nouns can move to D at LF, and thus may occur in non-lexically governed positions and are not necessarily confined to the existential interpretation (since D is then not empty anymore). In this way nouns can get their generic reading, as in (20), examples taken from Longobardi (1994:642).

- (20) a. Big beavers build dams.
b. Fresh water is often drinkable.

In these examples the nouns move to D in order to escape an existential interpretation and a government violation. Although the nouns move to D at LF, they can still be interpreted in N, which results in a generic interpretation (since nouns in N denote types). Since movement of common nouns at S-Structure is not allowed in Italian, this language cannot resort to this solution. In order to obtain a generic interpretation, an expletive article has to be inserted in D (to prevent an existential reading and a government violation).

3.2.4 *Expletive Articles*

The parameter and principles stated above correctly describe the facts outlined in Longobardi's article. The final important topic discussed in Longobardi (1994) is that of expletive articles, which are just introduced above. Expletive articles do not have a referential function. Expletive articles are elements whose sole function is to lexicalize the D-position; that is, they do not contribute semantics to the nominal expression. The definite article that introduces proper names in some varieties of Italian is an expletive article. In English singular non-mass generics (as in *The lion has four legs*) and generic substantivized adjectives (as in *The rich are becoming even richer*) are introduced by an expletive determiner.

3.2.5 *Summary*

To summarize, Longobardi has shown that empty determiners are subject to three conditions: namely, that they are restricted to plural or mass nouns, that they need to be lexically governed and that they receive an existential interpretation by default. The consequences of these conditions are that bare singular count nouns, non-mass generics and proper names cannot be introduced by an

empty determiner. In order to solve this discrepancy, languages have the choice to either move N to D or to insert an expletive article, so that the D-position is no longer empty. N-to-D movement takes place at S-Structure in Italian and at LF in English. One of Longobardi's underlying assumptions is that definite articles are inherently referential. In a 'normal' case, a definite article refers to a specific entity. Longobardi has to acknowledge that there are instances of definite articles that do not refer to unique entities. Longobardi provides a solution for this discrepancy in terms of expletive determiners.

3.3 Weak Definites and Bare Singulars along the Lines of Longobardi

Bare singulars and weak definites display an interesting parallel to the proper names discussed in Longobardi. Proper names can appear in bare form (i.e. without a preceding article), and in some varieties of Italian (and German, Dutch) they may also be introduced by a definite article. If we take a look at the data described in Chapter 2 we can make a similar observation. In the class of nouns that is investigated here, there are two options to express a weakly referential noun phrase. On the one hand there are bare singulars that appear without any determiner. On the other hand there are weak definites that are introduced by a definite article. These two constructions seem to be related, as the similarities described in the Introduction show. Moreover, it seems that languages either use a weak definite construction or a bare singular construction to express a weakly referential phrase. The fact that corresponding nouns appear either as a weak definite or as a bare singular, confirms the hypothesis that weak definites and bare singulars in PPs are related structures. It is possible to analyze these weakly referential structures along the lines of Longobardi's proposal. In terms of Longobardi's analysis the relationship between weak definites and bare singulars can be elaborated in terms of N-to-D movement and expletive articles. In this chapter I apply Longobardi's (1994) proposal to the data discussed in this thesis. More specifically, I try to find evidence for weak definites to be introduced by an expletive article and bare singulars to move from N to D. I will further consider the syntactic restrictions (i.e. the absence of pluralization, diminutives and adjectives) and explore possible explanations for these restrictions in Longobardi's approach to noun phrases.

In the following subsection I demonstrate that there are differences in interpretation in contracted and non-contracted forms in German, both in proper names and weak definites, suggesting that it might be fruitful to treat them on par with each other. Subsequently, I discuss the status of

complements of prepositions; that is, I discuss whether they should be analyzed as arguments or predicates. After that, I discuss these two options with respect to weak definites and bare singulars. The subsequent sections discuss the possible explanations for the mostly non-occurrence of plurals, diminutives and adjectives in weak definites and bare singulars.

3.3.1 *Interpretation shifts between Contracted and Non-Contracted forms in German*

To show that the parallelism between proper names and weak definites and bare singulars does not come out of the blue, I consider German data in this section that suggest that there are, next to the syntactic analogy, semantic similarities between proper names and weak definites. In this section I show how in German the parallel between weak definites and bare singulars on the one hand and proper names with or without articles on the other can be further explored. In German there is a contrast in interpretation between contracted and non-contracted forms of the preposition and the article. With respect to the interpretation of noun phrases, contracted forms (where contraction is possible¹⁶) are always weakly referential, whereas non-contracted forms yield a referential interpretation. In (21) the preposition *in* ‘to’ and the neuter article *das* ‘the’ have undergone contraction, of which *ins* is the result. In this case, the noun phrase has a weakly referential interpretation. The fact that (21) can be expressed without context and the fact that VP-ellipsis in this sentence allows a sloppy reading indicate that *Kino* ‘cinema’ is weakly referential in this case. In (22) *das Kino* ‘the cinema’ refers to a specific cinema. It cannot be expressed without context. The object that *das Kino* refers to should be clear from the preceding context or from the hearer’s knowledge. The VP-ellipsis test has shown that no sloppy reading is allowed in this case.

(21) Ich gehe ins Kino
 I go to-the cinema
 ‘I’m going to the cinema.’

(22) Ich gehe in das Kino
 I go to the cinema
 ‘I’m going to the cinema.’

¹⁶ Not all prepositions and articles can contract in German. Especially, feminine definite articles do not contract, except the Dative variant *der* ‘the’ (Curme 1974:58). See Figure 1 for an overview of possible contractions in German.

In the informant's variant of German articles are allowed to introduce proper names. (23) Shows some examples of German sentences with proper names preceded by an article. These articles are allowed to contract with prepositions, as the articles of other nouns do. There is also a difference in interpretation when a preposition and an article contract in front of a proper name, as can be seen in (25).

- (23) a. Ich bin *die* Carina
 I am the Carina
 'I am Carina.'
- b. Ich habe *die* Carina gesehen
 I have the Carina seen
 'I have seen Carina.'
- c. Ich habe mit *dem* Karl gesprochen
 I have with the Karl spoken
 'I have talked to Karl.'

- (24) Ich bin bei dem Paul
 I am at the Paul
 'I am with Paul'
 → this person is known for the hearer, but he does not know him very well

- (25) Ich bin beim Paul
 I am at-the Paul
 'I am with Paul'
 → the hearer precisely knows who this person is

The sentence in (25) is the most natural one when compared to the one in (24). In the situation sketched in (25), in which the preposition *bei* 'at' and the article *dem* 'the' are contracted, the hearer knows precisely who the speaker is talking about. In (24) the preposition and the article are not contracted. In this case the person being talked about is known to the listener, but the listener does not know him very well. It is a bit unusual to use this form.

This contrast in interpretation resembles the contrast between the weak definite in (21) and the non-weak definite in (22). In the case of the contracted forms, the object or person referred to can be

introduced without any preceding context. In (25) the hearer knows, probably from world knowledge, who is being referred to. In (21) it seems that *Kino* ‘cinema’ rather refers to the activity that is typically carried out in cinemas than to the physical building itself. Because of this interpretation, I assume that it is possible to express this sentence without any preceding context. The non-contracted forms in (22) and (24) are not suitable for being expressed out of context. In (22) there is reference to a particular building, though it has not been introduced thus far. Therefore, this sentence is infelicitous. More or less the same holds for (24). The person referred to is not known very well by the listener, so that it is inappropriate to express the sentence in (24) without preceding context.

These parallels in interpretation between proper names and weak definites and contracted and non-contracted forms show that contraction has a similar effect on the interpretation of proper names and weak definites. These facts indicate that the definite article present with proper names and weak definites can be treated on a par syntactically.

3.3.2 *The Status of Complements of P*

So far, we have seen that there is a relationship between weak definites and bare singulars. They share certain semantic and syntactic properties. Further, we observed a parallelism between the use of articles in proper names and weakly referential phrases discussed in this thesis. Both categories of nouns can appear in the presence or absence of an article.

The initial step in the elaboration of Longobardi’s approach is to consider the visible syntactic structure of weak definites and bare singulars, to start with weak definites. The fact that weak definites have a definite article, suggests that this category has a D-projection to host the article. For bare singulars this is less obvious, since there is no visible article. However, in Longobardi’s analysis there is another way to determine the presence of a D-projection. According to Longobardi (1994:628) only DPs can be arguments. Following this line of reasoning, we may conclude that in Longobardi’s analysis arguments are necessarily DPs, whereas non-arguments may be DPs, but need not be. In order to find out whether bare singular nouns in locative PPs are DPs or not, we need to know if they are considered to be arguments. If the assumption is that in bare singulars the noun is an argument of the preposition, it may be concluded that the noun is dominated by a D-projection.

3.3.2.1 Complements of P as Predicates

However, it is not completely clear that nouns in a P-projection are arguments of P. There are different approaches to the role of the noun phrase in PPs. De Swart & Zwarts (2009:289) argue that “bare singular nouns typically do not occur in regular argument positions of verbs, but only as predicates, in the company of ‘minor’ words like prepositions and conjunctions, or in an incorporated position.” De Swart and Zwarts discuss different types of bare singular nouns: namely, bare locative constructions (like the ones that are investigated in this thesis), bare coordinate structures (e.g. *the way to use knife and fork*), bare predication (e.g. *Mary is chair of the department*), bare reduplication (e.g. *He found door after door closed*) and bare incorporation (e.g. *She is playing piano for the choir*). Of all these constructions De Swart & Zwarts (2009) would like to argue that they do not occur in regular argument positions. An indication that they are not in argument positions, is the fact that bare singulars often do not have the referentiality as their full counterparts, as shown in (26) and (27), examples taken from De Swart & Zwarts (2009:289).

(26) Pat is in prison. ?It is a 3-story concrete building.

(27) Ik weet dat Peter viool_i speelt. #Kan hij 'm_i meenemen?
I know that Peter violin_i plays. #Can he it_i take along
'I know that Peter plays the violin. Can he take it along?'

De Swart and Zwarts (2009:289) explain that in dynamic semantics regular argument positions require nominals that introduce a discourse referent. As incorporated bare singulars do not introduce a discourse referent, as shown in (27) above, they only show up in special constructions in which the introduction of a discourse referent is not required, as explained by Farkas & De Swart (2003). In other words, incorporated nominals do not appear in regular argument positions, because they are not discourse-introducing referents. De Swart and Zwarts (2009:289) argue that this analysis can be extended to other bare singular constructions as well. Because the bare singulars discussed by De Swart and Zwarts are not in a regular argument position, they are not necessarily associated with a discourse referent. As regards the relevant construction for this thesis (i.e. the bare singulars that appear in PPs), De Swart and Zwarts (2009:289) would like to argue that the noun phrase complement of a preposition is not necessarily its argument. They support their proposal by pointing at the function of prepositions in a syntactic structure. Prepositions are functional categories that must be accompanied by a complement. This means that they entertain another relationship with

their noun phrase complements than theta-assigning heads. The relationship between a PP and its complement can be compared to the relationship between for instance TP and VP. TP does not assign a theta-role to the VP, but is rather an extension of the lexical category. Although De Swart and Zwarts (2009:290) remark that the status of prepositions as predicates is unclear, they believe that bare nominals, including the ones in PPs, do not occur in regular argument positions. In terms of Longobardi's (1994) analysis of noun phrases bare singulars in PPs could be analyzed as NPs, since they are not arguments in De Swart and Zwart's opinion. However, they are not excluded from being DPs. Arguments must be DPs according to Longobardi, but the implication does not hold the other way around.

3.3.2.2 *Complements of P as Arguments*

However, as already indicated by De Swart and Zwarts (2009), it is not clear whether prepositions should be analyzed as argument-taking predicates or not. Baker (2003) extensively discusses the status of PPs. Focusing on incorporation facts, he argues that prepositions are functional categories.¹⁷ Baker further argues that prepositions (or, more generally, adpositions) do not have a referential index. In other words, prepositions cannot refer. He also states that prepositions cannot theta-mark a specifier. In this sense prepositions do not seem to be argument-taking predicates. However, PPs still have a noun phrase complement that has to be accounted for. Baker (2003:312) states that P must have a theta-role to assign. He argues that prepositions select noun phrases, which they theta-mark (Baker 2003:324). In light of Longobardi's analysis this remark leads to the conclusion that noun phrase complements of prepositions are DPs.

De Swart & Zwarts (2009) and Baker (2003) disagree on this point. Both seem to make a good argument. Baker has studied the behavior of PPs thoroughly in many languages, which has led him to assume that noun phrase complements in PPs are arguments. However, the comparison that De Swart and Zwarts make between other functional categories and their complements (based on

¹⁷ Baker (2003:306) states a generalization that determines possible head movements, and that holds true over many constructions in a wide range of languages:

The Proper Head Movement Generalization (PHMG):

It is impossible to move from a functional category into a lexical category.

Cross-linguistic data show that in a structure with three heads, a P in the middle with a noun phrase complement and a V dominating it, the noun phrase can incorporate into the preposition, but the complex formed by the noun and the preposition cannot incorporate into the verb. This movement is ruled out by the PHMG, if we assume that the preposition is a functional head. If we turn things around, it can be observed that functional categories can incorporate into a preposition. These two patterns convincingly show that prepositions must be a functional category.

Grimshaw 2005) also plays an important role in determining the status of prepositions. Since TPs are not assigning a theta-role to VPs, it is very conceivable that prepositions, being a functional category, do not theta-mark their complements. As both analyses make a good case regarding the status of PPs, I will elaborate on both analyses in the remainder of this section. It will turn out that weak definites and bare singulars can receive different interpretations. For two of the three available interpretations, it will be argued that the weak definites and bare singulars are arguments of the preposition. However, from Longobardi's (1994) perspective this conclusion cannot hold for the third possible interpretation. On this reading the weak definites and bare singulars will be analyzed as predicates.

3.3.3 Interpretation

If we adopt Baker's (2003) analysis of prepositions as a theta-marking category, the weak definites and bare singulars examined in this thesis are arguments and thus have a similar syntactic structure. However, the following sections will show that in some cases the weak definites and bare singulars must be analyzed as predicates of the preposition, as advocated by De Swart & Zwarts (2009). Let us first consider the case in which both weak definites and bare singulars are analyzed as DPs. If these phrases are analyzed as DPs, the question arises where the different elements in these phrases are situated. For example, is it the case that in the Dutch and English examples in (28) *kerk* and *church* are in the same position, or are *church* and *de* rather located in the same position?

- (28) a. Lucy gaat naar de kerk.
 Lucy goes to the church
 'Lucy goes to the church.'
- b. Lucy goes to church.

