ACCESSIBILITY THEORY AND THE ISSUE OF TWO DEFINITE CONSTRUCTIONS IN SWEDISH: A COMPETITION HYPOTHESIS

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ABSTRACT

The present thesis is concerned with the difference between two definite marking strategies in Swedish: the double definite construction and the suffixed definite article construction. By means of a distributional analysis of adjectivally modified definite noun phrases, it will be shown that the two constructions do not differ from each other in overall degree of Accessibility (Ariel 1988, 1991). The distributional analysis of the factor of Competition brings to light a clear distinction between the two definite constructions. The double definite construction is strongly preferred over the suffixed definite article construction in contexts where the noun is modified by more than one information piece. Based on this, a Competition Hypothesis is formulated. The basic formulation of this hypothesis is that the double definite construction in Swedish signals that there is competition on the role of antecedent, while the suffixed definite article construction lacks this function.

1. INTRODUCTION

Swedish and the other Scandinavian languages have multiple constructions to mark definiteness on a noun phrase.¹ In fact, the Swedish language contains three distinct strategies to do this. Firstly, definiteness can be marked by a means of a definite article that is suffixed to the noun. The second way to mark definiteness is by using a free standing definite article in noun phrase initial position. Thirdly, the two markers can be combined, which yields the double definite construction². These three constructions are presented in (1).

(1a) Suffixed definite article construction: (ADJ_(weak)*) N-DEF

(1b) Free definite article construction: DEF $(ADJ_{(weak)}^*) N$

(1c) Double definite construction: DEF (ADJ_(weak)*) N-DEF

The Swedish free definite article can take three forms, depending on the gender and the number of the noun it is associated with: *den* for common nouns in the singular, *det* when the noun is neuter singular, and *de* (pronounced and sometimes written as *dom*) for plural nouns of both genders. It is important to note that adjectives behave differently in definite constructions than in indefinite ones; in indefinite constructions, adjectives are inflected for gender and number, while in definite constructions most adjectives receive a weak ending on -a, which is homophonous to the plural marker. However, not all adjectives receive this ending in definite constructions. Amongst these are superlatives, comparatives, and adjectives that cannot be inflected. Furthermore, certain masculine nouns can occur with an adjective on -e in definite noun phrases (Holmes & Hinchliffe 1997: 61).

The suffixed definite article, like the free definite article is inflected for gender and number. The noun occurs with a suffixed -(e)n when it is a definite singular common noun or when the noun is a neuter plural of the fifth declension. The suffix has the form -(e)t when it is attached to a neuter singular noun. Definite plurals, with the exception of the fifth declension neuter nouns, occur with the definite suffix in the form of -(n)a. In table 1.1 examples of each of the five nominal declensions are presented in their indefinite and definite forms.

Note that not all Scandinavian languages exhibit the same patterns as Swedish. Danish lacks the double definite

construction, and so do some varieties of Norwegian.

² Also called: double determinative/determination, double articulation, over-determination 'overbestämdhet'

	Declension	Indefinite	Indefinite	Definite	Definite
		singular	plural	singular	plural
Common	1	(en) ros	rosor	ros en	rosor na
nouns	2	(en) värld	världar	värld en	världar na
	3	(en) studie	studier	studie n	studier na
Neuter	4	(ett) hjärta	hjärtan	hjärta t	hjärtan a
nouns	5	(ett) barn	barn	barn et	barn en

Table 1.1: The five declensions in Swedish

The definites in table 1.1 above are marked by means of a suffix, which is the unmarked strategy to mark definiteness on bare noun phrases. When a noun phrase contains an adjectival modifier, the double marking of definiteness is said to be the unmarked strategy (Delsing 1988, Bohnacker 1997, amongst others). However, all three constructions presented in (1) are fairly frequently attested, although the definite construction lacking the suffixed marker is significantly less frequently used than the other two³. The three constructions are exemplified in (2). The suffixed definite article construction (henceforth: *SDA-construction*) is presented in (2a), the free definite article construction (*FDA-construction*) in (2b), and the double definite construction (*DD-construction*) in (2c).

(2a)	(stor-a	()	värld- en	(SDA-construction)
	(big)		world-DEF	
(2b)	den	(stor- a)	värld	(FDA-construction)
	DEF	big	world	
(2c)	den	(stor-a)	värld- en	(DD-construction)
	DEF	big	world-DEF	
	'the (b	oig) world'		

Although these three constructions differ from each other in form, they all have the same basic function, namely to denote definiteness. This raises the question: how do the constructions differ from each other? Previous accounts have shown that the choice of definite marker can influence the meaning of the noun phrase in certain contexts. This is exemplified in (3).

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³ See chapter 4 Distributional Analysis for data supporting this claim.

- (3a) President-en bor i Vita hus-et.

 President-DEF lives in white house-DEF.SG.NEUTER

 'The president lives in the White House.'
- (3b) President-en bor i det vita hus-et.

 President-DEF lives in DEF white house-DEF.SG.NEUTER

 'The president lives in the white house.'

In (3a), the noun phrase refers to the White House, the name of the house in which the president lives, while the noun phrase in (3b) refers to the house that is white in color. The example illustrates that the two definite constructions can differ from each other in contextual meaning. Because of this potential semantic variation, it is to be expected that there is an underlying functional distinction between the two definite constructions, triggering different readings in certain contexts. In the present thesis, I approach this problem from an Accessibility Theory point of view. More specifically, the aim of this thesis is to find an answer to whether or not the difference between the DD-construction and the SDAconstruction in Swedish can be explained by means of a difference in degree of Accessibility they signal. The Accessibility Theory, as introduced by Ariel (1988), argues that referential expressions mark and signal the ease with which the addressee can retrieve the referent from their individual's mental representation. Ariel states that there is a correlation between the form of a referring expression and the degree of Accessibility it marks. To be more precise; the more extensive the form of a referential expression is the lower degree of Accessibility it marks (Ariel 1988: 82). Based on this, it is hypothesized for the definite constructions in Swedish that:

(3) If the use of the definite descriptions in Swedish can be explained by means of Accessibility, then the difference between the SDA-construction and the DD-construction can be explained by means of a difference in degree of Accessibility they mark. If this is true, then the SDA-construction is thought to be the marker of a higher degree of Accessibility than the DD-construction.

This hypothesis will be tested by means of a corpus study in which the separate factors influencing an entity's degree of Accessibility are analyzed. It is expected that, if the SDA-construction marks a higher degree of Accessibility than the DD-construction, it would be visible in the results of each factor. As it turns out, the only significant difference between the

SDA-construction and the DD-construction is found for the factor of Competition. This leads to the formulation of a Competition Hypothesis in the fifth chapter of this thesis.

In chapter 2, previous analyses of the Swedish definite constructions will be discussed; chapter 3 provides the theoretical background and methodology of the current study. It includes an overview of the Accessibility Theory, a section on data and selection, an explanation of how the data analysis, and the choices that have been made for this analysis. In chapter 4 the distributional analysis of the two definite constructions will be presented and discussed. This will be followed up by chapter 5 in which the Competition Hypothesis will be formulated and tested. The final chapter of this thesis will contains some concluding remarks.

2. PREVIOUS ACCOUNTS

As has been mentioned in the introduction, the Swedish language permits three strategies of marking definiteness on adjectivally modified noun phrases: the suffixed definite article construction, the free definite article construction and the double definite construction. Although not all accounts agree that each of these three strategies are fully accepted or productive (see for example Schoorlemmer 2012: 153), all three are attested in the corpora, with the SDA-construction being the most frequent (for data supporting this claim, see chapter 4.1). Many and very varying attempts to explain of the existence of multiple definite markers and their functions have been given in previous literature. I will discuss some of them in the present chapter.

The majority of the accounts have in common that they assume that the double definite construction is the most common and unmarked strategy to mark definiteness on adjectivally modified noun phrases. Following this idea, Delsing (1988) and Santelmann (1993) argue that the double definite construction is triggered by the presence of an adjective. Bohnacker (1997: 55-56) departs from them and counters the idea that the adjective is the crucial reason for the use of double determination, although she acknowledges that double definiteness is obligatory if the definite noun phrase includes a weakly declined adjective. She shows that there are certain non-adjectivally modified noun phrases in which the noun is doubly marked. For example the two noun phrases in (1), in which no adjectives with a weak ending are present, yet the noun phrases have double determination. Note that both noun phrases are used as demonstratives.

(1a) den här stol-en 'this chair'

(1b) den_{stressed} stol-en 'that chair'

(Bohnacker 1997: 56)

Schoorlemmer (2012: 111) assumes, following Delsing (1988) and Santelmann (1993), that double definiteness is licensed by the presence of the adjective. He notes that double definiteness can occur without any overt adjective in demonstrative readings but he assumes, following Leu (2008), that in these cases a silent adjective with the meaning *here* or *there* is present in the noun phrase, triggering the double determination. Note that Schoorlemmer (2009, 2012), contrary to Bohnacker (1997), does not restrict the adjective licensing the double definite marker to the weakly declined.

Besides the existence of the double definite marking of noun phrases without a (weak) adjective, it has been noted that not all adjectivally modified noun phrases occur with a double definite marking. Examples are given in (2).

(2a) (den) vänstra handen

(DEF) left hand-DEF

'the left hand'

(2b) (den) franska revolutionen

(DEF) French revolution-DEF

'the French revolution'

(LaCara 2011: 59)

Three different reasons have been brought forward in the literature, explaining this phenomenon. Firstly, Schoorlemmer (2009, 2012), in agreement with the other accounts, assumes that SDA-constructions are exceptional cases and can occur when the adjective is a part of a proper noun. According to him, the absence of doubling of the definite marker is accepted because the adjective does not combine with the noun in the normal way (Schoorlemmer 2009). Secondly, the Svenska Akademiens Grammatik argues that "öppna spisen without free article is only possible if the adjective has a restrictive interpretation and the referent can be identified in the speech situation / previous experience but not if it is identified anaphorically through the [linguistic] context" (Teleman et al. 1999: 19). And thirdly, Delsing (1993: 118) says that the free definite article is allowed to be dropped in adjectivally modified noun phrases when 1) the item is well known in the speech situation, 2) the item is unique in the world, or 3) the item is unique in a smaller speech community.

(3) Ta nya bilen!

Take new car-DEF!

'Take the new car'

(Delsing 1993; Perridon 1989)

Thus, for example *ta nya bilen* 'take the new car' is said to be only possible in a context in which for example, a family has recently bought a new car, but has not replaced the old one. The adjective *nya* is sufficient to disambiguate the family's two cars. LaCara (2011: 60) has reformulated the idea of restrictiveness imposed by the adjective as "in all of the places where

the nominal has only one contextually salient or sensible referent, the definite article may be dropped".

The accounts discussed above have all argued that the presence of the adjective and the double definite marking are related to each other, and have attempted to explain the occurrence of double determination without an adjective and the occurrence of adjectivally modified noun phrases lacking this double determination as exceptional cases. Furthermore, there have been other studies dealing with the functional side of the definite marking strategies of Swedish. These studies have a slightly different focus and aim to answer questions regarding the contribution of each of the individual definite markers, i.e. the definite suffix and the free definite article. Traditionally, it has been assumed that the morpheme carrying definiteness is the suffixed definite article, because this is the unmarked strategy to mark definiteness on bare nouns, and that the use of the free definite article is less common than the use of the suffixed definite article. However, there are a notable amount of cases in which the suffix is missing, while the noun phrase as a whole remains definite. Assuming that the free definite article is the real determiner and the suffixed definite article an agreement marker of some sort raises similar problems. It has been made obvious in the literature that the meaning of certain noun phrases changes when the free definite article is left out, as the example of Norwegian in (4) shows. In (4a) both noun phrases refer to the same entity, while the noun phrases in (4b) refer to two different people.