For weak definites the structure is clear. They have a definite article that must be hosted in D according to Longobardi (1994). For bare singulars the structural properties are less straightforward. The noun could be in N, but it could also move to D. In the following section I will follow Stvan (2007) in showing that bare singulars may receive three different interpretations. The first two interpretations that are discussed for bare singulars require the noun phrase to be a DP, while on the third interpretation the bare singular is argued to be analyzed as an NP. The same holds for weak

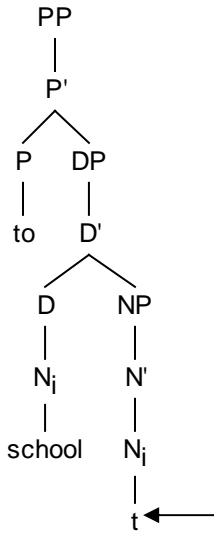
definites, which will be discussed afterwards. The different interpretations assigned to bare singulars by Stvan (2007) are based on English bare singulars. Since bare singulars and weak definites are argued to be two related structures, I will argue that these readings are available for weak definites as well. Because the weak definites and bare singulars in this thesis seem to behave similarly across languages, I will assume that the three separate meanings are available in the other languages from the sample as well.

3.3.3.1 Bare Singulars

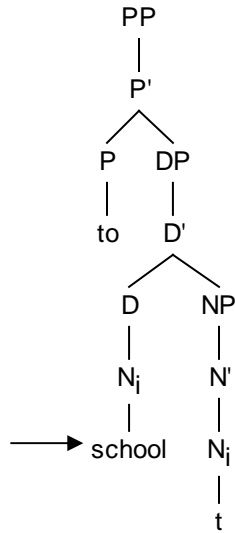
I will first discuss the structural properties of bare singulars. We could argue that the noun in bare singulars moves from N to D to fill the D-position. However, there is no clear-cut evidence showing that this process indeed takes place. It is difficult to find evidence for N-to-D movement in bare singulars. Since bare singulars do not tolerate adjectives, there is no visible material that can be inserted between the D-position and the head N. Since this option is not available, it is difficult to determine the location of the noun in bare singulars on syntactic grounds.

The visible syntactic structure is not the only object that can be investigated in order to determine syntactic positions. As we have seen in the discussion of Longobardi's approach, the interpretation of nouns plays an important role in determining locations of different components in a syntactic structure. Nouns with empty determiners that stay in N for instance, get an existential interpretation by default. If a noun does not have an existential interpretation, we may assume that there has to be an element that fills the D-position. In order to determine the exact location of the noun in bare singulars, we have to resort to their interpretation, since there are no syntactic tests that can be applied, due to the nature of bare singulars. Although the semantics might provide a solution for determination of the syntactic position of nouns in bare singular constructions, this strategy cannot be straightforwardly applied either. Carlson & Sussman (2005:5) note that, from a semantic point of view, it is difficult to determine if bare singulars are definite or indefinite, because their distributional properties preclude application of the standard tests. Let us first have a look at the options offered by Longobardi (1994). In Longobardi's analysis, there are three possible interpretations of a bare noun. It can get a generic, a specific or an existential interpretation. The three corresponding structures are in (29).

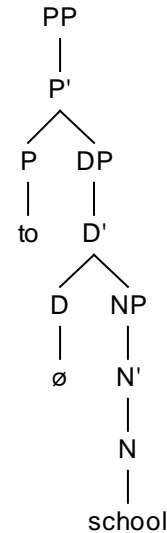
(29) a. Generic



b. Specific



c. Existential



Generic, specific and existential readings are precisely those interpretations that Stvan (2007) argues to be available for bare singulars in English. Let us have a look at those interpretations separately below.

Generic interpretation

The first possibility for analyzing the syntactic structure of bare singulars is represented in (29). In this structure the noun has moved from N to D, leaving a trace in N and forming a chain between D and N. The structure in (29) represents a generic reading of the noun. Rather than referring to a particular object, generics make generalizing statements about kinds. Stvan (2007:181) argues that bare singulars may indeed receive generic interpretations that express a claim about the kind of place named by the noun. Stvan (2007:180,181) states that “the genericity of this reading can be verified by replacing each singular with a bare plural form, another typical construction that has a generic referring use.” Stvan uses this test to establish the generic reading of the bare singular. The example in (30) illustrates a bare singular receiving a generic interpretation (example taken from Stvan (2007:181)).

- (30) An amendment to the Senate’s anti-drug bill would have barred alcohol companies from sponsoring any sort of event at all **on campus**.
= **on campuses**

As *on campus* can be replaced with *on campuses*, Stvan concludes that *on campus* has a generic reading. The proposal that bare singulars may receive a generic interpretation is supported by the fact that they can appear in singular and plural form, pointing at number neutrality (Stvan 2007:181). Number neutrality has been shown to be a characteristic property of other generic forms. A generic interpretation seems to be generously available for bare singulars. The bare singular *campus* in (30) can be replaced by examples from the table in Chapter 2; for instance, by *school, prison, jail, town*. Other bare singulars can occur in generalizing statements in other contexts. Stvan (2007:182) argues that all the bare singulars that she examined can receive a generic interpretation when embedded in a suitable context.

The generic reading is thus an interpretation to be accounted for. Longobardi (1994:647) argues that a generic reading of a noun, being an expression of a kind, can be obtained by interpreting the noun in N, since a head noun that is in N at S-Structure refers to a natural kind. Longobardi (1994:642) has also argued that English generics move to D at LF. This movement is necessary in order to prevent a proper government violation and to escape an existential interpretation. In English generics without a determiner may appear in subject position as shown in (20), repeated here as (31).

- (31) a. Big beavers build dams.
b. Fresh water is often drinkable.

Empty determiners may not appear in subject position, because they cannot be properly governed there (principle (19)). This principle is checked at LF in English. In order to satisfy this principle, the noun moves to D at LF, so that D is not empty and the phrase may occur in an ungoverned position. Movement of N to D constitutes a chain. The foot of this chain is interpreted, rather than the head, so that the noun is understood generically. This analysis can be applied to bare singulars too. Suppose that the noun moves to D at LF in order to avoid an existential interpretation and a violation of principle (19) (an empty head must be lexically governed). The foot of the chain is interpreted, indicated by the arrow, while the head of the chain is left uninterpreted, so that the noun receives a generic interpretation. The structure in (29) shows that it is possible to derive a generic interpretation for bare singulars in Longobardi's (1994) theory.

Specific interpretation

In the case of the generic interpretation of bare singulars the foot of the chain constituted by movement of the noun from N to D is interpreted. Instead of the foot of the chain, the head of the chain could also be interpreted. This possibility is shown in (29). This structure resembles the one that is proposed for proper names. At first sight, this analysis seems unsatisfactory, since it has been argued earlier that bare singulars display precisely the opposite pattern, namely that they do not refer to a unique entity. However, for some of the bare singulars it could be argued that they actually do seem to refer to a particular object. English bare singulars like *home*, *school*, *bed*, *kindergarten* could refer to particular objects that are determined through context or world knowledge. If John expresses *I'm going to school*, he means that he is going to his own school (cf. Jackendoff 1993), not just a school or other. In that sense bare singulars might parallel proper names in designating a particular object. Stvan (2007:177) argues that on the so-called familiarity reading bare singulars behave like definite referring expressions. The following example illustrates that the bare singular is identifiable to the listener. The bare singular can be paraphrased by a definite, possessive or demonstrative determiner (Stvan 2007:177), example taken from (Stvan 2007:177,178).

- (32) My dad was **in town** the weekend before my birthday at the DEMA Show at the Anaheim Convention Center.
= **my town/your town/my father's town**

The location that is referred to by the bare singular in (32) is not merely a location or other, but it is used to identify a particular location (Stvan 2007:178). In the sentence in (32) the location is related to a participant in the discourse by means of a conventional (rather than conversational) implicature that relies on the participants' shared knowledge (Stvan 2007:178). In (32) the bare singular may be related to the town of the subject of the sentence, the town of the reader or the town of the speaker.

The formal properties of such a construction can be captured with Longobardi's analysis of the definite interpretation of proper names. Longobardi (1994:648) argues that "the specific definite reading of determinerless proper names is obtained by raising the head noun to D at some level of representation and leaving the foot of the chain (i.e., the N position) uninterpreted." If the head of the chain of a moved bare singular is interpreted, the noun receives a specific definite reading, as proper names do under these conditions. In this sense they do not have any denotational structure, but they directly designate the individual object the name or noun refers to (Longobardi 1994:648).

The movement of the noun to D allows the bare singular to be interpreted as a specific object. Longobardi (1994) can account for the familiarity reading of bare singulars.

The proposal that bare singulars can be “interpreted as having the definiteness of a proper name” (Stvan 2007:178) and the suggestion that their definite designation relies on conventional implicature could also be formally worked out in terms of Ritter’s (1991) construct state. Construct states in Hebrew are another instantiation of N-to-D movement. Ritter (1991:38): “A construct state is a type of noun phrase containing a bare genitive phrase immediately following the head noun, that is, a genitive phrase that is not overtly case marked.” In construct states, the head noun moves from N to D. This means that these possessive constructions cannot have a determiner (Ritter 1991:40):

- (33) a. beyt ha- mora
 house the-teacher
 ‘the teacher’s house’
- b. *ha- beyt ha- mora
 the-house the-teacher
- c. *ha- beyt mora
 the-house teacher
- d. ha- bayit
 the-house
 ‘the house’

This paradigm shows that the determiner and the possessed element appear in complementary distribution. It could be argued that some bare singulars might appear in a disguised construct state, which means that they do not have overt Genitive Case marking, but that movement of the noun from N to D results in a possessive interpretation. The structural properties of this analysis coincide with Longobardi’s (1994) analysis; in other words, the movement of the noun from N to D is the same in both analyses. Treating bare singulars as disguised construct state captures a possessive reading of bare singulars, while treating them as some sort of proper names captures the definite reading. At this point it is not clear how the specific reference of bare singulars is obtained precisely. For now it suffices to recognize that Longobardi can account for this familiarity reading.

Existential interpretation

The third structure in (29) could possibly represent the existential interpretation of the bare singular noun. As mentioned before, Carlson & Sussman (2005:5) note that, from a semantic point of view, it is difficult to determine if bare singulars are definite or indefinite, because their distributional properties preclude application of the standard tests. Like weak definites, bare singulars resemble indefinites from a strictly truth-conditional point of view. If someone for instance expresses that John is in bed, “his presence in any bed with the intended purpose of rest will be sufficient” (Carlson & Sussman 2005:8). Despite the equivalent interpretation of indefinites and bare singulars, these two noun classes differ from each other with respect to scopal behavior. Like bare plurals, bare singulars take narrowest possible scope with respect to other operators in the sentence (Carlson & Sussman 2005:5,6). Bare singulars could be argued to be existentially quantified, but in that case the existential quantifier does not have variable scope, as the sentences in (34) show (examples taken from Carlson & Sussman (2005:6)).

- (34) a. Each mobster went to **prison**.
b. Most of them are in **class**.
c. My seven sons attended **college**.
d. Bob is not in **bed**.

Bare singulars thus seem to have some flavor of indefinites, but they do not seem to be simply indefinites, considering the fact that they cannot take wide scope. Moreover, they also deviate from indefinites displaying semantic enrichment and being number neutral. Carlson & Sussman (2005:15) have concluded for weak definites that they are not simply indefinites. This conclusion can be extended to bare singulars, since both categories are argued to be semantically equivalent by Carlson & Sussman.

In Longobardi’s (1994) analysis nouns that are dominated by an empty determiner and that stay in N receive a default existential interpretation, but do have narrow scope. In that sense the bare singulars perhaps could be argued to stay in N, with the expected interpretation, that is, an indefinite interpretation, but with some restrictions. Another property characteristic of bare singulars is that they seem to be unspecified for number (De Swart & Zwarts 2009:287; Stvan 2007:181). This fact also correlates with Longobardi’s analysis of nouns that are dominated by an empty determiner. Longobardi (1994:620) namely argues that empty Ds yield semantic indeterminacy between singular

and plural designation, so they are unspecified for number (Longobardi 1994:620). This analysis suggests that bare singulars may stay in N.

Mass Nouns

However, according to Longobardi singular nouns in N that are dominated by an empty determiner always receive a mass interpretation. This is so, because empty determiners seem to quantify over subparts, instead of quantifying over individuals, as articles, demonstratives and determiners as *every* and *each* do. Longobardi explains that determiners are semantically understood as operators binding a variable, whose range is the extension of the natural kind that the noun refers to. The range of plural forms consists of the members of the extension. In singular forms it is the determiner that decides whether the range is constituted by members of the extension (count interpretation) or by parts of its members (mass interpretation). The empty determiner always selects a mass interpretation (Longobardi 1994:633). If we follow Longobardi in his argumentation, we would expect that, if bare singular nouns stay in N, they receive a mass interpretation. Longobardi (1994:633) illustrates the mass interpretation with the following example:

(35) I ate lion

In (35) *lion* does not quantify over a set of lions, but rather over the set of subparts of the mass “lion meat” (Longobardi 1994:633). Longobardi concludes that empty determiners always select a mass interpretation for a singular noun, even if the noun has a possible count interpretation as well.

If we assume that bare singulars of the present study receive some sort of indefinite interpretation, and that they thus stay in N, they seem to contradict this conclusion. They are singular nouns and do allow a count interpretation. However, they do not seem to have a possible mass interpretation. If someone expresses that he goes to school, *school* does not quantify over the subparts of that school. These facts suggest that according to Longobardi the noun must move to D, in order to escape a mass interpretation. However, in some sense bare singulars seem to be interpreted as indefinites. In fact, if we assume that bare singulars have an empty determiner and stay in N, it turns out that they actually seem to meet two of the three conditions for empty determiners stated by Longobardi (1994): they are lexically governed by the preposition and they are some sort of indefinites, with some restrictions. It might thus turn out that Longobardi (1994) has to reformulate his statement that only plurals and mass nouns can occur in nouns dominated by empty determiners.

If we follow these lines of reasoning, we may conclude that bare singulars can occur in N without receiving a mass interpretation under certain circumstances. However, I will conclude that an indefinite interpretation of a bare singular cannot be represented as in (29). This conclusion is based on the relationship between weak definites and bare singulars and the fact that for weak definites the only way to receive an indefinite-like interpretation is to be analyzed as predicates of the preposition.

The following sections discuss the interpretations conveyed by weak definites. In the following section it will be shown that for weak definites it is only possible to receive an indefinite interpretation according to Longobardi (1994) when they are analyzed as the predicate of a preposition. To be consistent, it is argued that for bare singulars the same holds. Taking this into account, Longobardi's (1994) conclusion that an empty determiner may only appear with mass nouns or plurals will be maintained. It will further be argued that bare singulars and weak definites can only receive an interpretation that resembles an indefinite interpretation by analyzing them as predicates of prepositions.

Evidence for an Indefinite Interpretation

This section was introduced with the statement that according to Carlson & Sussman (2005) it is difficult to determine whether bare singulars are definite or indefinite. Stvan (2007) argues that bare singulars can have an activity reading, on which the noun receives an indefinite interpretation. On this reading the bare singular is analyzed as being part of a predicate. It does not really matter which particular object is being referred to, but it is important which typical activity is carried out in the location named by the noun.

- (36) Two are currently in foster care – one girl because her father is **in prison** for murdering her mother; another girl spent last year in foster care.
= **serving time as a prisoner**
≠ **in the/his prison**

The bare singular in (36) cannot be paraphrased with a definite article or a possessive determiner, showing that the activity reading is different from the familiarity reading. The bare singular rather functions as a predicate together with the preposition (Stvan 2007:180). The fact that the PP can be replaced by a VP (i.e. *serving time as a prisoner*) shows that the noun is functioning within a predicate (Stvan 2007:180). The PP thus predicates a state or action of the locatum (Stvan 2007:180). The fact

that some preposition-noun combinations are available as single words (e.g. *abed, asea, encamped, hospitalized, imprisoned*), further supports the proposal that the PP is indeed serving as a predicate. Moreover, the PP as a whole can serve as an antecedent for a pronoun, while a pronoun cannot be used to refer to a particular location, as the following examples show (examples taken from Stvan 2007:180).

- (37) a. “Her father is in prison”...
b. and he has been there_[pro = PP] for six years.
c. #and he has been in it_[proNP] for six years.

This section has shown that some bare singulars together with a corresponding preposition may function as a predicate. However, it is not clear whether the noun itself is an argument of the preposition or not. Although this is not clear yet, it will be shown in the following section that at least weak definites on the “indefinite” reading can only be predicates of the preposition in Longobardi’s (1994) analysis. In order to maintain the relationship between weak definites and bare singulars, I propose that bare singulars on the activity reading are not arguments of the preposition. Bare singulars on the activity reading do not assert a certain locative placement (Stvan 2007:179), which suggests that the noun receives an indefinite interpretation. However, it could also be argued that the noun itself is not an argument either. In that sense, the noun does not refer to a particular location, but it rather denotes a property of the subject of the sentence. Because the noun does not refer to a specific object, it seems to receive an indefinite interpretation. I conclude that the structure in (29) is illicit.

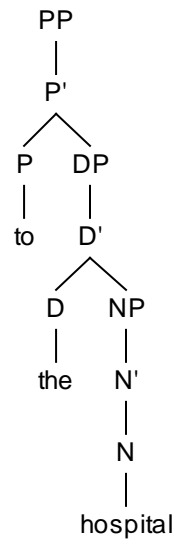
In Longobardi’s (1994) terms, a predicate may be an NP. Let us assume that the bare singulars on the activity reading are indeed NPs. There is no denotational structure and there is no D-position to which the noun can move. This means that there is no quantificational meaning and that the noun is neither interpreted as generic or specific. Longobardi (1994) could thus account for a non-referential reading of bare singulars.

3.3.3.2 *Weak Definites*

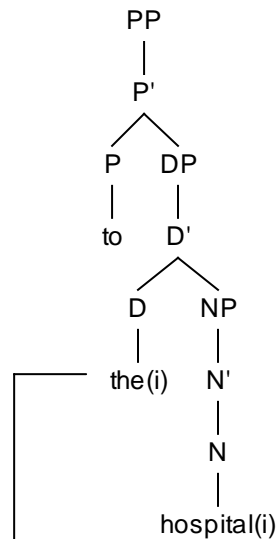
Weak definites seem to resemble proper names that allow expletive articles in varieties of Italian (and other languages, such as varieties of German and Dutch). Since the definite article in weak definites

does not refer to a uniquely identifiable referent – as “regular” definite articles do – it is likely that weak definites are introduced by an expletive article as well. In Longobardi’s (1994) analysis proper names that are introduced by an article have the following structure. The proper name is in N and the article is in D. By analogy, we may argue that the noun in a weak definite construction is in N as well and that the definite article is inserted in D. The two possible structures of weak definites are represented in (38).

(38) a. Generic



b. Specific



Since the weak definite does not refer to a unique object, we may assume that the inserted article is an expletive article that has no semantic content, but only serves to fill the D-position in this case. Longobardi shows that there are different types of expletive articles used in different constructions. One type is the definite article that appears in Italian generics. An expletive article can thus yield a generic interpretation of the noun it precedes according to Longobardi (1994:650). A similar expletive article appears in a non-mass interpretation of a noun in English (e.g. *The lion has four legs*). Longobardi (1994:650,652) illustrates that other instances of expletive articles are the ones that appear with proper names in Italian and the ones that introduce substantivized adjectives (e.g. *The rich are becoming even richer*). There is a structural difference between expletive articles that occur with proper names and the ones that appear with generics. Bare proper names must move to D at some level of representation in order to achieve a specific definite reading (Longobardi 1994:648). The movement of N to D constitutes a chain, of which the head is interpreted in the case of proper names. Longobardi (1994:655) argues that insertion of an expletive article also constitutes a

relationship between the heads N and D, which is called a CHAIN. The D-position is relevant for the interpretation of the noun phrase and is occupied by the expletive article. The expletive article is related to the proper name in the N-position, where the name cannot get a definite reading. The CHAIN thus serves as a link between the two heads, so that the noun can receive a definite reading through the expletive article in the interpretively relevant position D, as illustrated in (38), in which the addition (i) together with the lines indicate the CHAIN. The expletive article that appears with generics has another function. Generics are arguments and must thus be introduced by a D-position. This is achieved by inserting an expletive article, whose sole function is to introduce the N-position, as illustrated in (38).

Weak Definites and Expletive Articles

If the article appearing in weak definites is to be analyzed as an expletive article, the question is what type of expletive article introduces weak definites. As we have seen, Longobardi offers two options: the expletive article either serves as the head of a CHAIN in order for the noun to be interpreted (resulting in a specific interpretation), or it introduces an already interpretable position (resulting in a generic interpretation). The relevant question here is whether the weak definite noun can be interpreted in N, or not. If it can be interpreted in N, the expletive article only has to introduce N. If it cannot be interpreted in N, it needs to form a CHAIN with the expletive article.

In order to find out what kind of expletive article is used in weak definites, we thus have to determine their interpretation. Carlson & Sussman (2005:7) argue that for weak definites it is difficult to determine if they are definite or indefinite. From a strictly truth-conditional point of view indefinites and weak definites are equivalent. In a sentence like *John read the newspaper* on the weak reading the semantics is similar to that of the sentence *John read a newspaper* (Carlson & Sussman 2005:8). A difference between indefinites and weak definites is the semantic enrichment that characterizes weak definites, and that is absent with indefinites. However, Carlson & Sussman (2005:8) wonder whether the semantic enrichment is part of the semantics, or rather an implicature. Another characteristic of weak definites is that they display narrowest scope with respect to other operators in the sentence (Carlson & Sussman 2005:7), as is the case with bare singulars. The sentences in (39) illustrate that the weak definites have distributed readings, which means that they take narrow scope (examples from Carlson & Sussman 2005:7).

- (39) a. Each man listened to **the radio**.

- b. Every professor went to **the store**.
- c. Four students were busy reading **the newspaper**.

Although the weak definites and indefinites display similarities, Carlson & Sussman (2005:15) conclude on the basis of experimental evidence that weak definites and indefinites constitute different classes of noun phrases and that weak definites, and thus also bare singulars (since both categories are equivalent semantically) should receive another analysis than indefinites.

Apart from an existential interpretation, it is conceivable to think of weak definites receiving a generic or a specific interpretation. As explained in the previous sections, Stvan (2007) has argued for bare singulars that they can be used in three different ways: as generics, as markers of an identified referent or as part of a predicate with an indefinite meaning. Since bare singulars and weak definites are argued to be related structures, it is possible that weak definites and bare singulars may have the same options for interpretation. The generic and specific interpretation can be derived in Longobardi's theory. Longobardi's proposal offers two analyses for the derivation of proper names and generics. The specific interpretation of proper names is obtained by constituting a CHAIN between D and N. The generic interpretation is achieved by interpreting the noun in N, which is introduced by D.

Generic interpretation

Stvan (2007:181) showed that bare singulars may receive a generic interpretation, as discussed in section 3.3.3.1 Generics do not refer to a particular entity, but are rather generalizing statements about a kind. A generic reading of a bare singular is illustrated in (30). Objects denoted by weak definites could be considered to be kinds. On a generic reading they would not refer to a particular entity, but rather designate a comprised kind of objects. In this section it will be argued that weak definites, like bare singulars, may receive a generic interpretation. It is possible, at least in Dutch, to make generalizing statements about locations referred to by weak definites.

- (40) MRI-scanners zijn veel gebruikte apparaten **in het ziekenhuis**.
 MRI-scanners are much used devices in the hospital
 'MRI-scanners are commonly used in the hospital.'
 ≈ **in ziekenhuizen** 'in hospitals'
- (41) Het rookverbod leidt tot omzetverlies **in de kroeg**.

- the smoking ban leads to sales volume-loss in the pub
 ‘Smoking bans lead to loss in sales volume in the pub.’
 ≈ **in kroegen** ‘in pubs’
- (42) De prijzenoorlog zorgt voor sterk dalende prijzen **in de supermarkt**.
 the price war causes strong decreasing prices in the supermarket
 ‘The price war causes strong decreasing prices in the supermarket.’
 ≈ **in supermarkten** ‘in supermarkets’
- (43) Opstootjes zijn aan de orde van de dag **in de gevangenis**.
 riots are on the order of the day in the prison
 ‘Riots are common in prison.’
 ≈ **in gevangenissen** ‘in prisons’

The examples in (40)-(43) show that weak definites also can be argued to be able to receive generic interpretations. The weak definites in the sentences above can all be replaced by bare plurals, receiving a similar interpretation, indicating that the weak definites are interpreted generically. The results are a bit tentative, since they are based on my own intuitions. Intuitively, it can be argued that the weak definites in (40)-(43) do not refer to particular objects, but rather to institutes or kinds that they are a member of. Another indication that weak definites can be interpreted generically is the fact that they can appear in singular and plural form, pointing at number neutrality (Stvan 2007:181). Number neutrality has been shown to be a characteristic property of other generic forms.

We have seen that a good case can be made that weak definites can receive a generic interpretation. This interpretation can be easily captured in Longobardi’s work: namely, by an expletive article that fills the D-position, so that the N-position is introduced as argument. The noun is interpreted in N, since N is the position in which nouns denote kinds.

Specific interpretation

Although weak definites can be used as generics, some of them also seem to be able to receive some sort of familiarity reading. Stvan (2007:177) has shown that bare singulars can behave like definite referring expressions on the so-called familiarity reading, as illustrated in (32). On this reading the bare singular is related to one of the participants referred to in the sentence or present in the discourse by means of a conventional implicature (rather than a conversational one), so that a particular location is identified. The following examples illustrate that weak definites may be related

to a participant in the discourse. However, in some cases the relationship is established differently than in the case of the bare singulars reported by Stvan.

- (44) John goes to **the hospital**.
≠ **my hospital/your hospital/his hospital**
= **the nearest hospital/the hospital he usually goes to**
- (45) Max goes to **the cinema**
≠ **his cinema**
= **the nearest cinema/the cinema he usually goes to**
- (46) Lilly needs to go to **the toilet**.
= **her toilet/my toilet/your toilet**
= **the nearest toilet**

The example in (46) displays a similar pattern as the bare singulars discussed above. *The toilet* could be related to the subject of the sentence, and also to the speaker and the hearer in the discourse. In this sense, the weak definite can refer to a specific object by means of a conventional implicature. However, the relationship between the weak definites in (44) and (45) and discourse participants is less straightforward. It is not possible to replace the weak definite with a possessive determiner, for instance. Nevertheless, it seems possible to find another way to establish a relationship, which asks for a broader interpretation of Stvan's understanding of familiarity readings. For example, in (44) it can be argued that the speaker has a specific hospital in mind to which *the hospital* refers. This could be the hospital that is the nearest with respect to the location where the speaker or the listener is situated, or the subject of the sentence. It could also be the case that *the hospital* is related to the subject of the sentence because of the subject going to the same hospital usually. These considerations suggest that weak definites can be related to participants in the discourse, so that a particular location can be picked out. Although these relationships cannot in all cases be established by possessive markers, there are other ways that can establish such connections.

In Longobardi's (1994) analysis it is possible to derive a specific reading for weak definites. I assume that the article in weak definites is an expletive article. In the case of a specific interpretation, the expletive article constitutes a CHAIN between the noun and the D-position. The noun itself does not need denotational structure (cf. proper names), since they directly refer to an object in the world on the specific reading. However, in order to get the specific interpretation, the noun must be linked

to the D-position, since D determines the particular designation of a DP (Longobardi 1994:648). In other words, the D-position is necessary to refer to individual objects. The expletive article can establish the specific reference of a weak definite. Longobardi (1994) can account for a specific reading of weak definites.

Existential interpretation

The third interpretation allocated to bare singulars by Stvan (2007:179) is an indefinite reading. Stvan introduces these bare singulars as receiving an activity reading. There is no presupposition of a certain location, but the noun rather refers to a typical activity that is carried out in that location (Stvan 2007:179). By analogy, it could be argued that weak definites may also receive an activity reading, being interpreted as an indefinite and being part of a predicate. An example in English would be *the hospital*.

- (47) John has been **in the hospital** for three weeks now.
= **serving time as a patient**
≠ **in his hospital**

When the sentence in (47) is expressed, the directly available reading is one in which *John* is interpreted as a patient who needs medical care. Note that this weak definite may also receive a specific reading, as explained in the previous section. However, this predicate reading is available as well, also supported by the existence of the word *hospitalized*. The question is how weak definites would get an indefinite meaning within their predicative use together with the preposition. An indefinite meaning is the result of a quantificational interpretation, in which a determiner binds a variable. However, in Longobardi's (1994) terms it was concluded that the article that introduces weak definites must be an expletive article. The expletive article does not have semantic content and can therefore not function as an operator binding a variable. Weak definites cannot get an indefinite reading by means of a denotational structure either, because the definite article cannot be a "regular" definite article. In the introduction it was assumed that "regular" definite articles presuppose the existence of a uniquely identifiable referent (Russell 1905, Strawson 1950). It has also been shown that weak definites behave differently from non-weak definites. Following this observation, it can be concluded that, in Longobardi's analysis, the definite article in weak definites cannot be an operator with semantic content. A "regular" definite article cannot be said to introduce weak definites in the

activity reading. Furthermore, since there is a definite article, weak definites cannot be said to have an empty determiner either in this framework, because the D-position is occupied by the expletive article. This means that there is no empty determiner that takes care of a default existential interpretation. I would like to argue that the activity reading observed in bare singulars and weak definites cannot be a genuine existential interpretation according to Longobardi (1994), because there is no way to derive this interpretation within the DP, as explained above. Instead, the “existential” interpretation is an interpretation that looks very similar, because there is no reference to a particular entity. Rather, an existential reading for weak definites should be analyzed as the weak definite being a predicate of the preposition. The seemingly indefinite interpretation of bare singulars arises because the noun in such cases does not refer to a particular object.