- (4a) **den** unge professor-**n** og omsorgfulle far-**n**the young professor-DEF and caring father-DEF
 'the young professor_i and caring father_i'
- (4b) **den** unge professor-**n** og **den** omsorgfulle far-**n**the young professor-DEF and the caring father-DEF
 'the young professor_i and caring father_i'

(Anderssen 2007: 255)

Therefore, a different approach has been taken. More recently, people have suggested that both the free definite article as well as the definite suffix contribute to the definite interpretation. Julien (2005: 38) has proposed that the suffix marks specificity, which is defined as being identifiable for the speaker, and that the free definite article encodes inclusiveness, uniqueness and a deictic reading. Similarly, Anderssen (2007) argues that the prenominal determiner adds uniqueness, which she defines as "referring to a referent that is

familiar and identifiable to the listener, and is indicated by a [+hearer] feature" (Anderssen 2007: 255). The suffix adds specificity, here meaning "referring to a referent that is familiar and identifiable to the speaker and has a [+speaker] feature" (Anderssen 2007: 255). However, this analysis has some implications for definiteness marking in other languages. In languages that exhibit a double definite pattern, definiteness is regarded as compositional. But Danish, a language closely related to Swedish and Norwegian, lacks a double definite construction. Yet it still has two strategies to mark definiteness: 1) marking by means of a suffix only, mostly attested on bare noun phrases, and 2) the use of the free definite article without a definite suffix, which is used mostly with adjectivally modified noun phrases (Börjars 1994: 241ff). In order to solve the problem the split definiteness poses for the Danish definite constructions amongst others, where the suffixed definite article and the free definite article are (almost) perfectly complementary (Hankamer & Mikkelsen 2002: 159-160), Anderssen (2007) proposes a lexical insertion account. This solution argues that in the Scandinavian languages in which double definiteness is available, the two features, i.e. uniqueness and specificity, are split when there is an adjective present in the noun phrase. When there is no adjective; one lexical item (the definite suffix) can spell out both. The definite marking pattern in Danish, which does not allow for double definiteness, is explained by assuming that the lexicalization of specificity in modified structures has no phonological spell out.

(5a) Danish: Det. Adj. Noun

Pronouns [Uniqueness... Specificity]

Determiners [Uniqueness] (realized as den/det/de_

-dx1 [Uniqueness... Specificity] (realized as -et/-en)

-dx2 [Specificity] (always phonologically zero)

(5b) Norwegian⁴: Det. Adj. Noun-dx

Pronouns [Uniqueness... Specificity]

Determiners [Uniqueness] (realized as den/det/de)

-dx [(Uniqueness)... Specificity] (realized as -e/-a/-(e)n)

(Anderssen 2007: 260)

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⁴ Anderssen (2007) does not describe the Swedish language, but the pattern is the same for Swedish as the Norwegian variants she analyses.

Previous accounts have attacked the problem of the multiple definite constructions in Swedish from various points of view, but there is a reoccurring view that the presence of double determination is directly related to the presence of an adjective. However, in the present thesis it will be shown that the analysis of the adjective as a trigger of double determination is problematic. Data supporting this claim will be presented in chapter 4. In chapter 5, I will elaborate on these issues. In order to come with an alternative analysis, it will be examined whether or not the use of the two definite constructions in Swedish can instead be explained by a different degree of Accessibility they mark. If the Accessibility Theory (Ariel 1988) can account for the existence of multiple definite constructions, it is expected that each individual construction marks a different degree of still relatively low Accessibility. Therefore, it will not be assumed that the presence of an adjective is the trigger for the use of the free definite article, but instead that Swedish has three distinct constructions available to mark definiteness in adjectivally modified definite constructions. By means of corpus data, the relation between Accessibility and the two definite constructions will be explored.

3. METHODOLOGY

This chapter is concerned with the methodology used for the distributional analysis. The first part of the chapter consists of a summary of the theoretical background. This will be followed by an explanation of the data selection process. Lastly, I will elaborate on the methods used for the analysis.

3.1. Accessibility Theory

Ariel (1988, 1990 etc.) has put forward the proposal that every referring expression encodes a specific and different degree of mental Accessibility. In essence, she proposes that referring expressions have the function of Accessibility markers. They are used to signal to the addressee(s) how the appropriate mental representation can be retrieved in terms of Accessibility degree. In other words, the contextual retrieval of a referent is guided by a signal of degree of Accessibility with which the mental representation of this referent is held. Since each referring expression is said to encode a different degree of Accessibility, Ariel (1990: 73) has proposed the Accessibility scale, which reaches from items marking a very low degree of Accessibility to those that mark an extremely high degree of Accessibility. This scale is presented in (1) below.

(1) The Accessibility Scale, reaching from low Accessibility to high Accessibility.

Full name + modifier > Full name > Long definite description > Short definite description > Last name > First name > Distal demonstrative + modifier > Proximate demonstrative + modifier > Distal demonstrative + NP > Proximate demonstrative + NP > Distal demonstrative (-NP) > Proximate demonstrative (-NP) > Stressed pronoun + gesture > Stressed pronoun > Unstressed pronoun > Cliticized pronoun > Verbal person inflections > Zero.

(Ariel 1990: 73)

As one might observe, the higher Accessibility markers tend to contain less lexical information and are more phonological empty than the lower Accessibility markers, with the highest Accessibility marker, the zero marker, being phonological completely empty. This form-function correlation is neither arbitrary nor coincidental, but is the result of the interaction of three partially overlapping criteria that are involved in linguistically coding of

the degrees of Accessibility. These are Informativity, Rigidity and Attenuation (Ariel 1991: 444). Informativity refers to how semantically full a marker is, i.e. how much lexical information it contains. Rigidity has to do with how uniquely referring an expression is, i.e. how well an addressee can pick out a unique referent on the basis of the form of the expression. Lastly, Attenuation is a concept closely related to Givón's (1983) proposal concerning phonological size, but additionally includes stress and markedness. These criteria are said to work together so that the more informative, rigid, and un-attenuated a referring expression is, the lower the degree of Accessibility it codes. From this follows that when the form of the referring expression is less informative, rigid, and more attenuated, the degree of Accessibility it codes is higher (Ariel 1990: 29, 2001: 32). This raises the question: how does a language user know which degree of Accessibility should be ascribed to an entity? Ariel (1990) argues that there are at least four factors that have an influence on an entity's degree of Accessibility: Distance, Unity, Saliency and Competition.

One should note that the above mentioned factors should not been seen as a rigid definition for the psychological notion of Accessibility, but that these factors have been found operative in reference establishment. All of them are said to contribute to the Accessibility of mentally represented entities and as such they direct referential choices (Ariel 1990: 29). Furthermore, it is important to realize that the basis of Accessibility is grounded in the discourse world and not in the physical world. Although physical context can certainly influence the discourse model, mental representations are, in the Accessibility theory, a direct product of our discourse model only (Ariel 2001: 31). Thus, against Clark and Marshall (1981) who argue that referential expressions can be grounded in linguistic material, physical context or general knowledge, Ariel's Accessibility Theory argues that participants only have one source for identifying and using referential expressions: the discourse world. Therefore, discourse topics and other entities mentioned or predicted to be relevant in the specific discourse can have high, intermediate or low degrees of Accessibility, depending on the role they play in the discourse. Consequently, the most salient entity in a discourse, i.e. a global discourse topic is then by its very nature deemed to be the most accessible. Local topics, which take scope over a smaller section over the discourse, are considered to be relatively easily accessible, although less accessible than global discourse topics. Non-topics are the least salient entities in a discourse, and as such equipped with a low degree of Accessibility (Purkiss 1978; Sanford & Garrod 1981 in Ariel 1991: 448). This is captured by Ariel's factor of Saliency, where the idea is that the more salient an entity, the higher accessible it is. Besides topicality, the factor of Saliency captures the contrast between inherently salient and non-salient entities, for example the distinction between entities located between the speaker and the addressee versus discourse-external referents. The former are considered to be more salient and therefore relatively easily accessible, while the latter are less salient and have a relatively low degree of Accessibility (Ariel 1988, 2001).

Competition, the second factor influencing an entity's degree of Accessibility is explained as "[t]he number of competitors on the role of antecedent" (Ariel 1990: 29). In other words, Competition is the relative Saliency of an entity, compared to other entities that are potential candidates for the role of antecedent (Ariel 1988: 28). The idea is that the more competitors there are, the lower the entity's degree of Accessibility. Vice versa, when there are no competitors on the role of antecedent, the referent is deemed to be highly accessible. It should be noted that the amount of guidance a speaker provides is in inverse relation to the degree of Accessibility, so that the more information an addressee needs in order to identify the referent of an expression, the lower degree of Accessibility the entity is deemed to have (Ariel 1990: 34).

The third influential notion on the degree of Accessibility is Distance, which refers to the distance between the antecedent and the anaphor. This factor is restricted to linguistic contexts and is only applicable to subsequent mentioning of a referent. Thus, Distance is not observed between a referential construction and the mental representation of the referent (Ariel 1988). The idea is that the closer together the antecedent and the anaphor are in the text, the easier accessible the entity is, and vice versa, when there is a large distance between the antecedent and the anaphor, the entity is deemed to have a low degree of Accessibility.

The Unity Criterion captures the relation between the referential expression and its antecedent. The relation between the two can be tight. This is the case when the two entities are located within the same unit. A unit can either be a discourse world, a frame, a point of view, or topic. Furthermore, being located within the same paragraph, sentence and/or clause, i.e. within the same textual unit, points to a tight relation between the anaphor and antecedent as well (Ariel 2001: 33). If there is a unit break between the referential expression and its antecedent, for example when they are located in two different paragraphs, there is an intervening change in topic, or the two are located in a different point of view, the relation between the items becomes loose, and the referent gets a lower degree of Accessibility.

In (2) a summary of the factors influencing an entity's degree of Accessibility are presented.

- (2a) Saliency: The antecedent being a salient referent, mainly whether it is a topic or a non-topic
- (2b) Competition: The number of competitors on the role of antecedent
- (2c) Distance: The distance between the antecedent and the anaphor (relevant to subsequent mentions only
- (2d) Unity: The antecedent being within versus without the same frame / world / point of view / segment or paragraph as the anaphor

(Ariel 1990: 28 – 29)

3.2. Data selection

In order to test whether or not the difference between the double definite construction and the suffixed definite article construction can be explained by means of the Accessibility Theory, and that the DD-construction is the lower Accessibility marker of the two, I have looked into examples of actual language use, by means of a corpus research. I have chosen for the corpus Bloggmix 2014, retrieved from Spraakbanken's corpus. The corpus contains online published blogs from the year 2014 and consists of 34,298,071 tokens. The Bloggmix 2014 corpus has been chosen for several reasons. First of all, blogs are a written variant of language with a relatively informal style, which is relatively close to speech and everyday language use of speakers. Secondly, the language user, the blogger, and the addressee, the blog reader, do not have a shared personal history outside of the blog, which makes the established discourse world more accessible for a third person researcher. The addressee(s) is/are unknown for the language user, and as such the assumptions made by the speaker about Accessibility of an entity are likely to be based on, for a third person observer, visible context. The subcommunities the speaker and the assumed addressee(s) belong to, which can be the basis for referential expressions, are likely to be identifiable for an external observer. Furthermore, the decision to look solely at the 2014 corpus is made on the grounds of the present study aiming to provide a synchronic analysis of the situation in present day Swedish, and the 2014 corpus contains the most recent data.

I have made no distinction between superlatives, comparatives and positives, and included them all. Adjectives that can be inflected and those that cannot be inflected are both included. Although constructions with multiple adjectives in a noun phrase are fully productive, for reasons of practicality I have chosen to solely look into nouns that are modified by one single adjective.

In order to find the suffixed definite article constructions, I have used the following query:

(3) word is not den part of speech is adjective part of speech is substantive and word is not det and word is not det and word is not $ent{det}$ or words ends with $ent{det}$ and word is not $ent{det}$ or word ends with $ent{det}$ and word is not $ent{det}$ or word ends with $ent{det}$ and word is not $ent{det}$

The query used for the double definite construction is presented in (4).

(4) word is den part of speech is adjective part of speech is substantive or word is det and word ends with n or word is de or word ends with t
 or word is dom or word ends with a

The results of both queries were randomly sorted by means of the function provided by the corpus for this purpose. For each construction I have selected the first 100 random instances, and taken these as a basis for the analyses.

In order to establish a baseline, a random sample of 500 noun phrases without an adjectival modifier has been taken from the corpus. The query used for this is the following:

(5) Part of speech is not adjective Part of speech is noun

This results in 4,382,560 results. Of the sample of 500, 141 instances contain a definite marker in the form of a suffix or a definite free article in the form of *den/det/de/dom*. However, not all of these 141 are truly non-modified bare noun phrases. In certain cases, the word preceding the noun is in fact an adjectival modifier, even though it has not been tagged as such in the corpus. This is exemplified in (6a). Furthermore, some of the nouns are followed by a restrictive relative clause (6b) or other additional information that helps individuating the denoted concept (6c). Eliminating these cases leaves 97 instances of definite non-modified noun phrases.

- (6a) det mousserande vinet

 DEF sparkling wine-DEF

 'the sparkling wine'
- "wow" känslan killarna (6b)som kanske inte mig den ger "wow" feeling-DEF guys-DEF who maybe not give me the 'the guys who might not give me the "wow" feeling'
- (6c) fåtöljen i hörnet
 armchair-DEF in corner-DEF
 'the armchair in the corner'

These 97 are the base line to which the ratio DD-construction/SDA-construction can be compared.

3.3. Data analysis

In order to be able to give insight into the difference between the double definite construction and the suffixed definite construction an explanation is sought from an Accessibility Theory approach. The idea is that if the Accessibility Theory makes appropriate predictions on the use of the definite descriptions in Swedish, then it might also lend itself to explain the use of the specific definite constructions. The difference between the two constructions would then be the degree of Accessibility they mark. It has been hypothesized that the DD-construction marks a lower degree of Accessibility than the SDA-construction.

As Ariel (1990 etc.) has argued, an entity's degree of Accessibility can be influenced by four factors: Distance, Unity, Saliency and Competition. These will be the basis for the distributional analysis. It should be noted that some aspects playing a role in these factors are only relevant for subsequently mentioned referents, and does not apply to the Accessibility degree of referents that have not been previously introduced in the discourse. As a first step it is therefore necessary to make a distinction between the definite constructions referring to a previously mentioned referent, and those referring to a newly introduced referent. The givennew distinction or the old-new distinction has been a widely discussed topic in the literature (Chafe 1996; Clark and Haviland 1977, amongst others), and as Prince (1981: 225) points out, not all the approaches are in agreement with each other. The notion of given versus new information might not even be a binary one. However, in the present study I will make such a binary distinction, therefore I will spell out the assumptions that have been made to categorize the data. First of all, due to Accessibility being a property of information and not of words

(Arnold 2010: 188), the target definite construction is not required to be a literal repetition of a linguistic item in order to refer to something that has been previously introduced, but it is required to refer to the same concept. Antecedents of definite constructions can take several linguistic forms and are not limited to noun phrases only, but can also be a pronoun, or even a clause, as exemplified in (7) below. In this sentence, the target definite construction *hela tiden* 'the whole time' refers to the time *när Max kommer hem* 'when Max comes home'.

(7) [När Max kommer $hem]_i$ så vill han Max ska att When Max home so wants he Max will comes that

leka, läsa och vara med honom [hela tiden] $_i$ play, read and be with him whole time-DEF

'When Max comes home, he wants Max to play, read and be with him the whole time'

Secondly, due to the necessity of making a binary distinction between old and new information, inferables (Prince 1981) or associative anaphora have to be classified under one of the two types. I have decided that, in line of the categorization made by Prince, these fall under new information, with the exception of singular entities that have been introduced by means of countable plurals, in which the multiple entities are identifiable. In these cases, the referent has been previously introduced. An example is given in (8) below.

(8) Isabella, som gärna hänger med <u>brorsorna</u> och inte med mamma – hon hängde gladeligen på in på pojkrummet! Hon är 1 år. Står med en mobil i högsta hugg och tjuvkikar när <u>ena brorsan</u> spelar.

'Isabella, who likes to hang out with <u>her brothers</u> and not with mamma – she happily hung around in the boy's room. She is one year old. Stands with a mobile phone ready and peeks when <u>the one brother</u> plays.'

For measuring the factor of Distance and determining whether or not it influences the choice of definite marker, I have counted the number of words between the most recent previous mention and the target definite construction. A word is taken as a unit in between two spaces. A sentence starts with a capitalized letter and/or a full stop, question mark or exclamation

mark. Pearson's chi-square test is used in order to determine whether or not the two definite constructions exhibit different behavior with respect to Distance, and whether or not the SDA-construction is preferred over the DD-construction when entities are more recently mentioned.

In order to examine the influence of the factor of Unity on the choice of definite construction, three levels of Unity are distinguished: within or outside the text; within or outside the paragraph, and within or outside the sentence. For within or outside the text, the same analysis is used as for the old – new distinction explained above; if an entity has not been mentioned in the preceding text, the antecedent of the referential expression is said to be located outside of the current discourse. Therefore, the antecedent and the referring expressions are not located within the same unit. Because of this 'disunity', the Accessibility of the entity referred to is deemed to be low (Ariel 2001: 33). The second unit analyzed is the paragraph. Paragraph breaks are often a strong indicator of a change in frame, point of view or topic of conversations. In the present study, a paragraph is taken to be a section of the blog text, indicated with a new line, blank line, or indent. The third unit looked into in the present study is the sentence. If the antecedent of a referential expression is located within the same sentence as the target construction, it shows a tight relation between the referential expression and its antecedent, which is an indicator for high Accessibility. Although the data is binary (the antecedent is either located within or outside the unit in which the definite construction appears) one should keep in mind that the notion of unity is not necessarily binary, but gradual. A relation between an antecedent and the referring expression is looser the more disunity there is, and vice versa, the relation is tighter the more the units the antecedent and the referring expression share (Ariel 1990: 131). Pearson's chi-square test and Fisher's exact test will be used to statistically test whether or not the factor of Unity influences a language user's choice of definite construction. More specifically, the tests can confirm or reject the hypothesis that the DD-construction shows a preference for a loose relation between definite construction and its antecedent and the SDA-construction shows a stronger preference towards a tight relation between the two.

Concerning Ariel's factor of Saliency, I have looked into the number of previous mentions of the referent. A higher number of subsequent mentions suggests that the referent is salient in the discourse, and as such is deemed to exhibit a higher degree of Accessibility. Ariel names topicality as a major player in the factor of Saliency. However, her method for determining a text's discourse topic is not feasible in the current research: "since the texts analyzed in the present study were simple prose in the sense that they were all about specific characters about whom predications were constantly added on, establishing the discourse

I fear that this method gives room for a bias in favor or, since I am aware of the possibility that I might be biased, against the hypothesis. Either way, this potential bias would make the analysis unscientific. At this point of time I lack the means of letting a person with sufficient knowledge of discourse topics who is not involved in the present research determining the discourse topics. This is the reason why I have decided not to include an analysis of discourse topics and their influence on the choice of definite construction. Instead I will focus on the measurable aspect of Saliency, namely subsequent mentions. Note that this factor thus only takes into account previously introduced referents.

For the notion of Competition, a slightly different approach is taken than for the ones described above. Due to the 'uniqueness' and 'identifiable' character of definite descriptions (Julien 2003, Delsing 1993), and the high percentage of first mentions compared to previously introduced referents of definite constructions, Competition is not as easily measurable as Distance or Unity. Furthermore, the question of how exactly to define Competition on the role of referent when no entities that lend themselves for the role of referent have been introduced in the discourse is too big an issue to go into in the present research. Based on Grice's maxim of Quantity "make your contribution no more and no less informative than is required" (Grice 1967⁵ in Clark & Haviland 1977: 1), the analysis of the two definite constructions and Competition will focus on the length of the referential expression. The idea behind this is that, when additional lexical information has been provided by the language user, it is not unlikely to assume that the speaker assumes that the addressee cannot identify the referent without this extra information. This suggests that there is more than one entity that fits the definite description without extra information, in other words, that there is Competition on the role of referent. One should keep in mind that the data examined in the present study are definite constructions already containing an adjectival modifier, and that the data analyzed for this section focusses not on extra adjectival modification of the noun, but on additional lexical information such as restrictive relative clauses or names. Pearson's chi square test is used to determine whether or not either of the definite constructions is preferred with or without additional lexical information, and to be able to conclude whether the respective definite constructions prefer to occur with or without extra queues. Due to the relatively small data set (in total 200 instances of the two definite constructions), Fisher's exact test is used to confirm the results of the calculation by the chi-squared test.

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⁵ Published in 1975.

4. DISTRIBUTIONAL ANALYSIS

This chapter presents the distributional analysis of the adjectivally modified definite constructions in Swedish, with a focus on the suffixed definite article and the double definite construction. The theoretical framework in which the data is presented is the Accessibility Theory, as discussed in the previous chapter. This theory states that definiteness and definite articles are markers of an entity's relatively low degree of Accessibility. Furthermore, distinct referential expressions are seen as markers of different degrees of Accessibility. If the Accessibility Theory can account for the existence of the multiple definite constructions in Swedish, it is expected that each individual construction marks a different, but yet relatively low, degree of Accessibility. Due to the interaction between form and function (the more informative, rigid, and un-attenuated a referring expression is, the lower the degree of Accessibility it codes), it is expected that the DD-construction marks a lower degree of Accessibility than the SDA-construction.

The chapter starts out with a short discussion of the overall frequency of the constructions. The analysis of the new versus previous mentions is presented in the second section of this chapter. This is followed by a more precise analysis of the definite construction referring to an entity that has already been introduced into the discourse. Firstly, the factor of Distance is discussed. Secondly, the factor of Unity is analyzed. In the fourth section of this chapter, the results of the factor of Saliency are presented. The last section will be concerned with the data for the factor of Competition.

4.1. Overall Frequency

The query I have used for the suffixed definite article construction results in 220,958 tokens. These results include multiple constructions that do not qualify as a SDA-construction with one adjectival modifier. The data include: indefinites ending on -n, -t or -a (see 1a); definite constructions with more than one adjective, both with a FDA (1b) as without (1c); nouns following a possessive pronoun⁶ (1d); demonstratives (1e)⁷; adjectives that are not truly adjectives but, for example, verbs (1f); and sentences that are not Swedish (1g).

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⁶ Nouns following possessive pronouns (usually) lack a definite suffix. However, the noun phrase as a whole is not indefinite.

⁷ Most of the nouns following the demonstrative *denna/detta/dessa* are in indefinite form, however several examples are found with a noun with a definite suffix: *Hittade denna gamla bilden från förra årets skridskodag*. 'Found this old picture from last year's skate day'. Demonstratives *den/det/de där* and *den/det/de här* usually occur with a noun + definite suffix.