Because the only option in Longobardi’s (1994) analysis for weak definites to derive a seemingly indefinite interpretation is analyzing them as predicates of prepositions, the same conclusion holds for bare singulars. Bare singulars cannot rely on a denotational structure on their activity reading. In other words, they may not be introduced by an empty determiner (as already concluded by Longobardi (1994)). Rather, they should be analyzed as predicates of the preposition in order to receive an interpretation that truth-conditionally does not presuppose the existence of an object. Analyzing weak definites and bare singulars as predicates of prepositions in the case of the activity reading allows for a consistent theory in Longobardi’s (1994) terms, although it is not completely clear how such a structure would look like. In other words, the conclusion that only mass and plural nouns may be introduced by an empty determiner can be maintained. Moreover, this analysis meets Carlson & Sussman’s (2005) proposal that weak definites should receive another analysis than indefinites, because their interpretations differ. In this analysis the difference is manifested by an argument-predicate distinction. Indefinites have a quantificational structure, whereas weak definites and bare singulars on the activity reading do not.

3.3.3.3 Relationship interpretation weak definites and bare singulars

The previous two sections have shown that for weak definites and bare singulars the same three interpretations are available. Both categories can be used as generics, as referring to a specific object or as predicates with an indefinite interpretation for the noun. The relationship between the interpretation of weak definites and bare singulars can be satisfactorily explained in Longobardi’s approach to noun phrases and reference.

De Swart & Zwarts (2009) have suggested that complements of prepositions are not necessarily arguments of the prepositions. However, if weak definites and bare singulars are purely analyzed as predicates, it is not clear why weak definites and bare singulars allow the three readings mentioned above. If we assume that weak definites and bare singulars can be analyzed as arguments, at least two of the three readings naturally follow from Longobardi's (1994) analysis. There might be some cases in which weak definites and bare singulars are predicates of the prepositions, which may explain an interpretation that is similar to an indefinite interpretation.

3.3.4 *Internal Syntax*

3.3.4.1 *Longobardi and plurals*

Section 2.5 showed that pluralization changes the interpretation of weak definites and that it cannot always be added to bare singulars. If pluralization of a bare singular is at all possible, then the noun receives a different interpretation.

According to Longobardi (1994) common nouns always need denotational structure, unless they are used generically. Generics refer to the whole kind referred to by the noun. Proper names (in their article-less use) have the exceptional status not to rely on denotational structure. They directly refer to an object or person in the world. However, the possibility of plural designation converts proper names into common nouns, which require an operator to constitute a denotational structure. This fact draws an interesting parallel to weak definites that also lose their peculiarities and behave like "normal definites" when they are pluralized. If proper names are pluralized, they "must be interpreted quantificationally (i.e., like a common noun) and its article can no longer be expletive but must have semantic content as an operator" (Longobardi 1994:656).

This line of argumentation sheds light on the effect of pluralization on weak definites and bare singulars. Let us first consider weak definites. In section 3.3.3.2 it has been argued that some weak definites can behave like proper names. In this sense, they directly refer to an object in the world. On this interpretation an expletive article serves as the head of the CHAIN formed by the article and the noun, so that the noun can be interpreted specifically. Singular weak definites are thus introduced by an expletive article. However, parallel to proper names, the possibility of non-singular designation requires a noun phrase to be interpreted quantificationally. In order to obtain a quantificational structure, an article with semantic content is necessary. The article quantifies over the set of objects that the noun refers to, and picks out a specific set of those objects. As a consequence,

the weak definite loses its weak reading. Recall that weak definites may also be used generically. In this case they are already treated as common nouns. In those cases plural designation requires a semantically interpretable article as well.

Bare Singulars

Let us now consider bare singulars. In section 2.5.1 it was shown that bare singulars generally do not allow plural morphology. However, some bare singulars seem to be able to bear plural morphology when a suitable context is provided. For pluralized bare singulars the same holds as for other pluralized nouns: namely, a denotational structure is required. There are different possible ways to create an operator-variable structure for bare singulars: inserting an overt determiner or being introduced by an empty determiner. However, section 2.5.1 has shown that not every bare singular allows plural morphology. This could be due to the fact that for some interpretations (i.e. the generic and the specific) the noun has moved to D. In those cases there is no available position for a determiner, since the D-position is occupied. Since bare singulars sometimes do seem to permit plural morphology, another conceivable option is an analysis in which the noun stays in N¹⁸ (or perhaps moves to a functional projection where it combines with the number morphology, but at least does not reach D), introduced by an empty determiner. According to Longobardi (1994) one of the conditions under which empty determiners may occur, is that they introduce a plural noun. An empty determiner is, just as other determiners, understood as an operator binding a variable, whose range is the extension of the kind referred to by the head noun (Longobardi 1994:633). In the case of plurals an empty determiner ranges over members of the extension referred to by the noun. Bare singulars that are pluralized should be grammatical according to Longobardi (1994) and they would receive an indefinite interpretation. Let us have a look at two examples of pluralized bare singulars in Dutch and their singular counterparts ((49) and (51) repeated from section 2.5).

- (48) Jan gaat naar school.
John goes to school
'John goes to school (for education).'

¹⁸ Instead of staying in N, the noun could perhaps also move to a functional projection where it combines with the number morphology, but at least the noun does not reach D. Longobardi (1994) does refer to extra functional projections between N and D. It might be the case that they are available in his analysis, but he does not refer to such projections in his paper.

- (49) Jan gaat naar scholen # (om daar te vertellen over AIDS)
 John goes to schools (to there to tell about AIDS)
 'John goes to schools (in order to talk about AIDS).'
- (50) Jan gaat naar kantoor
 John goes to office
 'John goes to the office (to work).'
- (51) Jan gaat naar kantoren # (om medewerkers voorlichting te geven
 John goes to office (to employees information to give
 over RSI)
 about RSI
 'John goes to offices (in order to give employees information about RSI).'

In their singular forms *school* and *kantoor* could be said to have the so-called activity reading. On this reading the particular building that represents the school or the office is not particularly relevant.¹⁹ What is important is the activity that is typically carried out in these locations: namely, education in (48) and work in (50). These readings are directly available in these sentences. Since plural morphology is added in (49) and (51), a denotational structure is required. Let us assume that the noun stays in N (or moves to the projection where the plural morphology is picked up), and that an empty determiner introduces the plural noun. The empty determiner ranges over the members of the extension of the noun, so that the bare singulars lose their particular reading with semantic enrichment.

Bare Singular vs its Plural Counterpart

Let us return to bare singulars that receive an activity reading. It has already been argued that they cannot be introduced by an empty determiner. The different interpretations of bare singulars and their pluralized counterparts support this proposal. Imagine that bare singulars may be introduced by an empty determiner, which allows them to have a count interpretation. The structures of bare singulars and their pluralized counterparts would be very similar: namely, the noun stays in N and they are introduced by an empty determiner. Then the question arises why the singular form displays semantic enrichment, whereas the plural form deviates from this interpretation and is interpreted

¹⁹ Note that these bare singulars also may receive a familiarity reading, on which they refer to a particular object by means of a conventional implicature.

existentially instead. There is no explanation for this distinction if we assume that bare singulars may appear in a structure introduced by an empty determiner. These facts are considered to contradict the suggestion that bare singulars might be introduced by an empty determiner.

The explanation for the non-weak reading of pluralized weak definites and some pluralized bare singulars naturally follows from Longobardi's analysis. However, on the basis of this analysis it cannot be explained in which cases bare singulars might be pluralized, while others cannot. The facts further suggest that bare singulars may not be introduced by an empty determiner.

3.3.4.2 Longobardi and diminutives

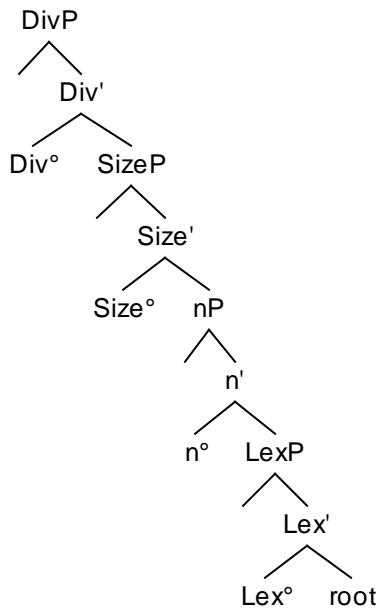
In section 2.3 we have seen that in languages that have diminutive suffixes, bare singulars do not allow diminutive morphology. These languages further showed that weak definites can take diminutive suffixes. However, weak definites lose their weak reading when a diminutive is suffixed to the noun. In the previous section we have seen that plural morphology requires a quantificational reading of a noun. A quantificational reading can only be achieved by means of a semantically interpretable operator. In this section a similar explanation will be proposed for the absence of diminutives in bare singulars and diminutives causing the loss of a weak reading in weak definites.

Structure of Diminutives

Following De Belder (2008:118) I consider diminutives to be the morphological means to overtly realize the feature [Size]. The feature [Size] is realized as a functional projection that is situated between DivP and NP (or nP), as shown in the following structure.²⁰ Although De Belder, Faust & Lampitelli include roots into their noun phrase structures, I will refrain from this use and consider N as the lexical head of the noun phrase. The following discussion is concerned with compositional diminutives that are located above N. These diminutives affect the interpretation of bare singulars and weak definites, which is the reason to focus on Size°. Moreover, I will use N instead of n.

²⁰ De Belder, Faust & Lampitelli (2010) assume that the root of a word is the first item to be introduced in syntax when a structure is built. Further, they show that there are two types of diminutives: namely, compositional and non-compositional ones. Nouns that have a suffixed compositional diminutive refer to a smaller version of what the noun refers to, whereas non-compositional diminutives derive a new denotation; for instance *pan-ino* (bread.DIM) means 'sandwich' in Italian (De Belder, Faust & Lampitelli 2010:1). De Belder, Faust & Lampitelli propose two different syntactic positions for diminutives in order to capture the two types of diminutive meanings. In this structure, the non-compositional diminutive would be located in a lexical position below the category head: namely, in Lex° (De Belder, Faust & Lampitelli 2010:2). The compositional diminutive merges with nP and is realized as Size°. Div° is a dividing head that hosts indefinite articles and plural morphology according to Borer (2005) and De Belder (2008).

(52)



De Belder (2008) shows that the presence of [Size] implies the presence of [Div]. In other words: whenever a structure contains an overt realization of [Size], which is a diminutive, the noun has to be countable, which is achieved by the feature [Div]. De Belder (2008) follows Borer (2005) in the assumption that nouns enter syntax lexically unmarked; that is, they are not assigned a mass or a count reading before they enter a syntactic structure. The mass-count distinction is a product of syntax (De Belder 2008:117). However, De Belder argues that the mass-count distinction is not the only distinction found among noun interpretations. She shows that the count nouns should be further distinguished between count readings of kinds and of units. De Belder (2008:118) convincingly shows that the three-way split between the mass reading, the count kind reading and the count unit reading is a result of the interaction between [Div] and [Size]. The crucial part for this discussion is that “the presence of [Size] in the absence of [Div] is illicit” (De Belder 2008:118). De Belder (2008:121) explains that objects that have size and that are measurable (a consequence of having the feature [Size]), are necessarily individual items by definition. In other words, “if something acquires size, it automatically gets individuality” (De Belder 2008:121). This means that the presence of [Size] implies the presence of [Div].²¹

²¹ De Belder (2008:121) points out that intuitively, it would be logical to assume that Size° is realized above Div°, since the presence of [Size] implies the presence of [Div]. However, in the structure in 0, Div° is realized above Size°. The reason for representing the nominal structure as in 0 is the surface order of the morphemes. The noun first seems to combine with the diminutive and thereafter with the plural suffix.

Diminutives related to Weak Definites and Bare Singulars

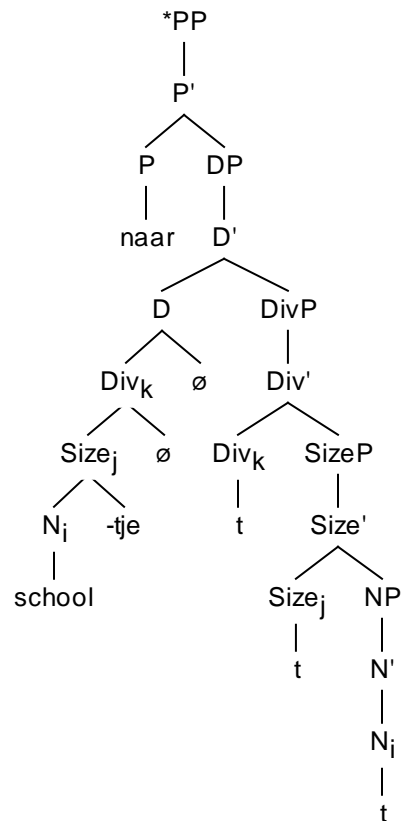
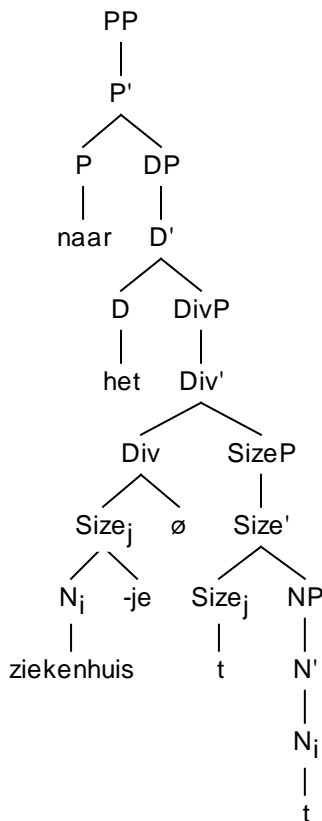
The fact that the feature [Size] implies the feature [Div] has consequences for nouns that have a suffixed diminutive. Weak definites and bare singulars that have a diminutive suffix also contain the feature [Div] in their structure. The presence of [Div] indicates that there is possible nonsingular designation. This being so, nouns accompanied by a diminutive suffix, and hence by a realization of [Div] – overt as plural marking or covert as a null morpheme – must be interpreted quantificationally (Longobardi 1994:656). In order for a noun to receive a quantificational interpretation, a denotational structure is required. Weak definites cannot be introduced by an expletive article if they bear a diminutive suffix. The definite article in such structures must be a “regular” definite article with semantic content that serves as an operator that binds a variable. Since nouns that bear a diminutive suffix are introduced by a semantically interpretable article, they always receive a referential interpretation. Weak definites thus lose their weak reading when a diminutive suffix is added due to the inescapable presence of a “regular” definite article. These facts are represented in the structure in (53) with the Dutch example *naar het ziekenhuisje* ‘to the small hospital’. The structure does not contain an expletive article that constitutes a CHAIN between the article and the noun or purely serves as an introducing category for N. Rather, the article *het* ‘the’ has semantic content and serves as an operator that binds the noun. In section 3.3.3.2 it was concluded that an indefinite reading (or a similar reading) for weak definites can only be achieved if the weak definite is analyzed as the predicate of the preposition. Note that this reading does not allow an adjective. Adding a diminutive to a predicative NP implies individuality, because of the necessary presence of [Div]. This feature asks for a denotational structure, which means that a determiner, and thus a D-position are necessary to quantify over the set of object denoted by the noun.