- (1a) Vi hittade **ekologisk bacon** när vi handlade idag. 'We found **organic bacon** when we shopped today.'
- (1b) Förmodligen är det en kombination av kompositionen, trädens skuggspel på väggen, de klara gröna färgerna från löven och reflektionerna i de små fönstren.
 - 'It is probably a combination of the composition, the shadows of the trees on the wall, **the bright green colors** of the leaves and the reflections in the small windows.'
- (1c) Och nu kom första riktiga jobbiga gravidgrejen (men än ont i tandköttet).

 'And now came the first real tough pregnancy thing (other than sore gums).'
- (1d) Jag älskar förresten min nya tröja från Noa Noa.'By the way, I love my new sweater from Noa Noa.'
- (1e) **Dom här små strumporna** ihop med hårbandet kommer bli så fint. '**These little socks** together with the headband will be so beautiful.'
- (1f) Det gillar ju jag nu när jag försöker rena kroppen lite.'I just like that when I try to clean my body a bit.'
- (1g) The prince has been the royal patron of Tusk since 2005.

I have filtered the first random 500 instances of the query and found that of these 500 only 158 are examples of the SDA-construction with only one adjective. This means that 31.6% of the 220,958 found tokens are of the kind we are looking for. Extrapolating this to the whole corpus, it means that there are in total approximately 69,823 instances of the SDA-construction present in the corpus of 34,298,071 tokens, corresponding to 2,035.77 SDA-constructions per one million words.

For the double definite construction, the search resulted in 59,870 tokens, of which 19 out of 500 randomly instances were not examples of the double definite construction, corresponding to 3.8%. This noise consists for the major part of nouns without a definite suffix ending on -n, -t, or -a (see 2). The corpus of 34.3 million tokens contains approximately 57,625 instances of the construction, which corresponds to 1,680.12 DD-constructions per one million tokens.

(2) Absolut den godaste bcaa jag testat
Absolutely DEF delicious.SUP BCAA I tested
'Absolutely the most delicious BCAA I've tested.'

The free definite article construction is not further discussed in the present study, due to its relatively low frequency in comparison with the SDA-construction and DD-construction. Nevertheless, the FDA-construction has been incorporated in the overall frequency in order to give a complete overview.

(3) word is den part of speech is adjective part of speech is substantive or det and word ends with or de b/c/d/e/f/g/h/i/j/k/l/m/o/p/q/ or dom r/s/u/v/w/x/y/z/å/ä/ö

The query presented in (3) results in 9,012 instances of the FDA-construction in a corpus of 34,298,071 tokens. From the data collected for the double definite construction, the FDA-constructions ending on -a, -n, or -t that lack a definite article are extracted. 14 out of the 500 instances found with this query are in fact examples of the FDA-construction, which means that approximately 1,676.36 of the 59,870 tokens are FDA-constructions. This is added to the 9,012 FDA-constructions, which results in a total of 10,688 FDA-constructions in the whole corpus, hence 311.62 FDA-constructions per one million tokens. Compared to the frequency of both the DD-construction and the SDA-construction, the FDA-construction occurs very rarely.

	Absolute	Per million tokens	Percentage of total
	frequency		definite
			constructions
DD-construction	59,870	1,680.12	42.65%
SDA-construction	69,823	2,035.77	49.74%
FDA-construction	10,688	311.62	7.61%
Total	140,381	4,027.51	100.00%

Table 4.1: Frequency of definite constructions in adjectivally modified noun phrases in Swedish

In table 4.1 it is shown that the SDA-construction is the most frequent definite marking strategy for noun phrases that are modified by one adjective. 49.74% of the definite constructions are SDA-constructions, while the double definite construction is used in 42.65% of the adjectivally modified definite noun phrases. The FDA-construction is least frequently used definite construction with 7.61%.

In order to have a point of reference, the overall frequency of each construction has also been calculated for noun phrases that are not adjectivally modified. The following two queries are used to find the distribution of the three constructions in this context:

(4a)	Word is not <i>den</i>	part of speech is not	part of speech is
	or det	adjective	substantive
	or de		and word ends with $n/t/a$
	or dom		
	or en		
	or ett		
(4b)	Word is den	part of speech is	
	or <i>det</i>	substantive	
	or de		
	or dom		

The query in (4a) is used to find the SDA-construction. This query results in 1,016,751 entries. 325 of the random sample of 500 are truly non-modified SDA-constructions. The other 175 results include adjectival modified noun phrases as in (5a), non-definite noun phrases that nevertheless end on a -n, -t, or -a, as in (5b), as well as sentences from other languages than Swedish, as in (5c).

- (5a) Första bilden på mig och alla barnen'The first picture of me and all the children'
- (5b) Jag gillar portvin också.'I like port as well.'
- (5c) She values her time there and relishes hearing about normalcy **even** if it's not long before her feet start to itch again.

To find the DD-constructions and the FDA-constructions, the query in (4b) is used. This results in 61,785 instances in total. A random sample of 1000 is taken. Of these, 270 are FDA-constructions, 345 are DD-constructions, and 385 are neither. Amongst those that are neither, there are constructions in which *det* is an expletive as in (6a), and phrases in which *den/det/de/dom* refers to something else than the noun that follows, for example (6b) and (6c). Calculated for the whole corpus, there are approximately 21,315.82 DD-constructions and 16,681.95 FDA-constructions lacking an adjectival modifier.

(6a) *Idag blev* **det fisk** till middag.

Today became **it fish** for dinner

'Today, there was fish for dinner.'

usual time 5:30?'

- Till stora förvåning (6b) min gillade den massor. jag To my big surprise liked I it tons 'To my big surprise, I liked it a lot.'
- Alltså, varför äter dom mat nio рå kvällen, vad Also, why they food nine evening-DEF what eat in hände med den vanliga tiden halv 6? happened with DEF usual time-DEF half 6? 'Also, why do they have dinner at nine in the evening, what happened to the

The overall distribution of the Swedish non-modified definite noun constructions is presented in table 4.2. Note that it has not been taken into account whether or not the noun phrase is modified by a post-nominal linguistic item, such as a restrictive relative clause, for both the adjectivally modified noun phrases and the non-adjectivally modified noun phrases.

	Absolute	Per million tokens	Percentage of total
	frequency		definite
			constructions
DD-construction	21,316	621.49	3.05%
SDA-construction	660,888	19,268.96	94.56%
FDA-construction	16,682	486.38	2.39%
Total	698,886	20,376.83	100.00%

Table 4.2: Frequency of definite constructions in non-modified noun phrases in Swedish

Comparing the data in table 4.2 with the data in 4.1, it can be clearly seen that the SDA-construction occurs a lot more frequently in combination without an adjectival modifier than with an adjectival modifier. The DD-construction occurs more frequently in combination with an adjectival modifier than without. The FDA-construction is relatively more frequent in combination with an adjective than without one. Undeniably, there is a strong correspondence between the lack of an adjectival modifier and the use of the SDA-construction.

4.2. New versus previously introduced entities

Regarding the analysis of the definite construction as a marker of low Accessibility, it would be expected that relatively more definite constructions refer to an entity that has not yet been introduced in the present text than items that have been mentioned in the preceding text. If the concept that the definite construction denotes has not been previously referred to, the antecedent cannot be found within the same unit, which decreases the entity's degree of Accessibility.

	First mentions	Subsequent	Total
		mentions	
DD-construction	67	33	100
SDA-construction	61	39	100
Total	128	72	200

Table 4.3: Newly introduced versus earlier introduced definite constructions

The distribution of adjectivally modified definite constructions in Swedish, presented in table 4.3, supports the prediction made by the Accessibility Theory. The majority of the definite constructions refer to an entity that has not been previously introduced into the discourse. Because of this factor, the definite constructions refer in general to entities with a relatively low degree of Accessibility. Since the antecedent cannot be found in the same text as the referring expression, there is a tendency of disunity between the definite constructions and their antecedents. Disunity, or in other words, a loose relation between the referential expression and its antecedent, causes an entity's degree of Accessibility to be lower (Ariel 2001: 52). Thus, the data supports the hypothesis that the definite descriptions in general are markers of low Accessibility.

The data does not provide a basis for a distinction between the suffixed definite article and double definite construction. With a *p*-value of 0.376759 in the Pearson chi-square test and a

p-value of 0.461508 in Fisher's exact test, there is no significant difference between the SDA-construction and DD-construction at p <0.05. Thus, it can be concluded that the two constructions behave similarly with regards to first and subsequent mentions. Therefore, the new-given distinction cannot explain the use of two distinct definite constructions.

4.3. Definite construction referring to previously introduced entities

The current section addresses the analysis on the definite constructions referring to subsequent mentioned entities. Although the majority of the data are new introductions of an item in the discourse, approximately a third of the adjectivally modified definite constructions refer to entities that already have been introduced into the discourse world. This means that definite descriptions can be used to refer to an entity already salient in the discourse, and are therefore already relatively easily accessible. In order to confirm or disprove that definite constructions are markers of a relatively low degree of Accessibility and not markers of a high degree of Accessibility, it is needed to discuss these subsequent mentions and learn whether or not other factors influencing an entity's degree of Accessibility give reason for a low degree of Accessibility. Furthermore, if the degree of Accessibility the DD-construction marks is a different degree of Accessibility than the SDA-construction, a distinction between the two constructions might surface by zooming in on the definite constructions referring to given entities. The definite constructions focused upon are more likely to be on the higher spectrum of the relatively low Accessibility items, due to their previous introduction in the discourse and therefore already activated status in a discourse participant's mental representations. If the SDA-construction marks, a higher degree of Accessibility than the DDconstruction, as has been hypothesized, then it is likely that this would become visible by taking a look at the group of definite constructions referring to entities mentioned in the discourse as opposed to items that are new in the discourse, due to the former being deemed to be easier accessible than the latter (Ariel 1991: 444). This section starts out with a discussion of the factor of Distance, which will be followed by a discussion of the results for the factor of Unity.

4.3.1. Distance

Distance, one of the four relevant factors influencing an entities degree of Accessibility, is relatively straightforward notion. This factor has the following relation to an entity's degree of Accessibility: the larger the distance between the referential construction and the most recent mention of its referent, the lower the degree of Accessibility the referential expression

marks (Ariel 2001: 33). Thus, Distance is solely relevant for subsequent mentions, because a new introduction of an entity does not have an antecedent within the same text.

4.3.1.1. Distance in words

Distance can be measured in several manners, of which the most basic and linear one is to measure distance in number of words interfering between the definite construction and the entity's most recent mention. In the second column of table 4.4, the sum of the number of words between the definite constructions and their antecedents is presented. Due to the unequal sample size of the two constructions, the third column presents the meaningful results, namely the average distance per anaphoric definite construction.

	Distance in total	Average distance
DD-construction	1153	34.94
SDA-construction	1301	33.36
Total	2454	34.08

Table 4.4: Distance between the definite constructions and their antecedents in total and on average in words

As the data in table 4.4 shows, the definite constructions are both used to refer to entities that have been very recently mentioned as well as entities mentioned far away. However, due to the gradual nature of the notion of Accessibility, there are no clear cut borders to determine how long the distance between the definite construction and the most recent mention of the referent have to be in order to lower its degree of Accessibility.

The mean distance between the DD-construction and its antecedent is only 1.58 words more than the average distance between the SDA-construction and its most recent previous mention. Furthermore, the average distance of the DD-construction differs 0.86 from the overall average distance, and the SDA-construction differs 0.72 from the overall mean. In table 4.5 below, the individual measured distances are presented for each definite construction.

	Measured distances in number of words
DD-construction	0, 1, 1, 2, 2, 4, 4, 4, 7, 9, 10, 13, 13, 14, 15, 16, 20, 21, 23,
	26, 28, 28, 32, 42, 43, 46, 48, 55, 64, 92, 127, 136, 207
SDA-construction	0, 0, 1, 2, 2, 3, 4, 4, 4, 5, 7, 7, 8, 8, 9, 10, 15, 19, 23, 23,
	25, 25, 26, 28, 30, 30, 34, 38, 38, 42, 46, 47, 52, 71, 84,
	98, 111, 121, 201

Table 4.5: Distance between the definite constructions and their antecedents

Since the sample sizes of the two constructions are unequal, Welch's unequal variances t-test is used to calculate whether or not the difference between the two constructions is significant. This results in a two-tailed p-value of 0.88, which is far above p < 0.05 and therefore non-significant. Thus, it can be concluded that the distance between the SDA-constructions and their antecedents counted in words does not differ in a meaningful manner from the distance between the DD-constructions and their antecedents. In other words, both constructions behave similarly regarding the factor of Distance.

This result indicates that the factor of Distance measured in number of words does not provide any basis for a distinction between the DD-construction and SDA-construction. Both constructions can and are used in contexts in which their antecedent is very close by, even without a single interfering word, or very far away in the text with more than 200 words between the definite construction and its antecedent. Both constructions do not show a preference for either close-by or far-away antecedents. Furthermore, neither of the contexts exhibits a preference for one of the two constructions. It can be concluded that the choice between the two constructions is not influenced by Distance, measured in number of words between the definite constructions and their antecedent.

4.3.1.2. Distance in sentence breaks

Besides measuring Distance in number of words interfering between definite constructions and their antecedent, it can be described in terms of sentence breaks. As Ariel (1990, 1991) has shown, definite descriptions tend to be disfavored in contexts in which the most recent previous mention occupies a position in the same sentence as the referring expression. Long distances of more than one sentence break between the definite construction and their antecedent is more frequently found than distances of zero or one sentence break, respectively

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 $^{^{8}}$ For the DD-construction: SD = 45.67; SEM = 7.95. For the SDA-construction: SD = 41.41; SEM = 6.63. Overall: t = 0.1527; df = 65; standard error of difference = 10.652.

84% and 16% (Ariel 1990: 70). Interestingly enough, the majority of the antecedents of the definite constructions in the Swedish corpus are found within the same sentence or in the previous sentence, as opposed to further away. Contrary to the behavior of definite descriptions in English (Ariel 1990: 70), the Swedish definite descriptions occur more frequently when their antecedents are located within the same or previous sentence.

	Same / previous	Further away	Total
	sentence		
DD-construction	21 (63.64%)	12 (36.36%)	33 (100.00%)
SDA-construction	23 (58.97%)	16 (48.48%)	39 (100.00%)
Total	44 (61.11%)	28 (38.89%)	72 (100.00%)

Table 4.6: Distance in sentence breaks

As is shown in table 4.6, 63.6% of the DD-constructions and 59.0% of the SDA-constructions have an antecedent in near proximity of the definite construction. Compare this to the data of English, where definite descriptions only have an antecedent this close by in 19% of all occurrences. The data of Swedish, focused upon Distance in sentence breaks, contradicts the expectation made by the Accessibility Theory, which is based in the idea that there is a correlation between the distance between the referential expression and its antecedent and the entity's degree of Accessibility. Since definite constructions mark a low degree of Accessibility, it would not be predicted that the majority of the definite constructions referring to a previously mentioned entity refer to an entity within the same or previous sentence. Furthermore, the definite constructions examined in the present study are expected to be overall of an even lower Accessibility than the definite descriptions studied in Ariel (1990), because the present study has been restricted to adjectivally modified definite constructions only, while Ariel's definite descriptions include besides modified definite constructions, bare definite nouns as well. Due to the unknown absolute number of definite constructions analyzed by Ariel, there is no possibility to statistically compare the difference between the behavior of those definite descriptions and the ones analyzed in the current study. However, it is unlikely that a statistical analysis of the two data groups would show that the difference is non-significant, since the difference in percentage is very large.

In order to determine whether or not the SDA-construction and the DD-construction in Swedish behave similarly or dissimilarly with regard to the Distance in sentence breaks, the measured distances for each individual construction are presented in table 4.7.

	Measured distances in sentence breaks
DD-construction	0, 0, 0, 0, 0, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
	3, 3, 4, 4, 5, 5, 5, 5, 6, 21
SDA-construction	0, 0, 0, 0, 0, 0, 0, 0, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
	2, 2, 2, 3, 3, 3, 3, 4, 4, 4, 5, 7, 7, 9, 13, 30

Table 4.7: Distance between the each definite construction and their antecedents

If every number of sentence breaks is taken as an individual category, it can be read off that both definite constructions occur most often in a position of one sentence break distance of the most recent mention. The data presented in table 4.8 shows that the average distance in sentence breaks between both definite constructions and their antecedents are relatively low. The means of the two definite constructions differ 0.53 from each other, the mean of the DD-construction is 0.29 lower than the overall mean, and the distance between a SDA-construction and its antecedent is on average 0.24 higher than the average in total.

	Distance in total	Average distance
DD-construction	80	2.42
SDA-construction	115	2.95
Total	195	2.71

Table 4.8: Distance between the definite constructions and their antecedents in total and on average in sentence breaks

Calculated by means of Welch's t-test, the two-tailed p-value = 0.6334, which is non-significant at a critical value of 0.05. Thus, it can be concluded that the DD-construction and SDA-construction behave similarly with regard to distance to their antecedent. Both constructions occur in contexts in which the most recent mention is located within the same sentence as well in contexts in which the most recent mention is more than ten sentence breaks away, although they both tend to occur more frequently with an antecedent in the same or previous sentence.

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⁹ For the DD-construction: SD = 3.78; SEM = 0.66. For the SDA-construction: SD = 5.24; SEM = 0.84. Overall: t = 0.4790; df = 70; standard error of difference = 1.095.

4.3.1.3. Interim conclusion

As I have shown in this section, the distance measured either in number of words or in sentence breaks is not a factor influencing the choice of definite construction. The distributional variation in distance between the suffixed definite article construction and the double definite construction has turned out to be non-significant. Based on this factor alone, the degree of Accessibility of both the SDA-construction and the DD-construction is similar. When a definite construction is used to refer to an entity previously introduced in the discourse, both constructions can be used to refer to entities very recently mentioned in the blogs, as well as entities that have been previously mentioned further away in the discourse. Neither of the constructions show a strong preference to whether an antecedent is in the same sentence, the previous sentence or one further away, although the majority of the previous mentioning of the entity happens in the immediate preceding sentence.

For the Distance measured in number of intervening words, no clear cut tendency towards a specific number of words is visible in the data. A wide range is represented, reaching from zero intervening words to over two hundred intervening words. The average number of intervening words seems to be quite high: 34.08. However, at this point in time there is no other data to which this number can be compared; therefore it is impossible to state that this distance is either high or low. However, looking at Distance in sentence breaks, the data turns out to not follow the prediction made by the Accessibility Theory. Contrary to the prediction, the adjectivally modified definite constructions in Swedish tend to occur more frequently with an antecedent within the same or previous sentence as opposed to entities further away.

4.3.2. Unity

Besides Distance, Accessibility can be low or high because of the degree of Unity between the referential expression and its antecedent. In section 4.1, the factor of Unity has already been introduced with respect to whether or not the definite construction refers to something within the same text or outside this unit. For the 128 definite constructions referring to an entity that has not yet been introduced into the discourse, the relation between the definite construction and its antecedent is deemed to be loose, leading to a low degree of Accessibility. The 72 definite constructions that refer to items that have been referred to prior in the blog texts can be analyzed by means of different aspects of Unity. The textual units that will be discussed in this section are the paragraph and the sentence.

4.3.2.1. In or outside the paragraph

A paragraph can be seen as one linguistic and textual unit, and if the antecedent is located outside this unit, there is a looser relation between the anaphor and the antecedent. When the two entities occur in the same paragraph, i.e. the same linguistic unit, their relation is tighter, which means that their Unity factor is higher. Looking at the status of paragraphs within the factor of Unity makes it clear that the distinction between one or more boundaries between the anaphor and the antecedent should not influence an entity's degree of Accessibility. Thus, the only distinction that has to be made is whether or not the antecedent of each definite construction is located inside or outside the paragraph in which the definite construction is uttered. In the present study, a paragraph is taken to be a section of the blog text, indicated with a new line, blank line, or indent. In table 4.9 below the results are presented.

	Same paragraph	Outside the	Total
		paragraph	
DD-construction	57.58% (19)	42.42% (14)	45.83 (33)
SDA-construction	61.54% (24)	38.46% (15)	54.17 (39)
Total	59.72% (43)	40.28% (29)	100.00 (72)

Table 4.9: The definite constructions and the factor of Unity, calculated with paragraph breaks as unit breaks

Both definite constructions seem to show a slight preference towards entities in the same paragraph over antecedents outside the paragraph, so does the DD-construction. The difference in frequency between entities located in the same paragraph and those outside is less for the DD-construction than for the SDA-construction. However, the difference between the two definite constructions is non-significant with a chi-square statistic of 0.12 and a *p*-value of 0.73. The null hypothesis, namely that the values of the two constructions behave similarly and the variation in values can be explained by means of chance, has not been proven wrong. The factor of Unity, investigated as paragraph boundaries, does not provide any evidence supporting that the difference between the two constructions can be explained by means of Accessibility.

4.3.2.2. In or outside the sentence

In table 4.10 the results for the factor of Unity, with a unit taken to be a sentence, are presented. Two categories are shown, namely whether the antecedent is located within or

outside the same sentence in which the definite construction is uttered. This corresponds to the division between antecedents within the same unit, and those that are located outside the same unit.

	Same sentence	Outside the same	Total
		sentence	
DD-construction	18.18% (6)	81.82% (27)	100.00% (33)
SDA-construction	23.08% (9)	76.92% (30)	100.00% (39)
Total	20.83% (15)	79. 17% (57)	100.00% (72)

Table 4.10: The definite constructions and the factor of Unity, calculated with sentence breaks as unit breaks

Both definite constructions display a strong tendency to refer to antecedents located outside the same sentence as the construction itself. This result is expected considering that definite descriptions are assumed to be low Accessibility markers. When a referential expression denotes an antecedent that is located in the same unit, the entity is expected to be highly accessible, and vice versa, when a linguistic item refers to an entity that has not yet been represented within the same unit, then the entity is be deemed to have a relatively low degree of Accessibility. Thus, contrary to the results of the paragraph as a unit, the data seen from the perspective of a unit being a *sentence* is supportive of the Accessibility Theory.

The data displays no significant difference between the DD-construction and the SDA-construction; with a chi-square value of 0.26 and a p-value of 0.61¹⁰, the difference in values between the two constructions is predicted by chance. This means that both constructions behave similarly when it comes to marking of degrees of Accessibility in the light of Unity, when units are taken to be sentences.

4.3.2.3. Interim conclusion

In the light of the Accessibility theory it is predicted that definite constructions more often than not have their antecedent outside the same unit, the reason being that a tight relation between the definite construction and their antecedent leads to a higher degree of Accessibility. Since definite constructions are conceived as low Accessibility markers, a strong unity between the most recent mention and the definite construction is unexpected. As Ariel (1991: 445) has pointed out, a unit can be a wide range of things. In the current analysis

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¹⁰ Fisher's exact: *p*-value of 0.77

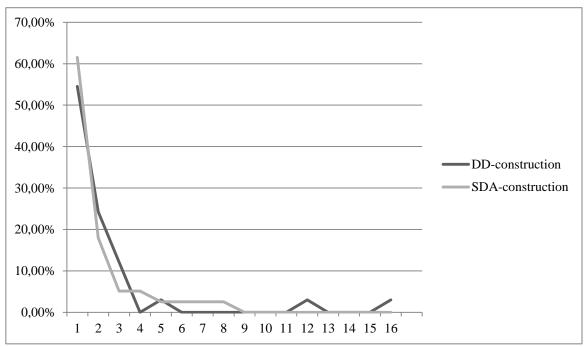
paragraphs and sentences have been analyzed. When taking paragraphs as units, it turns out that the majority of the adjectivally modified definite constructions in Swedish have their antecedent within the same paragraph. Thus, the definite constructions refer as easily or even with more ease to entities that have been most recently mentioned within the same paragraph as to items outside the paragraph. On the other hand, if we look at the behavior of the definite constructions and whether or not their antecedent is within or outside the same sentence, it is clear that both definite constructions more frequently refer to an entity outside the unit. Thus, although the data contradicts the predictions made by the Accessibility Theory when a unit is defined as a paragraph, the data is in line with the predictions when units are described in terms of sentences.