Whereas weak definites lose their weak reading when bearing a diminutive suffix, bare singulars do not allow diminutive suffixes at all. As is argued in section 3.3.3.1 bare singulars may be analyzed as structures in which the noun moves to D in order to avoid a proper government violation and from being interpreted as a mass noun. If the noun in bare singulars moves to D, there is no space for a determiner in D, as illustrated in (53), in which the Dutch noun *school* ‘school’ bears the diminutive suffix *-tje*. Consequently, such bare singulars do not allow diminutives due to the obligatory denotational structure. In section 3.3.3.1 it has been argued that some bare singulars perhaps could receive an existential interpretation. These bare singulars would in this case have to stay in N, which is actually impossible according to Longobardi (1994), because only plurals and mass nouns may be dominated by an empty determiner. The ungrammaticality of this construction is illustrated by a

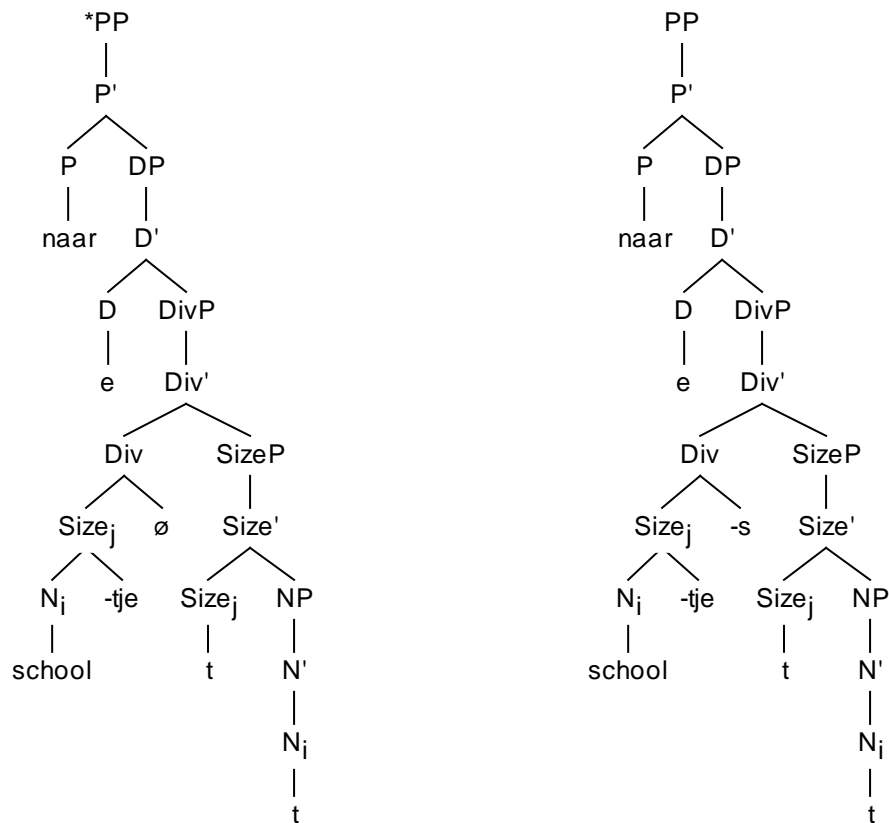
Dutch example in (53). The diminutive *-tje* requires a denotational structure. Although there is an operator in (53) (in this case an empty determiner), the structure is ill-formed. The noun has singular designation, but is not a mass noun, due to the presence of [Div]. In Longobardi's terms a singular noun that does not have a mass interpretation is not allowed to be introduced by an empty determiner. As a consequence, the structure in (53) is out. Plurals are allowed to be introduced by an empty determiner according to Longobardi (1994). (53) Contains a bare plural form: *naar schooltjes* 'to small schools'. Although the expression in (53) is weird when used without an appropriate context, it is not as ungrammatical as its singular counterpart, as observed in section 2.5.1 as well. Note that a possible predicatively use of a bare singular does not tolerate a diminutive suffix either, for the same reason as weak definites.

(53) a. *naar het ziekenhuisje*

b. **naar schooltje* (noun moves to D)



- c. *naar schooltje (with empty determiner) d. ?naar schooltjes (plural)



Non-Compositional Diminutive in Spanish

The Spanish informant has indicated that there is a weak definite in Spanish that can bear a diminutive suffix, while still receiving a weak interpretation. It concerns the following case.

- (54) Lola fue a la tiend-ita.
 Lola went to the shop.DIM
 ‘Lola went to the grocery store.’

The diminutive in (54) does not have a compositional meaning. *Tiendita* ‘shop.DIM’ does not refer to a smaller version of a store. Rather, the diminutive creates a new meaning, which has a weak reading according to the informant. Following De Belder, Faust & Lampitelli (2010), this non-compositional diminutive is merged in Lex^o (cf. (52)). Since this type of diminutive is not realized in Size^o, Div^o is not necessarily present. As a consequence, a quantificational interpretation with a “real” operator is

not required. Therefore, the noun with the diminutive suffix can be introduced by an expletive article and receive a weak reading.

3.3.4.3 Longobardi and Adjectives

In the previous sections it was shown that the presence of certain projections affects the weakness of weak definites and the grammaticality of bare singulars. In this section the insertion of adjectives will be discussed. Section 2.4 illustrated that generally speaking, languages do not allow adjectives to modify bare singulars. Weak definites may be modified, but the presence of an adjective causes the weak definite to lose its weak reading. Because weak definites cannot preserve their weak reading when modified, I will discuss this issue as ‘adjectives being absent in weak definites and bare singulars’. Besides these data, there are other cases in which the presence of adjectives is closely related to the presence of articles. In Romanian, for instance, a definite article must be absent when a noun is preceded by a preposition (Mardale 2008:2). However, whenever the noun is modified by an adjective (or by a PP or relative clause), the definite article is required (Mardale 2008:2). In Icelandic, definite articles are normally suffixed to the noun, but in the presence of an adjective they may appear as a free-standing element preceding the noun (Thraínsson 2007). For Norwegian more or less the same holds: normally a noun has a suffixed article, but the presence of an adjective requires an extra article preceding the noun. These facts show that there is a strong interplay between adjectives and articles. These observations, abstracting away from the exceptions in Norwegian (that allows some bare singulars to be modified) require an explanation. This section discusses different approaches to the absence of adjectives in weak definites and bare singulars. However, it will turn out that the theoretical framework discussed in this chapter cannot satisfactorily account for all the facts. On the basis of the cross-linguistic facts described above I would like to propose that the presence of an adjective somehow triggers an article. However, at this point I cannot explain what exactly causes this behavior.

Appositive vs Restrictive Adjectives

In the previous sections a parallel was drawn between proper names on the one hand and weak definites and bare singulars on the other. This analogy could be extended to the discussion of adjectives. An explanation for the absence of adjectives in weak definites and bare singulars along these lines will have a semantic point of departure with an indispensable role for the interpretation of noun phrases. Proper names have the special status to refer to unique entities without any

denotational structure. Longobardi (1994:623) has shown that proper names can be modified by adjectives. There are cases in which adjectives restrict the set denoted by the noun they modify. Suppose a context in which there are multiple tables. In the phrase *the white table* the adjective *white* picks out a particular table. However, a proper name, referring to a specific object, has already been maximally restricted and cannot be further restricted. That is the reason why in the case of proper names adjectives do not have a restricting function, but rather an appositive meaning; that is, they give additional information about the proper name.²² Sentence (8) in Section 3.1, repeated here as (55), illustrates this point.

- (55) Gianni mio ha finalmente telefonato
 Gianni my has finally called up
 ‘My Gianni finally called.’

In a context in which only one person can satisfy the content of *Gianni*, the possessive adjective *mio* ‘my’ is used appositively. *Mio* does not restrict the set of Gianni’s ‘Johns’, but provides extra information about *Gianni*, namely that he is closely related to the speaker of the utterance. A similar example in Dutch can be given.

- (56) Kleine Jan-tje gaat vandaag voor het eerst naar school
 little John-DIM goes today for the first time to school
 ‘Today, little John goes to school for the first time.’

In (56) *kleine* ‘little’ does not restrict the set of Jan’s ‘Johns’, but it adds information about Jan’s size or age. As such, the adjective is used appositively, but not restrictively.

Since some weak definites and bare singulars can be interpreted specifically as well, it is possible to draw a parallel with proper names. It could be the case that weak definites and bare singulars can only combine with appositive adjectives, but not with restrictive ones, since they are already maximally restricted. The opposite situation is sketched by Vergnaud & Zubizarreta (1992). They argue that a certain class of inalienable expressions cannot combine with appositive adjectives,

²² Note that it is possible to construe a context in which there are for example multiple persons that are called *John*. In such cases it is possible for a restrictive adjective like *old* to combine with a proper name. In this case *old John* can be used to distinguish between John senior and John junior.

while they are able to combine with restrictive adjectives. Vergnaud & Zubizarreta (1992) argue that inalienable expressions are introduced by expletive determiners. In external possessor constructions²³ the noun is said to be introduced by an expletive determiner. This proposal is established by the fact that these constructions display a distributivity effect. The expletive determiner does not have a denotational index, which means that there is no instantiation relation between the type denoted by the noun and a token (Vergnaud & Zubizarreta 1992:614). As a consequence, nouns introduced by an expletive determiner denote types. Vergnaud & Zubizarreta (1992:630) show that restrictive adjectives, but not appositive adjectives, may modify the inalienable phrase in external possessor constructions, as illustrated below (examples taken from Vergnaud & Zubizarreta 1992:630).

- | | | | | | |
|------|-------------|---------|-----------|--------------|----------------------|
| (57) | *Le médecin | leur | a examiné | la | <i>belle</i> bouche. |
| | the doctor | to them | examined | SING.DEF.DET | <i>pretty</i> mouth |
| (58) | Le médecin | leur | a examine | le | doigt <i>coupé</i> |
| | the doctor | to them | examined | SING.DEF.DET | <i>cut</i> finger |

In (57) there is only one possible referent, since people only have a single mouth. The adjective *belle* ‘pretty’ is used appositively here, which makes the sentence ungrammatical according to Vergnaud & Zubizarreta (1992:630). In (58), however, there are multiple referents and the adjective *coupé* ‘cut’ picks out one referent out of the set of fingers. The sentence in (58) implies that not all fingers were cut. These sentences show that in external possessor constructions, the inalienable phrase may be modified by a restrictive adjective, but not by an appositive one. Contrarily, internal possessor constructions allow both appositive and restrictive adjectives to modify the inalienable phrase. Vergnaud & Zubizarreta (1992:631) argue that the restriction found in external possessor construction is due to the “open” (i.e. phrase of which the argument-variables are not saturated)

²³ An internal possessor construction is an inalienable expression in which an argument is interpreted as an inalienable dependent of another argument that is external to it (Vergnaud & Zubizarreta 1992:597). In the following examples from French an internal possessor construction and an external possessor construction are contrasted (examples taken from Vergnaud & Zubizarreta 1992:597,598).

- | | | | | | |
|-----|------------|----------------|----------------|------------|---------|
| i. | Le médecin | a radiographié | <i>leurs</i> | estomacs | |
| | the doctor | X-rayed | POSSR.3.PL | stomachs | |
| ii. | Le médecin | <i>leur</i> | a radiographié | l’ | estomac |
| | the doctor | to them | X-rayed | SG.DEF.DET | stomach |
- ‘The doctor X-rayed their stomachs.’

In (i) the possessor argument *leurs* ‘their’ is not a separate argument of the verb governing the inalienable, but is realized as a possessive form internal to the noun phrase headed by the inalienable noun *estomacs* ‘stomachs’ (Vergnaud & Zubizarreta 1992:598). Contrarily, in (ii) the verb takes an extra argument, namely *leur* ‘their’, that governs the inalienable argument *estomac* ‘stomach’ (Vergnaud & Zubizarreta 1992:597).

nature of the relevant noun phrases. Vergnaud & Zubizarreta propose that appositive adjectives may only modify “closed” nominal phrases (i.e. phrase of which the argument-variables are saturated). Restrictive adjectives are allowed to combine with “open” expressions. Vergnaud & Zubizarreta (1992:631) formally capture these proposals by assuming that appositive adjectives are argument-taking predicates. Since the argument-variables are not saturated in external possessive constructions, they cannot function as arguments. Closed expressions as in internal possessive constructions have saturated their argument-variables and can therefore function as arguments and can thus combine with appositive adjectives. Vergnaud & Zubizarreta (1992:631) point out that this analysis implies that restrictive adjectives are not argument-taking predicates, since they can combine with nominal phrases that have not saturated their argument-variables. As a consequence, restrictive adjectives have another relationship with the nominal phrase than appositive adjectives. They are not in an argument relation, but form a structure that is similar to compounds. Vergnaud & Zubizarreta (1992:631) suggest that “the meaning of the restricted modifier is ‘compounded’ with that of the modified element, thus creating a new denotatum.”

Now the question is whether this analysis could account for the data discussed in section 2.4 as well. In the previous sections we have seen that there are at least two well-established readings for weak definites and bare singulars that can be accounted for in Longobardi’s framework: namely, the specific reading and the generic reading. In Vergnaud & Zubizarreta’s (1992) analysis inalienable expressions are introduced by an expletive determiner. Vergnaud & Zubizarreta (1992:616) argue that these phrases must receive a type interpretation. In Longobardi’s (1994) terms, this assertion implies that the relevant noun is introduced by an expletive article that only serves as an introducing category for N, without contributing anything to the interpretation of the noun. As a consequence, the noun is interpreted in N as a type. However, we have seen that an expletive article can also serve as the head of a CHAIN formed by the expletive article and the noun. This strategy provides the noun with a specific interpretation. Following Vergnaud & Zubizarreta (1992) it could be argued that the generic use of the expletive article results in an “open class” nominal, which cannot function as an argument.²⁴ The other type of expletive article discussed by Longobardi (1994) is the head of a CHAIN between the article and the noun. This expletive article is necessary for the noun to be interpreted specifically, as it is situated in D. As the noun (or proper name) in such structures refers

²⁴ Note that this assertion does not agree with the previous assumption that weak definites and bare singulars in PPs are arguments. Vergnaud & Zubizarreta (1992) argue that variables cannot be saturated within a DP if they are introduced by an expletive article. They developed an analysis in which the variables of such nominal phrases are predicated over by a Predication element hither in the structure.

to an object in the world directly, without any denotational structure, it could be argued that nouns that are introduced by this type of expletive article are “closed” in terms of Vergnaud & Zubizarreta (1992). In other words, their argument-variables are saturated, because the noun (or proper name) itself already has a specific reference.