The data indicate that the two definite constructions are indistinguishable when it comes to marking the degree of Accessibility in light of the factor of Unity. It has been shown that an entity's degree of Accessibility dependent on the factor of Unity does not influence the choice of one of the definite constructions over the other.

4.4. Subsequent mentions (Saliency)

After an entity has been mentioned once in the discourse, it remains activated for a limited amount of time. The path towards a mental representation of an entity is paved every time it is activated in the discourse. If a path is well defined, the entity is easily retrievable, and as such salient, consequently it bears a relatively high degree of Accessibility. If an entity has a high number of subsequent mentioning it follows that the entity is salient in the discourse, and as such is deemed to exhibit a higher degree of Accessibility (Ariel 1991: 445).

The results, presented in graph 4.1, show that both constructions are more frequently used when their referent has only been mentioned once before. The double definite construction is mainly used when the referent has been mentioned once before, and its second most frequent use in contexts in which the referent has been previously introduced, is when the entity is named twice in the preceding text. The same is true for the suffixed definite article construction.



Graph 4.1: Relative frequency of times mentioned before, with the number of mentions on the x-axis and the times this frequency occurred in the data on the y-axis

Graph 4.1 shows that both constructions behave very similar regarding the number of subsequent mentions. There is no indication of a difference between the two definite constructions in Swedish based on this aspect of the factor of Saliency.

4.5. Length of referring expression (Competition)

Based on Grice's maxim of Quantity "make your contribution no more and no less informative than is required" (Grice 1967 in Clark & Haviland 1977: 1), the analysis of the two definite constructions and Competition will focus on the length of the referential expression. The idea behind this is that, when additional lexical information has been provided by the language user, it is reasonable to assume that the speaker assumes that the addressee cannot identify the referent without this extra information. This suggests that there is more than one entity that fits the definite description without extra information, in other words that there is competition on the role of referent. It should be kept in mind that the data examined in the present study are definite constructions already containing an adjectival modifier, and that the data analyzed for this section focusses not on extra adjectival modification of the noun, but on additional lexical information such as restrictive relative clauses or names.

Regarding this factor, the double definite construction is more often further modified than the suffixed definite article construction, as can be read of from table 4.11.

	Extra lexical	No extra lexical	Total
	information	information	
DD-construction	35	65	100
SDA-construction	4	96	100
Total	39	161	200

Table 4.11: The frequency of the definite constructions with or without extra lexical information

In only four out of the 100 SDA-constructions, one or more pieces of additional lexical information are given by the speaker, while this is the case in 35 out of the 100 double definite constructions. The difference between the values is statistically extremely significant with a *p*-value of less than 0.0001, calculated by the two-tailed Fisher's exact test, and a chi-square statistic of 30.61, with a p-value of less than 0.0001. Thus, it can be concluded that the DD-construction is preferred over the SDA-construction when the language user feels the need to further specify the referent. Furthermore, the data makes clear that the DD-construction feels more comfortable in contexts with extra lexical information than the SDA-construction. Yet, both constructions prefer to occur in contexts where definite construction is only modified by one lexical piece (i.e. the adjective).

The data presented in the table 4.11 does not immediately provide a basis to argue for a distinction between the DD-construction and the SDA-construction based on degree of Accessibility. The fact that the DD-construction lends itself for extensive definite descriptions, which are presumably used to mark low accessible entities, while the SDA-construction is not very frequently used in these contexts, does not mean that the SDA-construction is a higher Accessibility marker per se. A further elaboration on these results and their implications will be discussed in the following chapter.

4.6. Summary of the results

The data presented in this chapter show that overall degree of Accessibility cannot account for the existence of two definite constructions in Swedish. If, as hypothesized, the SDA-construction were to be a marker of higher Accessibility than the DD-construction, it would be expected to be visible in all factors influencing an entity's degree of Accessibility. Contrary to this expectation, the two constructions have been shown to behave similarly with

regard to the factors of Distance and Unity. For the factor of Saliency only one aspect has been analyzed: number of subsequent mentions. It has been proven that this does not provide any basis for a distinction between the SDA- and DD-construction. However, it has been shown that the frequency of the two constructions is significantly different in contexts in which the denoted entity is further specified.

In the following chapter will a hypothesis based on the results presented in the current chapter will be formulated, which will focus on the data with a positive result: the results for the factor of Competition.

5. COMPETITION HYPOTHESIS

The distributional analysis in the previous chapter has shown that the difference between the two definite constructions cannot be explained by overall degree of Accessibility they mark. The present chapter nevertheless aims to give an insight in the difference between the suffixed definite article construction and the double definite construction. In this chapter, I start out with formulating a Competition Hypothesis, based on the data presented in the previous chapter, which have shown that the factor of Competition is the only factor showing a significant difference between the SDA-construction and the SDA-construction. The hypothesis explains the difference between the two definite constructions, and is tested by looking at the behavior of both constructions in bare noun phrases. The second section of this chapter discusses the formulated hypothesis in relation to previous accounts. It will be shown that there are certain problems that arise with previous accounts, which are not problematic for the Competition Hypothesis. In other cases, the Competition Hypothesis complements earlier theories. Lastly, I discuss the problems that arise and remain for the Competition Hypothesis, both problems mentioned in previous literature, as well as data that has surfaced during the corpus research.

5.1. The hypothesis

As has been proven in Chapter 4, the SDA-construction and the DD-construction do not differ from each other in overall degree of Accessibility. If, as has been hypothesized in the introduction, the SDA-construction were in fact a marker of a higher degree of Accessibility than the DD-construction, this would be visible in the results of the analysis of every factor influencing an entity's degree of Accessibility. As it turns out, only the results for the factor of Competition show a significant difference between the SDA-construction and the DD-construction. The data for this factor is repeated in table 5.1.

	Multiple modifiers		One adjectival modifier	
DD-construction	89.74%	(35)	40.37%	(65)
SDA-construction	10.26%	(4)	59.63%	(96)
Total	100.00%	(39)	100.00%	(161)

Table 5.1: The frequency of the definite constructions with one or multiple modifiers

As can be seen in table 5.1, the ratio DD-construction/SDA-construction is higher when the entity denoted by the noun phrase is specified by multiple pieces of information (8.75), than when only one adjectival modifier is found (0.68). When the noun is modified by one lexical item (the adjective), the SDA-construction is more frequently used than in constructions containing more lexical information. As has been shown in section 4.5, the difference between the values is statistically extremely significant with a p-value of less than 0.0001

Based on Grice's maxim of Quantity "make your contribution no more and no less informative than is required" (Grice 1967 in Clark and Haviland 1997: 1) and Sperber and Wilson's principle of relevance "the speaker tries to express the proposition which is the most relevant one possible to the hearer" (Sperber & Wilson 1982: 75), it is assumed that a language user would not provide irrelevant lexical information, nor would they purposely leave out necessary lexical information. Consequently, if a language user makes use of noun phrases with multiple modifiers, it indicates that they are uncertain about the addressee's capability of identifying the entity without this additional distinguishing information. This information is provided because the language user thinks that the addressee would not be able to sufficiently distinguish the denoted entity from others without this information. In other words, additional distinguishing lexical information is provided when there is competition on the role of antecedent.

This leads to the intuition that the two definite constructions differ from each other with respect to the factor of Competition. In (1) the Competition Hypothesis is formulated. I propose that the difference between the DD-construction and the SDA-construction lies in that the DD-construction signals that there are multiple potential entities that can serve as the antecedent of the noun, while the SDA-construction has no such function.

(1) Competition Hypothesis

The double definite construction signals two things to the addressee: the entity's relatively low degree of Accessibility and that there is competition on the antecedent of the noun.

The suffixed definite article construction does not signal this competition, but only marks that the entity denoted by the noun has a relatively low degree of Accessibility.

In line with Ariel's Accessibility Theory and Epstein's (2002) further proposal on the function of definites, both definite constructions are thought to mark a relatively low degree of

Accessibility, as has been discussed in chapter 3. The difference between the two constructions is hypothesized to be that the DD-construction signals to the addressee that there is Competition, while the SDA-construction lacks this signal. I have decided not to formulate the hypothesis in such a way that the entity's low degree of Accessibility is a consequence of Competition, due to the fact that there are many more factors involved in an entity's degree of Accessibility than Competition alone, as has been discussed in chapter 3. Assuming that the third definite construction in Swedish, the FDA-construction is a true definite marker as well, a split-semantics hypothesis arguing that the free definite article on its own signals Competition is out of place. Further research that incorporates the FDAconstruction is needed to provide clarification regarding this issue. At this point in time I do not deny that the FDA-construction is a true definite marker and as such marks an entity's relatively low degree of Accessibility. Therefore, I argue that there is not a one to one function – morpheme relation. In other words, I do not attribute the function of marking an entity's relatively low degree of Accessibility to the definite suffix, nor do I argue that the free definite suffix signals Competition. Instead, the SDA-construction and the DD-construction both mark a relatively low degree of Accessibility. The DD-construction has the additional function of signaling Competition.

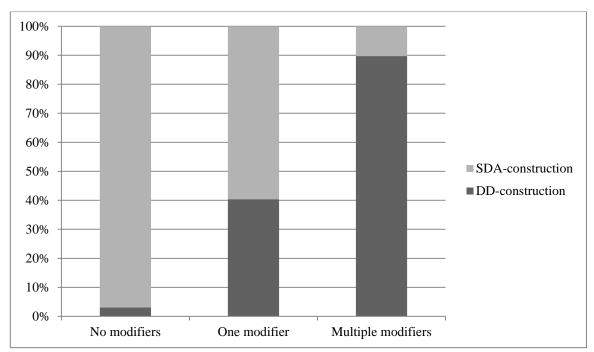
The Competition Hypothesis can be confirmed by looking at the ratio DD-construction/SDA-construction in non-modified definite noun phrases. When language users do not make use of modifiers in a noun phrase, they are deemed to be fairly certain that the noun alone is sufficient for the addressee(s) to access the intended denoted entity. The sufficiency of the bare noun phrase predicts that there is no competition (because there is no need to provide distinguishing information about the entity). Therefore, it is expected that the SDA-construction is used.

	Multiple modifiers	One adjectival	No modifiers
		modifier	
DD-construction	89.74% (35)	40.37% (65)	3.09% (3)
SDA-construction	10.26% (4)	59.63% (96)	96.91% (94)
Total	100.00% (39)	100.00% (161)	100.00% (97)

Table 5.2: The frequency of the definite constructions depending on the number of modifiers

Table 5.2 presents the data on the definite noun phrases without modifiers, in comparison to the noun phrases with one and multiple modifiers. The ratio DD-construction/SDA-

construction for multiple modifiers is 8.74, decreases to 0.677 in definite noun phrases with one adjectival modifier and drops to 0.032 when there are no modifiers in the noun phrase. With a significant level α of 0.01, all values are significant, calculated with a binominal test. The strong trend is made visible in graph 5.1.



Graph 5.1: The frequency of the definite constructions depending on the number of modifiers

It is evident that the more modified a definite noun is, the higher the chance of encountering the DD-construction and the lower the chance of encountering a SDA-construction. Conversely, the SDA-construction becomes more frequent when there are fewer modifiers. This data supports the Competition Hypothesis, because it shows that the alleged non-competition marker (the SDA-construction) is preferred more strongly over the definite construction with competition signal (the DD-construction) than in modified contexts.

5.2. The hypothesis in relation to previous accounts

In the current section, I evaluate the Competition Hypothesis in relation to previous theories regarding the difference between the DD-construction and the SDA-construction. It will be argued that the Competition Hypothesis has certain advantages over the traditional approaches, which have directly related the use of the free definite article to the presence of an adjective.

5.2.1. The DD-construction without an adjective

The use of the DD-construction without an adjective seems quite problematic for the analysis of the use of the DD-construction as being triggered by the presence of an adjective, since there is no apparent trigger for the double determination. In (2) and (3), two examples are presented.

- (2) I Ytterjärna besökte jag Robygges butik, gick omkring lite i trädgården och tittade på de övriga antroposofiska byggnaderna utifrån. Utifrån detta blev jag inte imponerad. Jag hade nog för höga förväntningar och skulle ha behövt en guidning och gått in i husen också, men den tiden fanns inte.

 'In Ytterjäna I visited Robygges store, walked around a bit in the garden and looked at the other anthroposophical buildings outside. Based on this I was not impressed. I probably had too high expectations and would like to have had a guided tour and gone into the houses as well, but I did not have the time.'
- (3) Och bara en fin gatbild på en <u>"ding ding"</u>, spårvagnarna heter så här.

 'And just a nice street scene of a "ding ding", that's what the trams are called.'

 Ska lätt ta med det uttrycket hem till Götet!

 'It should be easy to take that expression home to Gothenburg!¹¹

The absence of an adjective causes no direct problems for the Competition Hypothesis, since there is no direct relation between the presence of an adjective and the use of the DDconstruction, only a strong indirect relation.

Schoorlemmer (2012: 111), following Leu (2008), explains the double determination in contexts without an adjective by assuming that there is a silent adjective with a 'here/there' meaning. The silent adjective then triggers the use of a free definite article. However, this explanation does not suffice for the DD-construction in (2). There is no indication of the noun phrase to have a demonstrative meaning. Furthermore, it would be weird to insert a *här* or *där* in between *den* and *tiden*. Instead, the function of the DD-construction in (2) is to denote definiteness and make a contrast. The language user talks about not having the time to do a guided tour and go into the houses, contrasting that he had the time to walk around in the garden, look at the buildings and visit a store. Santelmann (1993: 156), contrary to Schoorlemmer (2012), acknowledges this kind of emphatic or contrastive meaning as one of

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¹¹ Literal translation: 'Should easily take that expression home to Gothenburg.'

the two contexts in which the DD-construction is allowed without an adjective triggering its use. The second context in which the DD-construction is allowed without an adjective is when the noun phrase has a demonstrative meaning, exemplified in (3).

Although the use of the DD-construction in (2) and (3) is accounted for by Santelmann (1993), she does not explain how an emphatic/contrastive or demonstrative meaning can trigger double determination. The Competition Hypothesis advantages over these accounts, since it does not need to seek to an explanation as to why a double definite construction can be used without an adjective in the noun phrase, nor does it assume that this use is exceptional. However, the emphatic, contrastive and demonstrative interpretations have to be explained if these are not needed as a trigger of the DD-construction. I argue that these are inferred and are a consequence of the language user signaling that there is competition. For the contrastive interpretation in (2) it is reasoned that by expressing that there is more than one potential antecedent for tiden 'the time', and because of the existence of two potential antecedents in the discourse, contrast between these two potential antecedents is attenuated by marking Competition. The contrastive interpretation is then pragmatically made. Similarly, the demonstrative interpretation in (3) is thought to be a consequence of Competition. Interestingly enough, the context in (3) provides only one salient entity that is a likely candidate for the role of antecedent, namely ding ding. This makes it unexpected that the DDconstruction is used, because there are no apparent competitors. The relation between demonstratives and Competition requires further research in order to give a convincing argument as to why the DD-construction can be interpreted as a demonstrative.

So far, I have argued that the potential contrastive meaning of the DD-construction in contexts without an adjectival modifier is a pragmatic consequence of the Competition Hypothesis, when all members of the potential set are introduced into the discourse would. A contrastive meaning is a consequence of the signal of Competition in combination with introduction of the members of the set into the discourse world. Assuming a silent adjective with a here/there-meaning, as Schoorlemmmer (2012) and Leu (2008) do, is problematic when the DD-construction does not embody a demonstrative. The reason for the possibility of a demonstrative interpretation of a DD-construction without adjectival modifier requires further research.

5.2.2. SDA-construction with an adjective

Connecting the presence of a DD-construction directly to the presence of an adjective in the definite noun phrase makes the relatively high frequency of the SDA-construction in

adjectivally modified noun phrases compared to the FDA-construction and the DD-construction slightly problematic. The previous accounts arguing for this direct relation have proposed some 'exceptional rules' in order to account for the lack of the free definite article in some adjectivally modified definite noun phrases. Under these circumstances, the free definite article is said to be allowed to be dropped. In this section, I will discuss these exceptional rules, and argue that they are unable to account for the full range of uses of the SDA-construction. I will start out with discussing the non-anaphoric restriction on SDA-constructions (Teleman et al. 1999), which will be followed up by a discussion of the uniqueness constraint. Lastly, it will be argued that the Competition Hypothesis complements the idea that the adjective in SDA-constructions is more closely tied to the noun than in DD-constructions.

5.2.2.1. Non-anaphoric restriction

Teleman et al (1999: 19) have argued that the free definite article can be dropped only when "the adjective has a restrictive interpretation and the referent can be identified in the speech situation / previous experience but *not if it is identified anaphorically through the [linguistic] context*".

I have assumed that "anaphoric identification" is defined in the sense of Hawkins (1978), who states that a definite description is used anaphorically when it co-specifies with a discourse entity already introduced in the discourse. A definite description co-specifies with its antecedent in a text, given that such an antecedent exists, if the definite description and its antecedent denote the same object (Sidner 1979 in Poesio & Vieira 1998: 186). Consequently, this entails that Teleman et al. (1999) predict that the SDA-construction should not be found when it denotes an entity that has been directly introduced in the preceding text.

(4) <u>Det här klippet</u> med John Oliver är både underhållande och dystopiskt (en av de bättre kombinationer man kan tänka sig för att nå ut med sitt budskap på ett slagkraftigt sätt).

'<u>This clip</u> with John Oliver is both entertaining and dystopian (one of the better combinations one can think of to reach out with their message in an effective way).'

I klippet finns också ett ganska makabert uttalande från TIMEs vd Joe Ripp som påstår att redaktörer nu är glada över att äntligen slippa tänka på "the separation between church and state, whatever that was" (motsvarande väggen mellan redaktion och marknadsavdelning), och att redaktionen nu får jobba för "the business side of the equation".

'In the clip there is also a quite macabre statement from the CEO of TIMEs Joe Ripp who states that editors are now happy to finally avoid thinking about "the separation between church and state, whatever that was." (corresponding to the wall between editorial and marketing), and that the editors now get to work on the "business side of the equation".'

John Oliver konstaterar att det är som att säga att en kirurg opererar bort hjärtat på en patient – whatever that was. That was the heart!

'John Oliver notes that it is like saying that a surgeon operates the heart of a patient away – whatever that was. That was the heart!'

Sevärt och intressant inlägg i debatten. Se <u>hela klippet</u> nedan.

'Worth seeing and an interesting contribution to the debate. See **the full clip** below.'

In the example in (4) the SDA-construction *hela klippet* 'the full clip' co-specifies with *klippet* and *det här klippet*; they both refer to the same video. This is confirmed when comparing the URL attached to the text *det här klippet* and the URL of the video inserted in the blog, both redirect to the URL: https://youtu.be/E_F5GxCwizc. This example counters the explanation of the use of the SDA-construction given by Teleman et al. (1999: 19) and shows that the SDA-construction can be used when the referent is identified anaphorically. For the Competition Hypothesis, the use of the SDA-construction in the example above is not problematic. Since there is only one salient 'clip' in the discourse world, there is no competition on the role of antecedent. The denoted entity is clear and easily accessible for the addressee, without any competitors of the same set, that is, the set of *clips*.

5.2.2.2. Uniqueness criterion

Santelmann (1993: 159) mentions that it is sometimes possible to omit the pre-nominal determiner, even when there is an adjectival modifier. She argues that this can only happen if the noun phrase is either a proper name, or if it denotes a unique entity. Similarly, LaCara (2011: 60)¹² has noted that the "in all of the places where the nominal has only one contextually salient or sensible referent, the definite article may be dropped", and Delsing (1993: 118) argues that the free definite article is allowed to be dropped in adjectivally modified noun phrases when 1) the item is well known in the speech situation; 2) the item is unique in the world or 3) the item is unique in a smaller speech community. Although this uniqueness criterion seems to hold up for many of the SDA-constructions used in combination with an adjectival modifier, there are certain cases in which it does not (exemplified in 5 and 6).

- (5) Isabella, som gärna hänger med brorsorna och inte med mamma hon hängde gladeligen på in på pojkrummet! Hon är 1 år. Står med en mobil i högsta hugg och tjuvkikar när **ena brorsan** spelar.
 - 'Isabella, who likes to hang out with her brothers and not with mamma she happily hung around in the boy's room. She is one year old. Stands with a mobile phone ready and peeks when **the one brother** plays.'
- (6) Jag skulle gått ikväll men min energi är nere på noll nu eftersom att jag går praktik 7-16 dagligen på en byggarbetsplats där jag jobbar utomhus **HELA** dagarna på ett tak.

'I would have gone tonight but my energy is down to zero now because I do an internship every day from 7-16 on a construction site where I work outdoors **WHOLE days** on a roof.'

The noun phrase in example (5) does not denote a unique entity and the example in (6) does not denote a unique group. Instead, of all the possible days, it is not relevant which days in (6), neither is it relevant in (5) which one of the brothers plays, only that it is one of the brothers. The Competition Hypothesis does not encounter any problems with the examples in (5) and (6); there is simply no competition because it is not relevant which member of the set

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¹² Santelmann's definition of uniqueness is inferred from the example she has given on page 173: *norra stranden* 'the north shore', in combination with her analysis that the free definite article cannot be used when the referent is not sufficiently unique to recover the content of $pro-D^0$ (cf. Rizzi 1986).

is denoted, only that it is one member of the set. The correlation between the use of the SDA-construction and the uniqueness of an entity can be easily explained. When there is only one unique item of a set in the world, the smaller speech community or in the discourse world, there is no competition on the role of antecedent; consequently there is no need to use a competition marker, which triggers the use of the SDA-construction.

The advantage of the Competition Hypothesis over the uniqueness criterion is that it does not restrict the use of the SDA-construction to contexts in which a unique referent is denoted, but extends the use to contexts in which the language user does not deem it relevant whether or not there are competitors.

5.2.2.3. Different kinds of adjectives

The last exceptional circumstance in which the SDA-construction is allowed to be used according to previous accounts (Julien 2005, Delsing 1993, Börjars 1994, Schoorlemmer 2009 and Santelmann 1993) is when the noun phrase denotes a proper name. In these noun phrases, the adjective is bound to the noun in a different manner than in non-name denoting definite noun phrases. Two examples are presented in (7).