Vergnaud & Zubizarreta’s (1992) analysis of inalienable expressions combining with different types of adjectives makes different predictions for the specific and generic use of weak definites and bare singulars. The specific uses are expected to allow appositive adjectives, but not restrictive adjectives. Vice versa, generic uses are predicted to admit restrictive adjectives, but not appositive adjectives. Specific uses of weak definites and bare singulars involve nouns that directly refer to an object in the world. As such, they can be said to have their argument-variables saturated. In such cases, the specific denotation of the noun cannot be further restricted, because it is already maximally restricted. However, it should be possible to add additional information to the noun by an adjective used appositively. For weak definites, it seems to be possible to construe a context in Dutch where this is indeed possible. Imagine a context including a single hospital. One participant in the discourse expresses the following sentence: *Ik lig in het verwaarloosde ziekenhuis* ‘I am in the neglected hospital’. Although very tentative, it seems to be possible to interpret this sentence with the adjective being used appositively; that is, the adjective providing extra information about the hospital. On this reading the adjective does not restrict the set of hospitals, since there is only one hospital in the discourse. Rather, the adjective provides information about the status of the hospital. In section 2.4.4 it was argued that weak definites lose their weak reading when they are modified. The starting point of the specific reading of weak definites is by all means a specific reading, as the name suggests. However, this reading does not arise, along the lines of Stvan (2007), because of a “regular” use of the definite article, but because of a conventional implicature. Now an appositive adjective has been inserted into the noun phrase, it is difficult to distinguish between a specific reading by means of a conventional implicature and a “regular” use of the definite article. I will not further elaborate on this issue here. This discussion has shown that weak definites might be modified by an appositive adjective, as Vergnaud & Zubizarreta (1992) would predict, although this conclusion is very tentative. However, the analysis of appositive versus restrictive adjective proposed by Vergnaud & Zubizarreta cannot explain why bare singulars in their specific use cannot be modified by appositive adjectives. Bare singulars cannot be modified by any adjective, which means that the distinction between appositive and restrictive adjectives cannot provide a solution for the absence of adjectives in bare singulars in most of the languages in the sample.

The inalienable expressions discussed by Vergnaud & Zubizarreta (1992) are argued to be interpreted as types. This reading matches the generic reading of weak definites and bare singulars. In other words, these phrases do not refer to a particular entity, but to the kind denoted by the noun. The use of an expletive article in generics is different from the use in specific expressions. In generic phrases, the expletive article functions as an introducing category for N, without contributing anything to the semantics of the phrase. The expletive articles discussed by Vergnaud & Zubizarreta (1992) have the same function. Vergnaud & Zubizarreta argue that such phrases are “open” nominals that have not saturated their argument-variables within the DP. That is the reason why they cannot combine with appositive adjectives, since these adjectives are argued to be argument-taking predicates. Restrictive adjectives, however, do not take arguments and can therefore combine with “open” noun phrases. Following this line of reasoning, the generic use of weak definites and bare singulars is expected to allow restrictive adjectives as well. Let us first consider generic weak definites. In Dutch, it seems to be possible to express a generic sentence including a weak definite and an adjective: *MRI-scanners zijn veel gebruikte apparaten in het moderne ziekenhuis* ‘MRI-scanners are commonly used in the modern hospital’. In this sentence *het moderne ziekenhuis* ‘the modern hospital’ does not refer to a particular hospital, but rather refers to a particular *type* of hospital. In this sense, the noun phrase seems to receive the interpretation described by Vergnaud & Zubizarreta (1992:631): namely, the meaning of the restrictive adjective is compounded with that of the modified noun, so that a new denotatum is created. The possibility of this reading suggests that the assertion that weak definites necessarily lose their weak reading deserves some modification. It seems to be possible to modify a generic weak definite and still keep a generic reading, denoting subset of the noun’s reference.

Although it seems to be possible to combine a generically interpreted weak definite and a restrictive adjective, the majority of language in the sample do not allow adjectives at all. Again, the distinction between appositive and restrictive adjectives cannot account for the absence of adjectives in bare singulars. An exception is Norwegian. The Norwegian informant has indicated, as described in section 2.4.2, that some bare singulars in Norwegian can be modified by adjectives. The relevant examples from section 2.4.2, repeated here, illustrate the possibility of modified bare singulars.

- (59) Emma er i lukket fengsel.
 Emma is in closed prison
 ‘Emma is in closed prison.’

- (60) Emma bor i stort hus, så hun har plass til alle
 Emma lives in big house, so she has space to all
 bøk-ene sine
 book-the.pl refl.poss
 ‘Emma lives in a big house, so she has the space for all her books.’
- (61) Emma bor i gammelt hus, så hun bruker alle
 Emma lives in old house, so she uses all
 peng-ene sine på vedlikehold
 money-the.pl refl.poss on maintenance
 ‘Emma lives in an old house, so she uses all her money on maintenance.’

In these examples, there is no reference to specific prisons or houses, but to a type of prison (i.e. a high security prison) and to particular types of houses (i.e. having a lot of space and needing maintenance respectively). These interpretations seem to fit in Vergnaud & Zubizarreta’s (1992) analysis of restrictive adjectives; that is, the interpretations of the adjective and the noun are compounded. From the questionnaire it has not become clear whether Norwegian bare singulars allow appositive adjectives as well. Future research has to be done to find out whether there are restrictions on the type of adjectives that may modify bare singulars in Norwegian. At this point, it is not clear why Icelandic bare singulars do allow adjectives. This issue is also left for future work.

Syntactic Solutions

Although the distinction between appositive and restrictive adjectives can account for some of the data, this analysis does not have an explanation for the fact that bare singulars generally do not allow adjectives. Perhaps a more syntactic analysis is necessary to provide a solution to this problem. There are at least two possible solutions that solely rely on syntactic constraints. In the case of weak definites one could say that the adjective blocks the constitution of a CHAIN. However, CHAINs can be formed between two elements in a structure that are separated from each other by an intervening element. In a sentence like *There is a mouse on the mat* the expletive *there* and its associate *a mouse* are also separated from each other. However, there is no problem for *there* and *a mouse* to form a CHAIN. It would therefore be unsatisfactory to explain the obligatory referential meaning of modified weak definites on the basis of the inability to form a CHAIN. In the case of bare singulars it could be argued that the presence of an adjective blocks movement of the noun to the D-position.

As the adjectival structure includes a head that intervenes between the head N and the head D, one could argue that the noun may not skip the adjectival head when moving to D, due to the Head Movement Constraint (Travis 1984), which prohibits a moving head to skip a governing head. In section 3.3.3.1 it was argued that bare singulars may move to D in order to prevent a mass reading. It could be argued that the Head Movement Constraint prohibits the noun to move from N to D in the presence of an adjective.²⁵ However, the Head Movement Constraint does not seem to be the correct explanation for the absence of adjectives in bare singulars. Longobardi (1994:623,624) has argued that in the case of modified article-less proper names the noun must move to D, thereby skipping the adjectival head. In those cases the movement of N to D, crossing the adjective, does not cause any problems.

Presence of NumP

Finally, the presence of a functional projection that hosts number features may be regarded as an element that may influence the interpretation or grammaticality of modified weak definites and bare singulars. In the discussion about plurals and diminutives it was shown that number features play an important role in the interpretation of weak definites and bare singulars. From a theoretical point of view, it would thus be desirable to find a similar explanation for the effect of adjectives on weak definites and bare singulars.

In the previous sections we have seen that possible plural designation or the presence of a projection that hosts number features, requires an operator-variable structure. At first sight, it seems possible to give a similar explanation for adjectives causing weak definites to refer to particular objects and bare singular structures to become ungrammatical. Mardale (2008) supports this line of reasoning. He argues that “modification depends on a ‘rich’ functional structure, i.e., on the projection of D, among others” (Mardale 2008:11). This could mean that NumP also has to be present in the case of adjectives. There are different conceivable reasons for the presence of NumP (or a similar projection) in the structure of a modified noun.

First of all, it could be argued that number features are necessary to get a sensible interpretation for a modified noun. For intersective adjectives, for instance, it might be argued that it is necessary for a structure with an adjective to have an operator. Semantically, intersective adjectives compare

²⁵ Although Longobardi (2001) argues that there are types of different adjectives that appear in different locations in the syntactic structure, they are all situated between D and N (Longobardi 2001:597). This means that if a noun moves from N to D, it has to cross an adjectival head.

two sets of objects: namely, the set denoted by the adjective and the set denoted by the noun. The combination of an intersective adjective and a noun is interpreted as the intersection of the things denoted by the adjective and the objects denoted by the noun. One could argue that in order to define the sets denoted by the adjective and the noun, there must be information about the number of objects. This would imply that Div° (or NumP) is merged into the nominal structure, which means that there must be a denotational structure. However, this prediction is easily disproved. The following examples show that mass nouns, assumed to be discarded from a number projection (De Belder 2008), allow adjectives.

(62) I had **spicy chicken** yesterday.

(63) Ik hou van **rood vlees**.

I love red meat

‘I love red meat.’

The mass nouns *chicken* and *vlees* ‘meat’ in (62) and (63) do allow adjectives. The empty determiner that according to Longobardi (1994) introduces these nouns does not quantify over members of the extensions of the nouns, but rather over their subparts. Apparently, an adjective does not require a denotational structure. Next to intersective adjectives, there are other types of adjectives that can restrict the denotation of a noun. However, as the examples in (62) and (63) show, adjectives do not necessarily turn common nouns into individual objects. This kind of explanation cannot clarify why adjectives require a denotational structure.

A second possible explanation could be searched in a more syntactic angle. As mentioned above, Mardale argues that the presence of an adjective triggers the presence of a rich functional structure. Following this line of reasoning, it could be the case that the presence of an adjective directly triggers the use of a “real” article; that is, an article with semantic content. It could also be the case that an adjective somehow triggers the presence of NumP, that at his turn requires the use of an article that can constitute a denotational structure. At this point, it is not clear what precisely would trigger the use of an article that has semantic content.

In summary: Longobardi’s (1994) theory does not provide a straightforward explanation for the absence of adjectives in weak definites and bare singulars. Intuitively, I think that a syntactic analysis would be most adequate in explaining this phenomenon. We have seen that in many languages the

presence of an adjective triggers the use of an article. Bare singulars do not allow adjectives; they must be introduced by an article when they are modified. In languages with suffixed articles an adjective may trigger or requires a free-standing article. Perhaps another framework is able to deal with those facts. Exploring such possibilities lie behind the scope of this thesis, however.

3.3.4.4 *Longobardi and Contracted Forms in German*

Section 3.3.1 illustrated that contracted forms of prepositions and articles in German always result in a weak reading for the noun. I assume with Hinrichs (1984) that contraction in German is a syntactic process.²⁶ Given the fact that Longobardi (1994) considers expletive articles to be structurally different from “regular” articles, there might be an explanation for the fact that contracted forms are weak, whereas non-contracted forms are not (in cases in which contraction is possible). Since expletive articles and genuine definite articles have a different status, they could behave differently with respect to syntactic processes. In the case of weak definites Longobardi could argue that only expletive articles may contract. He could further argue that a non-contracted article is necessarily an operator with content. That is the reason why a non-contracted article always refers to a uniquely identifiable referent, and cannot be used without context. These considerations cannot be further supported by empirical evidence at this point, but are an interesting issue for future research. It is clear that Longobardi could deal with the distinct interpretations of contracted and non-contracted forms.

3.3.4.5 *Longobardi and Double Definiteness in Norwegian*

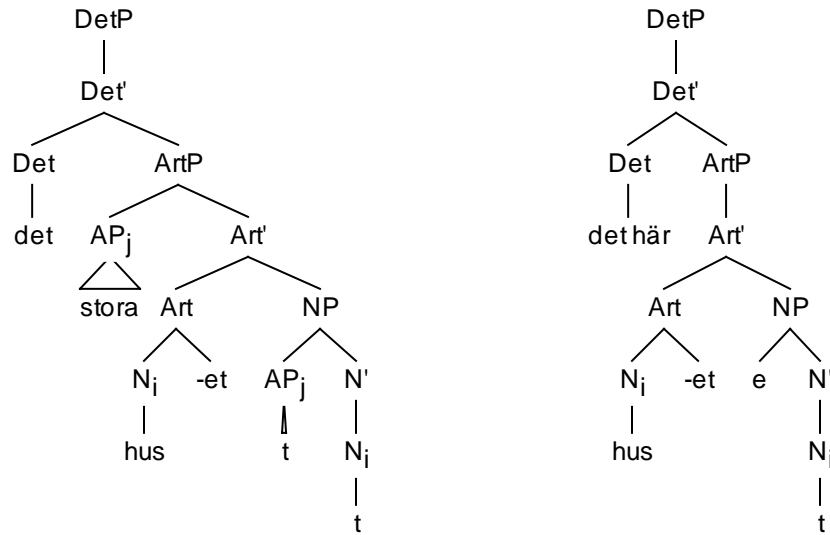
In section 1.3.1 the double definiteness construction in Norwegian was introduced. In Norwegian (and Swedish) noun phrases can include two definite articles. In noun phrases that include an AP or that include an idiomatic article *den här/den där* ‘the-here/the-there’ there are two definite articles. The structural representations according to Delsing (1988) are as follows.²⁷

²⁶ Hinrichs (1984) provides four arguments against a phonological treatment of preposition-noun contraction. First of all, a phonological account presupposes the process of phonological weakening, in which a morpheme is weakened step by step. Hinrichs (1984:128) argues that the penultimate step before reaching the contracted form in the process is ill-formed. This gap is highly unexpected. Secondly, the interpretation of a contracted article is in many cases different from its non-contracted counterpart and the other way around. A phonological account cannot explain these systematic differences. Moreover, the use of contracted forms is not always optional. In most idioms, for instance, the article has to contract with the preposition. Finally, the use of contracted forms is obligatory in certain syntactic environments, while it is prohibited in others. For these reasons, a morpho-syntactic account is necessary.

²⁷ Delsing (1988:64) assumes that adjectives are base-generated in spec,NP, contrarily to the assumption followed in this thesis, i.e. the adjectival phrase is adjoined to NP. Since the noun moves to Art, the word order of this phrase forces the adjective to move as well. Delsing (1988:64) suggests that it moves to spec,ArtP.

(64) a. *det stora huset* ‘the big house-the’

b. *det här huset* ‘the-here house-the’



The double definiteness phenomenon in Scandinavian languages (among other languages) leads Delsing to conclude that there must be at least three head positions in the nominal phrase in these languages. He proposes that these heads must be N, Art (which hosts articles) and Det (which determines the definiteness of a noun phrase). This conclusion can be drawn from the following paradigm that Delsing (1988:70) sketches for definite noun phrases.

- (65) $[\text{Det}' \text{ huset}_i [\text{ArtP} \text{ e} [\text{Art}' \text{ t}_i [\text{NP} \text{ e} [\text{N}' \text{ t}_i]]]]]]$
 $[\text{Det}' \text{ det} [\text{ArtP} \text{ stora}_j [\text{Art}' \text{ huset}_i [\text{NP} \text{ t}_j [\text{N}' \text{ t}_i]]]]]]$
 $[\text{Det}' \text{ detta}_i [\text{ArtP} \text{ stora}_j [\text{Art}' \text{ t}_i [\text{NP} \text{ t}_j [\text{N}' \text{ hus}]]]]]]$

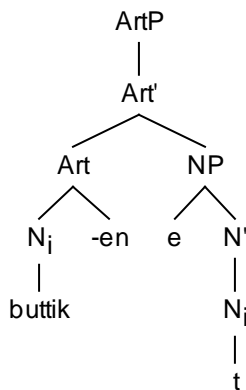
In the first structure the noun first moves to Art to attach to the definite article *-et*. Subsequently, the complex structure of the noun and the suffixed article moves to Det to receive a definite interpretation. The second structure shows that pronominal articles are base-generated in Det. Because they are generated there, the structure automatically becomes definite due to a filled Det. Further, demonstratives and possessives originate in Art, but move to Det subsequently in order to get the definite meaning.

In order to account for the double definiteness phenomenon, it is necessary to have two positions in the nominal structure for articles. In Longobardi (1994) there is no straightforward solution for the

double occurrence of articles within one noun phrase. Only the D-position can host an article. In Longobardi's (1994) analysis.²⁸ Delsing's (1988) analysis has some advantages over Longobardi's (1994) analysis with respect to this issue.

Delsing (1988) provides an interesting perspective on weak definites. Delsing (1988:58) argues that "the definiteness of the noun is independent of the definiteness of the noun phrase." This means that nouns may not be marked for definiteness (i.e. they do not have a suffixed definite article), while the noun phrase as a whole has a definite referring interpretation. According to Delsing (1988:58), in such cases a noun thus has different features (indefinite) than the whole noun phrase (definite). This pattern is illustrated by possessives (*mitt stora hus* 'my big house' versus **mitt stora huset* 'my big house-the'), in which the noun cannot have a suffixed definite article, but the interpretation of the whole noun phrase is definite. Since the definiteness of the noun is independent of the noun phrase, the opposite situation could exist as well; in other words, with this assumption Delsing (1988) predicts that there might also be indefinite noun phrases in which the noun is marked as definite. Perhaps this situation applies to weak definites in Norwegian. According to Delsing (1988:69) ArtPs are generally indefinites. Indefinites thus do not project Det (cf. (65)). This analysis leaves open the possibility to analyze weak definites as follows.

(66) *butikk-en* 'store-the'



²⁸ In later work, Longobardi (2001) comes up with a possible analysis. Longobardi (2001:587,588) argues that the suffixed article cannot occupy the D-position. He further suggests that the suffixed article in Scandinavian languages is not a real enclitic article. Because the suffixed article is always lower than all adjectives and immediately to the left of a position for Genitive Case, Longobardi (2001:587) proposes that the suffixed article has to be in a projection between AP and the projection in which the Genitive Case is hosted.

In this case the whole NP is interpreted indefinitely (or non-definitely). However, the noun is marked for definiteness. Because there is no Det-projection, the noun phrase is not interpreted as a definite. In this sense the definite article has a “weak” reference. The proposal that the definite article does not move to Det, predicts that the noun phrase is not interpreted as a definite.

The proposal that a suffixed article does not turn a noun phrase into a definite noun phrase is supported by the different interpretations for structures with only a suffixed definite article on the one hand, and double definite constructions on the other.

(67) Han går i kirke-n
he goes to church-the
'He regularly goes to church.'

(68) Han går i den kirke-n
he goes to the church-the
'He regularly goes to that church.'

In (67) the noun with the attached definite article has a weak reading. There is no specific church involved in this sentence. In (68), however, the weak interpretation is lost because of *den* ‘the’. Rather, the noun phrase has a demonstrative interpretation in this case.

These facts are hard to capture in Longobardi (1994). Although Longobardi can make use of the notion *expletive article* to account for non-specific definite articles, he has no explanation for the fact that the article is suffixed to the noun. In Longobardi’s analysis, expletive articles are only used to fill the D-position and thus only appear in the D-position. It is not clear how an expletive article can end up suffixed to the noun. One could argue that the noun moves to D in order to attach to the article suffix, but this analysis cannot be correct. In Scandinavian languages, a noun with a suffixed article always appears after the adjective, if present. Therefore, the suffixed article must be generated lower than the position where adjectives are generated. If one argues that the noun needs to move to D in order to pick up the article suffix, it is impossible to get the correct order of noun and adjective. Moreover, in Longobardi’s (1994) analysis there is no space for two articles, hence Longobardi cannot analyze double definite constructions in Scandinavian languages. As explained above, an analysis along the lines of Delsing (1988) can account for the Norwegian facts. He could argue that

the structure in (67) is an ArtP, which implies that the structure cannot be definite due to the lack of Det. However, (68) has a definite interpretation, because Det is filled.

3.4 Summary and Evaluation

This chapter discussed the possible explanations for the interpretations and the syntactic behavior of weak definites and bare singulars from Longobardi's (1994) perspective. The three possible interpretations observed for weak definites and bare singulars naturally follow from Longobardi's theory. Weak definites can be interpreted generically, specifically or predicatively. The generic and specific interpretations are obtained by interpreting the noun in N and in D respectively. In the case of weak definites this means that a generic interpretation is achieved by inserting an expletive article that serves as an introducing category for N, and that for a specific interpretation an expletive article constitutes a CHAIN with the noun, so that the noun can be interpreted in D. In the case of bare singulars the noun moves to D for both the generic and the specific reading. The different interpretations can be accounted for by assuming that for the generic interpretation, the noun is interpreted in N, and for the specific interpretation the noun is interpreted in D. The interpretation that resembles an indefinite reading can be explained as the noun being a predicate of P both in weak definites and bare singulars.

The restrictions on plurals and diminutives also naturally follow from Longobardi's analysis. Since in both structures the number features are necessarily present, a quantificational interpretation is required, which can only be achieved by a denotational structure with an operator with semantic content. However, abstracting away from the Icelandic and Norwegian cases for the moment, there is no satisfactory explanation for the absence of adjectives in weak definites and bare singulars. Moreover, Longobardi cannot satisfactorily explain the possibility of having two articles within one noun phrase in Norwegian.

Longobardi (1994) considers articles to be intrinsically referential elements. In other words, if a noun phrase contains a definite article, it refers to a particular object. Weak definites pose a problem for Longobardi, because they are introduced by a definite article, but do not refer to a specific object.²⁹ Longobardi can solve this problem by introducing the notion *expletive article*. On the

²⁹ Note that in section 3.3.3.2 it is argued that weak definites can in some way refer to a particular object, in which the weak definite is related to a participant in the discourse: the familiarity reading. However, the specific reference is established in another way than is the case with non-weak definites. In this sense, weak definites do not refer to specific objects by themselves. A conventional implicature takes care of the reference in these cases.

basis of English, this might seem an ad-hoc solution, but Longobardi shows that there are languages (Catalan and a variety of Frisian) that have two morphologically different articles: one is used to introduce proper names; the other is used in all other circumstances (Longobardi 1994:656). There thus seems to be empirical evidence for the existence of expletive articles. Moreover, the notion *expletive article* might be useful in explaining the interpretation contrasts in German observed between contracted and non-contracted forms.

Conceptually, Longobardi provides an attractive theory. Within the Government & Binding theory, Longobardi makes use of already existing principles in this theory for a great deal. He does not have to make many extra assumptions to account for the distinction between generic and specific readings. With a minimal nominal structure, he can account for these readings; that is, he can account for the interpretation of generics and proper names, as well as for the interpretations of weak definites and bare singulars. In other words, the D-projection and the N-projection are sufficient to derive the different interpretations. Longobardi has to make the assumption that empty determiners exist, but there is good evidence that they indeed exist. According to Longobardi (2001:591) “the supposed empty determiners display some properties often attributed to empty categories in general.” I will not go into these properties now, but refer the reader to Longobardi (2001:590,591).

Although Longobardi proposes a conceptually attractive theory, there are some empirical shortcomings. As stated above, Longobardi does not have a satisfactory answer for the absence of adjectives in weak definites and bare singulars. Moreover, the possibility of a double definiteness construction is hard to implement in Longobardi’s analysis.

Even though I argued that Longobardi’s theory is conceptually attractive, there are more possible theories that could perhaps satisfactorily explain the data discussed in this thesis and that are perhaps advantageous over Longobardi’s approach. I think that an advantageous theory should consider articles as elements that are not intrinsically referential. In this thesis we have seen that there is no one-to-one relation between the presence or absence of articles and interpretations of noun phrases. Stvan (2007:183) supports this observation, arguing that the presence of an article alone does not determine the function of a noun phrase. In this thesis we have seen that definite articles, which are generally assumed to have a unique reference, sometimes behave in non-referential way. On the other hand, there are structures that do not have a definite article, but that can receive a specific interpretation. In Stvan (2007) and in the discussion about the possible interpretations of bare singulars in section 3.3.3, it has been shown that some bare singulars can receive a specific interpretation. Moreover, Romanian data (Mardale 2008) show that noun phrases without a definite

article can be interpreted as definites. These observations show that articles do not determine the definiteness of a noun phrase. Conceptually, it might therefore be more attractive to have a theory in which the definite status of noun phrases is derived in syntax, rather than assuming that given elements are already determined to be referential or non-referential before entering a syntactic structure. This approach to articles resembles Borer's (2005) analysis of mass and count noun. These readings are derived in syntax according to Borer (2005). An analysis for the definiteness of noun phrases along these lines definiteness is determined by a position in the syntactic structure (probably D). Such an analysis can straightforwardly account for different uses of a definite determiner. One does not have to assume that there are different types of definite articles by definition. Rather, their referential properties can be derived in syntax. Such an analysis allows a more flexible treatment of articles and their interpretations. In other words, no extra assumptions need to be made in order to account for the weak reading of some definite articles or for a definite reading without a definite article. However, a theory like that requires a position lower than D that can host articles. In this position articles do not have a referential interpretation yet. An article position between D and N could account for a definite article that has a weakly referential meaning. Furthermore, such a position seems necessary to account for the empirical observation that noun phrases may have two articles in some languages.

In summary: Longobardi's theory is not completely descriptively adequate. It cannot account for the absence of adjectives in weak definites and bare singulars and for double definiteness constructions. Although Longobardi's theory is conceptually attractive, a theory that does not treat articles as intrinsically referential elements is probably advantageous over Longobardi's approach.

4. Alternative Approaches

The previous chapter extensively discussed Longobardi's (1994) analysis of noun phrases. This section briefly discusses two other types of theories that can probably shed light on the structure of weak definites and bare singulars as well. I will not elaborate on these theories, but I summarize their most important properties and explain how they can provide interesting views on the syntax of weak definites and bare singulars.

4.1 A Bare Phrase Structure Approach

Giusti (2002) approaches the syntax of noun phrases with a bare phrase structure approach. A central assumption in her theory is that the realization of a functional head is a last resort procedure, which means that a functional head may only be realized if it can eliminate [-interpretable] formal features (Hornstein, Nunes & Grohmann 2005:293). Functional projections are thus only merged when they are necessary. In Giusti's approach, articles are not inherently referential. She argues that they become referential once they are moved to the highest functional projection in the nominal domain. With Campbell, Giusti (2002) assumes that noun phrases contain an invisible specificity operator. Giusti's underlying assumption is that the article itself does not have referential properties. Giusti (2002:56) argues that the apparent effects of referential properties of the articles can be derived by assuming that there is an empty operator which functions like a demonstrative and is in the same position as a demonstrative when the definite article is in F^{max} (i.e. D).

In Section 3.4 it has been argued that the presence of an article is neither a sufficient nor a necessary condition for a noun phrase to be referential. In Giusti's (2002) approach to noun phrases it is possible to account for these facts. Since definite articles are not inherently referential in her theory, but become referential by means of movement to the highest spec-position in the noun phrase, it is possible to interpret them as "weak definite articles" when they are relatively low in the structure. On the other hand it is perhaps possible to argue that a noun phrase without an article receives a specific interpretation, because it has moved to the highest spec-position. Giusti's (2002) approach thus provides options to analyze articles as elements that receive their referential properties during the syntactic derivation, which is probably very useful in analyzing weak definites and bare singulars.

4.2 Relational Determiners

Another theory that treats articles as being not inherently referential is proposed by Larson (1991). Larson provides a syntactic of noun phrases that heavily relies on the semantics of determiners. In Larson's approach determiners are elements that establish relationships between predicate meanings. Larson compares their function to that of verbs. Determiners are predicates that take arguments. Since determiners express quantification according to Larson (1991:7), their semantic roles are stated in terms of restriction and scope. "Semantically, the restriction sets the domain of quantification, whereas the scope determines what is true of those individuals" (Larson 1991:7). Syntactically, the

the particular nouns that are realized either as a weak definite or as a bare singular. In other words, in some languages a certain noun is realized as a weak definite, while it is realized as a bare singular in other languages. Languages that do not have many bare singulars, may allow some nouns to be realized as a bare singular, while this set of bare singulars may not be a subset of the bare singulars that are realized in a language that allows many bare singulars.

Another topic investigated in this study is the question what determines the presence or absence of an article in weakly referential phrases. Longobardi's (1994) analysis provides an answer to this question. Longobardi argues that the D-projection of a noun phrase may not be empty, unless the noun included in the structure is a mass noun or a plural. Since the weak definites in this study are neither mass nouns nor plurals, the D-position has to be filled. Following Longobardi's lines of reasoning, it can be concluded that there are two ways to fill the D-position: namely, either by moving the noun to D or by inserting an expletive article in D. Both strategies result in the same possible interpretations. This conclusion matches the proposal that weak definites and bare singulars receive the same interpretation. However, Longobardi's analysis cannot explain why a certain noun in a given language is introduced by an expletive article, but cannot be moved from N to D. Perhaps there is no deep explanation for this fact. The discussion about the syntactic notions of plurals, diminutives and adjectives has further shown that these elements in many cases require the presence of a "real" definite article.

This study was finally concerned with the question why definite articles sometimes behave in a non-referential way. Longobardi assumes that definite articles normally have a unique reference. Because there seem to be instances of definite articles that contradict this general use, he introduces the notion *expletive article*. Within this framework, the definite article that introduces weak definites probably is an expletive article. It can be an expletive article, because it can either function as an introducing category for N or constitute a CHAIN with a noun that directly refers to an object in the world. Under these circumstances, the expletive article can be used, exhibiting a non-referential interpretation.

As described above, Longobardi's theory is not completely descriptively adequate, as it cannot account for the absence of adjectives in weak definites and bare singulars and for double definiteness constructions. Although Longobardi's theory is conceptually attractive, a theory that does not treat articles as intrinsically referential elements is probably advantageous over Longobardi's approach.

This study was a first attempt to give an overview of possible structures of weak definites and bare singulars in different languages. There are several issues that can be further explored in order to get a more complete picture of this phenomenon. Firstly, the different variables in this study can all be extended. In addition, alternative approaches may provide useful insights into this phenomenon. Finally, other types of weak definites and bare singulars are necessary in order to find validation for the conclusions drawn in this thesis.

Internal Syntax

This thesis focussed on the internal syntax of weak definites and bare singulars. This was done by investigating the effects of plural morphology, diminutives and adjectives on the interpretation and grammaticality of these phrases. There are other syntactic tests that can be used to examine the internal syntax of noun phrases, among which the process of coordination. Although this topic was included in the questionnaires, it has not been covered in this thesis due to reasons of space and time. The results of the questionnaires showed that coordination of weak definites and bare singulars is problematic in most cases. The informants made all possible combinations (if applicable³⁰), and in the majority of cases the result was ungrammatical.