(7a) Svenska dagblad-etSwedish daily-DEF.SG.NEUTER

'Svenska Dagbladet' (the name of a newspaper)

(7b) Vita hus-et

white house-DEF.SG.NEUTER

'The White House' (the name of the home of the American President)

(Börjars 1998: 203 in Schoorlemmer 2009: 42)

In sentences like these, it has been argued that the noun and the adjective form one single vocabulary item¹³. This is confirmed by the fact that the insertion of a different adjective in between the original adjective and the noun is not possible, under the condition that the denoted entity has to stay the same. This is exemplified in (8).

¹³ Schoorlemmer (2009: 43) does not assume that the adjective and the noun form one single vocabulary item, but instead that they are inserted in the morphological component as one unit under a single syntactic head. An AP lacks in both suggested structures.

- (8a) *Svenska vältryckta dagblad-et
 Swedish well-printed daily-DEF.SG.NEUTER
 'The well-printed Svenska Dagbladet'
- (8b) *Vita fallfärdiga hus-et
 white ramshackle house-DEF.SG.NEUTER

'The ramshackle White House'

(Börjars 1998: 205 in Schoorlemmer 2009: 42-43)

According to Schoorlemmer (2009), Delsing (1993), and Julien (2005), the omission of the free definite article is also possible when the referent of the noun phrase has a presupposed unique character to both the hearer and the speaker. Delsing and Julien conclude that this causes a reading similar to that of a proper name, thus allowing the use of the SDA-construction. Schoorlemmer (2009) slightly parts from them in suggesting that the adjective and the noun only syntactically function together as a proper name when the free definite article is missing.

(9) Ta nya bil-enTake DEF new car-DEF'take the new car'

The sentence in (9) is an example of an adjectivally modified noun phrase behaving similarly to a proper name. LaCara (2011: 59) argues that the free definite article may only be dropped in a context in which for example, a family has bought a car but not yet replaced the old one. The expression *nya bilen* 'the new car' is then conventionalized as the way of referring to the unique car.

It seems that this case is problematic for the Competition hypothesis, since there is a clear competitor, namely the old car. It is the adjective that is making sure that there is only one item of the set accessed, and eliminates others. However, if we adept Schoorlemmer's (2009) analysis, in the sense that the adjective and noun convey one unit, then the adjective and the noun combined denote a set of 'new cars', in which there is no competition from the old car, since it is not a valid member of this denoted set.

The advantage of the Competition Hypothesis is that it does not assume that the SDA-construction denotes a unique entity per se, avoiding problems encountered with sentences as the ones in (5) and (6). Furthermore, it does not predict that the adjective and the noun are

obliged to denote a set together, and gives room for a more gradual analysis of adjectival incorporation into the noun. This is needed, because the adjective in SDA-constructions does not always form a strict syntactic unit with the noun. If the adjective and the noun were always to behave as one syntactic unit in SDA-constructions, it would predict that, similarly to the proper names, the insertion of an additional adjective would not be possible. However, this is not true, as is shown in (10). Both sentences are retrieved from the corpus.

(10a) Vi skrattade hela vägen till tvhuset.

'We laughed the entire way to the TV house.'

(10b) Vi skrattade hela långa vägen hem.

'We laughed the entire long way home'

5.2.2.4. Specificity and Uniqueness

The account of Julien (2003) and Anderssen (2007), who split definiteness into uniqueness and specificity, encounters some issues. Their definition of uniqueness as "referring to a referent that is familiar and identifiable to the listener, and is indicated by a [+hearer] feature" does not coincide with the traditional definition of uniqueness (Russell 1905). Following Russell's account uniqueness has been later described in terms of the exhaustiveness condition (Hawkins 1978 amongst others).

(11) Exhaustiveness condition:

The F(s) is/are G

 $F-G = \emptyset$

(Neale 1990: 46 in Abott 2001: 2)

In the traditional literature on uniqueness, identifiability to the listener is not necessarily a condition for uniqueness, which means that the definition of Julien and Anderssen is not identical to the traditional definition. Because of this, it is problematic that neither Julien (2003) nor Anderssen (2007) have specified what they mean with other notions they use, familiarity and identifiability. Traditionally (unique) identifiability and familiarity are two different and distinct approaches that aim to explain definiteness. The two notions cannot be simply combined without any complications (Abott 2001). See Chistophersen (1939) and Heim (1982) for a familiarity account of definiteness, and Gundel et al. (1993) for a unique identifiability account. Furthermore, splitting the functions of definiteness in this specific

manner would predict that the FDA-construction is not identifiable and familiar for the speaker, but yet identifiable and familiar for the hearer, unless it is lexically inserted in the same manner as a pronoun. The Competition Hypothesis does split the definite function, but argues that the DD-construction has an additional function to definiteness, namely to mark Competition. Consequently, the definite constructions in Swedish are full and complete markers of definiteness.

5.3. Remaining issues

The main problem that remains for the Competition Hypothesis is the group of DD-constructions that are used in contexts in which there is no apparent competition. I will discuss two examples taken from the data sample.

(12) Det var nämligen inte så, att den eviga freden hade brutit ut efter Sovjetunionens kapitulation i **det Kalla Kriget.**

'Because it was in fact not true that the eternal peace had broken out after the Soviet Union's surrender in **the Cold War.**'

The noun phrase in (12) denotes a unique entity in the world and the adjective-noun combination *Kalla Kriget* 'the Cold War' is the conventionalized manner of referring to this specific war. The noun phrase thus denotes a set of one. Consequently, there are no competitors. It could be argued that in this case *Kriget* denotes the set of all wars and the adjective *Kalla* is used to distinguish the denoted entity from all other competitors. However, there is no other reason to assume this, other than it would be convenient. Furthermore, the impossibility of inserting an adjective in between *Kalla* and *Kriget* without changing the denoted entity shows that the adjective in this noun phrase is as tightly bound to the noun as *Vita* to *huset* in example (7b). Therefore, there is no reason to think that there is competition. Note however, that it is possible to use the SDA-construction, although it is used less frequently¹⁴.

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¹⁴In the corpus 41 instances of *det kalla kriget/det Kalla Kriget* are found, compared to 33 instances *kalla kriget/Kalla Kriget*.

(13) Efter **Kalla Kriget** förändrades den strategiska situationen drastiskt. 'After the Cold War, the strategic situation changed drastically.'

In order to explain the use of the DD-construction in (12) further research will be needed.

(14) Och bara en fin gatbild på en "ding ding", spårvagnarna heter så här.
 'And just a nice street scene of a "ding ding", that's what the trams are called.'
 Ska lätt ta med det uttrycket hem till Götet!
 ''It should be easy to take that expression home to Gothenburg!

Example (3), repeated in (14), remains at this time problematic as well, because as discussed in section 5.2.1., there is only one salient entity in the discourse: *ding ding*. The use of the DD-construction in this context triggers a demonstrative reading, which is hypothesized to be a consequence of the signaling Competition in combination with the existence of one salient entity. It is left for further research to examine and describe how signaling Competition and demonstrative readings are related.

To summarize, it is possible to encounter a DD-construction in contexts in which there is no apparent reason for signaling competition. In these cases it is unexpected that the DD-construction is used as opposed to the SDA-construction. Further research is required to shed light on these uses of the DD-construction.

5.4. Conclusion

In the current chapter it has been argued that the difference between the double definite construction and the suffixed definite article construction is grounded in the notion of Competition. This difference is captured by the Competition Hypothesis, which states that the DD-construction signals that there is competition, while SDA-construction lacks this function. Both constructions are assumed to be complete definite constructions and signal an entity's relatively low degree of Accessibility. The hypothesis is tested by looking at the non-modified definite noun phrases. The sufficiency of the bare noun phrase predicts that there is no competition, because there is no need to provide distinguishing information about the entity. As it turns out, the ratio DD-construction/SDA-construction is indeed significantly smaller for

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¹⁵ Literal translation: 'Should easily take that expression home to Gothenburg.'

non-modified noun phrases than the for modified definite noun phrases. This result confirms the hypothesis.

Relating the Competition Hypothesis to previous accounts shows that the main advantage the current theory has over previous accounts that it does not directly relate the presence of an adjective to the use of a free definite article. Still, it is undeniable that the DD-construction, and thus the free definite article, occurs more often in contexts of a modifier than in contexts without a modifier. This relation is explained by simple conversational maxims (Grice 1975). Furthermore, the Competition Hypothesis does not predict a uniqueness criterion for the SDA-construction, yet it still explains why a uniqueness effect often co-occurs with this construction. Still some issues remain regarding certain uses of the DD-construction that do not seem to need a competition signal. These are the DD-constructions that denote a proper name-like noun phrase and refer to an entity unique in the world; and the DD-constructions that are used in combination with only one potential antecedent, which is dictated by the contextual situation. The last mentioned group of DD-constructions seems to get a demonstrative reading. Further research is needed to clarify these uses.

6. CONCLUDING REMARKS

In the present thesis I have shown that the two most frequent definite constructions in Swedish, the double definite construction and the suffixed definite article construction, do not differ from each other in the overall degree of Accessibility they mark. Corpus research has proven that the double definite construction and the suffixed definite article construction exhibit similar distributional behavior regarding the factors of Distance, Unity and Saliency. Interestingly enough, there is one crucial factor of Accessibility that shows a significant difference in distribution between the two definite constructions: Competition. Based on the data in combination with Grice's maxim of Quantity, a Competition Hypothesis has been formulated. Both definite constructions are argued to be markers of a relatively low degree of Accessibility, while the DD-construction has an additional function, which the SDA-construction lacks: the signal of Competition. The hypothesis has been supported by data of definite bare noun phrases, which show that the ratio DD-construction/SDA-construction is smallest for non-modified definite noun phrases and increases the more modified a definite noun phrase is.

The Competition Hypothesis has as its main advantage over previous accounts that it does not directly relate the presence of an adjective to the use of a free definite article. Instead, the highly frequent co-occurrence of the DD-construction and modifiers are argued to be a consequence of the function of the DD-construction, grounded in conversational maxims. The main problem for the hypothesis is at this point in time the group of data in which the DD-construction is used without any apparent sign of Competition. An explanation might be sought in the direction of a relation between Competition and demonstrative readings of the DD-construction. This issue is left for further research. Furthermore, a study of the definite constructions in which the definite suffix is lacking can provide further insight in the Competition Hypothesis and refine its formulation.

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7.1. Primary data

500 random results of the query used for the DD-construction (Sheet 1) and the SDA-construction (Sheet 2). URL:

https://drive.google.com/open?id=15_pYFF2CEBX27VSjnggiiwSeMTC_Ne4lEvztygxUlqk

The analyses of the two definite constructions by means of the four factors influencing Accessibility. 100 DD-constructions (Sheet 1) and 100 SDA-constructions (Sheet 2). URL: https://drive.google.com/open?id=19IZ7uAxNp25k5clrdIGOUcU0t3tRuLCmMuf7PD6ZdOY

Bare noun phrases and the overall frequency of the definite constructions. 1000 random instances of the query used for the DD-construction and FDA-construction in definite bare noun phrases (Sheet 1) and the 500 random results of the query used for the SDA-construction in definite bare noun phrases (Sheet 2). URL:

https://drive.google.com/open?id=1zU8FA1yE-pResDyLrDxP4WbCxDvcgkEsk11Dy56yQM Result of the query for 500 bare noun phrases. URL:

https://drive.google.com/open?id=1wR55B4NPxsVSgtEPIjagc1_OLKmF-L1Xolwc4g32RsA 97 definite bare noun phrases. URL:

https://drive.google.com/open?id=1GoFzCgni0d6G2HuevqLEsdZ2hibQnwZHLAu5i0neoxM