- | | | | | | | | |
|-----|-----|----|------|------------|-----|------------|---------------------------------|
| (1) | Ik | ga | naar | de winkel | en | de kerk | (weak definite – weak definite) |
| | I | go | to | the store | and | the church | |
| (2) | *Ik | ga | naar | school | en | kantoor | (bare singular – bare singular) |
| | I | go | to | school | and | office | |
| (3) | *Ik | ga | naar | school | en | de kerk | (bare singular – weak definite) |
| | I | go | to | school | and | the church | |
| (4) | *Ik | ga | naar | de kerk | en | school | (weak definite – bare singular) |
| | I | go | to | the church | and | school | |

In some of the languages it is possible to coordinate two weak definites, as in (1). However, this is not the case for every language. All the other conceivable combinations are either ungrammatical in the majority of languages, or are highly questionable. Almost all the informants indicated that the

³⁰ Some languages, like French and German have very few bare singulars in the locative PP class. In those languages it is thus impossible to coordinate two bare singulars, since French only has one bare singular in this class. Although German has two bare singulars, coordination was impossible, because the bare singulars are governed by different prepositions.

coordinated structures become grammatical once the preposition is repeated before the second noun, as the Italian contrast between (5) and (6) illustrates.

- (5) *Gianni va in chiesa e ufficio (bare singular – bare singular)
 John goes to church and office
- (6) Gianni va in chiesa e in ufficio
 John goes to church and to office
 ‘John goes to church and to office.’

These facts about coordination indicate that it is difficult to coordinate within the nominal structure. Weak definites and bare singulars can only be coordinated on the level of their governing preposition. The only exception, in some languages, is the coordination of two weak definites. In future work the coordination facts could be used to find out more properties of the internal syntax of weak definites and bare singulars. Future work could focus on finding an explanation for the fact that it is difficult to coordinate these phrases at the level of DP or another level within DP.

External Syntax

Another interesting contribution to this study would be the study of the external syntax of weak definites and bare singulars. Tests involving anaphoric relations and scrambling can provide information about weak definites and bare singulars that allows us to compare the syntactic behavior of these phrases with other kinds of noun phrases. This information can be used to determine whether weak definites and bare singulars should receive a different structure than other noun phrases. The following examples suggest that syntactic processes applied to weak definites or bare singulars affect their interpretation and grammaticality.

- (7) Jan moet de gevangenis in
 John must the prison in
 ‘John must go into prison.’
- (8) *Jan gaat vanavond op tijd bed in
 John goes tonight on time bed in
 Intended meaning: ‘John will go to bed on time tonight.’

These examples show that syntax plays an important role in weak definites and bare singulars.³¹ Apparently, it matters whether the noun is preceded or followed by the adposition. Preposition stranding in English also suggests that movement of a weak definite causes the weak definite to lose its weak reading (9). Moving a bare singular out of a PP is ungrammatical (10).

(9) The store_i you should go to t_i.

→ refers to a particular store

(10) *Sea_i where the ship is at t_i

Additional Data

As this study was a first attempt to describe weak definites and bare singulars across languages, more research is necessary to establish the conclusions drawn in this thesis. First of all, intuitions from a larger group of speakers per language are required to make more robust claims about the data discussed in Chapter 2. Next to the number of informants, the number of languages may also be extended. An interesting language that can provide information about possible locations for articles in nominal structures is Bulgarian. Like Norwegian and Icelandic, Bulgarian has a suffixed article (Scatton 1984). The Bulgarian definite article appears on the first fully stressed element of a noun phrase: on the noun, the adjective, the possessive, but not on adverbs (Scatton 1984:314). The examples in (11) show this pattern (Scatton 1984:164).

- (11) a. kniga-ta
book-the
'the book'
- b. xubava-ta kniga
nice-the book
'the nice book'
- c. moja-ta xubava kniga
my-the nice book
'my nice book'

³¹ Koopman (1997) argues that postpositions in Dutch are a derived form. Prepositions precede their noun phrase complement in their basic position and the noun-preposition order is derived from this basic form by moving the noun across the preposition.

Because of its various possible positions in a structure, the Bulgarian definite article could also provide interesting information about possible loci for a definite article.

This study examined languages that have articles. Additional data from languages that do not display articles at all will bring an interesting dimension into the discussion. Bare singulars should be analyzed as DPs according to Longobardi (1994). For article-less languages the question arises whether their noun phrases should have a D-projection, or not.³² The facts discussed in this paper, combined with data from article-less languages could contribute to this investigation.

Another domain that may provide an interesting perspective on this phenomenon is micro-variation. Varieties of Dutch may realize weakly referential phrases differently than Dutch. This type of data can provide information about what kind of variation is possible and whether variation within Dutch resembles variation across borders.

Alternative Approaches

As the discussion of alternative approaches already suggests, it will be fruitful to study the data discussed in this thesis from different perspectives. Other frameworks can shed light on the properties of weak definites and bare singulars along the lines that are discussed in Chapter 4.

Other Types of Weak Definites and Bare Singulars

Finally, it would be great if an analysis provided for the weak definites and bare singulars examined in this thesis (i.e. weak definites and bare singulars occurring in locative PPs), could be extended to other types of weak definites and bare singulars: for instance, to weakly referential phrases that occur outside PPs (*to read the newspaper*); to prepositional weakly referential phrases that do not refer to locations (*to listen to the radio*); to Spanish bare singular constructions with ‘have’-predicates (*encontramos taxi* ‘we found a taxi’). Future research could focus on these types of weakly referential phrases aiming to find similarities among those phrases. A unified analysis that can account for the presence or absence of an article and the “weak” reading of these phrases is desirable.

³² Bošković (2008) argues that noun phrases in article-less languages are NPs, and thus do not project D-projections. Bošković’s analysis allows him to account for the existence of certain phenomena in article-less languages, such as left-branch extraction, adjunct extraction from NPs, scrambling, among others.

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Appendix I – Example of Questionnaire

Bare Singulars and Weak Definites in Norwegian Questionnaire

Introduction

Normally, nouns are accompanied by an article in English. However, under certain conditions singular count nouns can appear without an article. For example:

- 1) Tom goes to school
- 2) The sailors are still at sea
- 3) Max is in town this afternoon

Because in these phrases the article is omitted, we call them bare nouns.

Further, sometimes definite articles in English do not refer to a uniquely identifiable object (as they normally do). For that reason they are called ‘weak definites’. For example:

- 4) Mary goes to the hospital
- 5) Sam is going to the church
- 6) John is going to the store

There seems to be a relation between bare nouns and weak definites. First of all, both types of constructions seem to be weakly referential. In other words, they do not seem to refer to unique entities. Secondly, there is variation across languages with regard to these constructions. Corresponding nouns can be a bare noun in one language, while a weak definite in another. For instance, *to play the piano* is a weak definite in English, while *å spille piano* is a bare noun in Norwegian.

To find out what the properties of these phrases are, I am investigating these types of constructions in different languages. I am particularly interested in locative prepositional phrases, since this type of construction allows the most variation across languages with respect to the presence/absence of the article. I would like to ask you to fill in this questionnaire for Norwegian.

Instructions

This questionnaire is built around a set of English bare nouns and weak definites. The questionnaire mostly consists of translation tasks. In the first task I ask you to translate simple sentences containing weak definites and bare singulars. After that, there will be some more specific tasks involving some syntactic tests and there will be some additional questions about definite articles and adjectives in Norwegian. Every question is introduced by an explanation of the phenomenon and examples in English or Dutch.

I would like to ask you if you could gloss the Norwegian translations. For instance: indicate definite suffixes, definite/indefinite articles and agreement on adjectives, plural morphology, etc.

At the end of the questionnaire there is space for comments. If there are additional constructions that did not come up in the questionnaire, but of which you think that they might be relevant, you can put them there as well.

Questions

I. Translations

Could you translate the following sentences into Norwegian? Could you keep the following things in mind:

- i. What I would like to find out in this task is how the following phrases are expressed in Norwegian: by a weak definite (wdef) or a bare singular (bs). So please don't give a literal translation of the English phrases, but indicate how these phrases are expressed in Norwegian (e.g. as wdef or bs).
- ii. If Norwegian uses another preposition for a certain noun than a corresponding noun in English, please use the suitable Norwegian preposition.
- iii. Could you indicate in the last column whether a translation in Norwegian has a weak reading (e.g. whether it does not seem to refer to a unique/familiar object)? You can test this in several ways, for instance:
 - a. Is the sentence felicitous when expressed out of the blue? If yes, then the relevant noun probably has a weak reading
 - b. With a VP-ellipsis test, for example: "John is going to the hospital, and Mary too." If a sloppy reading is allowed (e.g. John and Mary visited different hospitals), then the relevant noun is weak.

	English Phrase (wdef or bs)	Translation	Weak y/n
1	John goes to <i>the hospital</i>		
2	Mary goes to <i>the store</i>		
3	Max goes to <i>the cinema</i>		
4	Bob is going <i>to town/is in town</i>		
5	Emma is <i>in jail/must go to jail</i>		
6	William is going <i>to the church</i>		
7	Lilly needs to go to <i>the toilet</i>		
8	Emily went to <i>the supermarket</i>		
9	Jack is going to <i>the pub</i>		
10	Andrew is going <i>home/is at home</i>		
11	Sofie is going to <i>school/ is at school</i>		
12	Lucy is going to <i>the office/is at the office</i>		
13	Samuel is <i>in/out of bed/is going to bed</i>		
14	Eva knows how to survive on <i>the street</i>		
15	Thomas is <i>at sea</i>		
16	A lot of community takes place at <i>table</i>		
17	Joe goes to/is in <i>kindergarten</i>		
18	Austin is <i>in/out of/comes from/goes to prison</i>		
19	The CD was recorded in <i>studio</i>		
20	Sarah is going to/is in <i>synagogue</i>		
21	Daniel is going to <i>temple</i>		

In a Norwegian grammar I read about the double definiteness phenomenon in Norwegian. Do I understand it correctly that normally definite articles are suffixed to the noun? And when there is an adjective, then an additional, "free-standing" article is required? If this is correct, do all the weak definites in the table above appear with a

suffixed article? Or is there a possibility of only having a free-standing article or a double definiteness construction?

In the remainder of this questionnaire I ask questions about weak definites and bare singulars. However, I think there are not so many bare singulars (at least not in the class of locative PPs) in Norwegian. So if it turns out that the list above only contains Norwegian weak definites, then you can ignore the questions about bare singulars.

II. Diminutives

In Dutch, diminutives are formed with a suffix. When a diminutive is added to a bare noun, the phrase becomes ungrammatical:

- 7) *Jan gaat naar *school-tje*
John goes to school-DIM

When a diminutive follows a weak definite, the weak definite loses its weak reading and becomes referential:

- 8) Jan ging naar *het ziekenhuis-je* en Marie ook
John went to the hospital-DIM and Mary too
→ must be the same hospital

Does Norwegian have a diminutive suffix as well? If so, could you give some examples as in (7) and (8) for Norwegian and explain whether bare nouns allow diminutives and indicate whether the weak definite loses its weak reading when a diminutive is added to the noun? This can be checked to make a coordinated sentence like the English “and Mary did too”.

III. Modification

Modification has the same effect as diminutives have on bare nouns and weak definites. Bare nouns normally do not allow modification (although it is required in some phrases), or at least modification is very restricted.

- 9) *John goes to old *prison*

When a weak definite is modified by an adjective, it loses its weak reading:

- 10) John went to *the old hospital* and Mary too
→ must be the same hospital

Do bare singulars allow adjectives? Is it possible to have an adjective without a definite article? And is it possible, in this case, to have only a free-standing definite article, an adjective and a “bare singular” (that is then not bare anymore) in Norwegian? So schematically:

11) def-article adjective bare singular

And what about weak definites? When an adjective precedes a weak definite, does the free-standing article then automatically appear? What kind of agreement does it get, indefinite or definite? And does the weak definite lose its weak reading?

IV. Plurals

Do bare singulars allow plural morphology? In English, this is not the case:

12) *Matthew is going to *beds*

13) *Sofie is going to *schools*

Weak definites do allow plural morphology, but they lose their weak reading when pluralized:

14) Jonathan is going to *the churches*

→ must be different churches

15) Lucy is going to *the hospitals*

→ must be different hospitals

Do Norwegian bare singulars allow plural morphology? Can you give some examples? And what happens if plural morphology is added to weak definites? Does the weak reading disappear? Could you give some examples?

V. Postpositions

In Dutch it is possible in some cases to appear after the noun (in directional PPs).

16) Jan gaat het bos in
 John goes the woods in
 'John goes into the woods'

This kind of construction seems to be possible with weak definites in Dutch as well:

17) Jan moet *de gevangenis* in
 John must the prison in
 'John has to go into prison'

However, this construction is not possible with bare nouns:

18) *Jan gaat vanavond op tijd *bed* in
 John goes tonight on time bed in

Does Norwegian allow post-nominal “prepositions” as well? Could you indicate whether such a construction is possible with weak definites and bare singulars or not? Could you give some examples (also, if that is the case, of ungrammatical sentences)?

VI. Interpretation

Some English bare singulars allow bound variable readings, as the following sentences indicate:

- 19) Everybody goes *home*
→ everybody goes to his own home
20) Everybody is at *school*
→ everybody is at his own school

Do you have similar examples in Norwegian? If so, could you give examples and indicate the interpretation?

VII. Coordination

In Dutch, it is possible to coordinate two weak definites, but it is impossible to coordinate two bare singulars or a bare singular and a weak definite, as the following sentences indicate:

- | | | | | | | | |
|---|----|-------|------------------|-----|------------------|------|------|
| 21)Ik | ga | [naar | <i>de winkel</i> | en | <i>de kerk</i>] | WDef | WDef |
| I | go | to | the store | and | the church | | |
| 'I'm going to the store and the church' | | | | | | | |
| 22)*Ik | ga | [naar | <i>school</i> | en | <i>kantoor</i>] | BS | BS |
| I | go | to | school | and | office | | |
| 'I'm going to school and office' | | | | | | | |
| 23)*Ik | ga | [naar | <i>school</i> | en | <i>de kerk</i>] | BS | WDef |
| I | go | to | school | and | the church | | |
| 'I'm going to school and the church' | | | | | | | |
| 24)*Ik | ga | [naar | <i>de kerk</i> | en | <i>school</i>] | WDef | BS |
| I | go | to | the church | and | school | | |
| 'I'm going to the church and school' | | | | | | | |

Could you construe sentences in Norwegian of this kind? So, if possible, look for weak definites and bare singulars that occur with the same preposition and coordinate them. Are such constructions possible in Norwegian or not?

VIII. Comments

If you feel that there are interesting constructions that might be relevant for this topic, but did not come up in this questionnaire, please feel free to discuss them here.

Thank you very much for your help!