

CONTRACTED PREPOSITION-DETERMINER FORMS IN GERMAN:

SEMANTICS AND PRAGMATICS

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Estela Sophie Puig Waldmüller

Advisor: Dr. Louise McNally Seifert

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Chapter 1

Introduction

The topic of this work is a class of prepositions with inflectional endings (henceforth contracted forms) which are found in Standard and non-Standard German. In colloquial and non-Standard German contracted forms appear more freely than in Standard German. Although many non-Standard contractions are not admitted in Standard German grammars they seem to be obligatory in non-Standard German or are often accepted in fixed and idiomatic expressions. In this work, I will focus on the forms found in Standard German, as listed in table 1 (forms that are considered non-Standard German are in parenthesis).

	Masc.Sg	Fem.Sg	Neutr.Sg
Prep-DAT	am, beim, im, vom, zum	zur	
colloquial	hinterm, überm, unterm, vorm	(beir) ¹	
Prep-ACC			ans, ins
colloquial	hintern, übern, untern, vorn		hinters, übers, unters, vors

Table 1.1: Some of the contracted forms found in Standard and non-Standard German

To begin with, in the next two chapters (2 and 3) the distribution of “non-contracted” and “contracted forms” will be presented and contrasted. Henceforth, I will use the term “contracted forms” since the term signals neutrality with respect to what is contracted. These forms will be contrasted with “non-contracted forms” which consist of bare prepositions followed by regular forms of the definite articles. Further, I will transcribe a contracted form as “Prep-CASE” where “Prep” is the affected preposition and “CASE” is the case of the suffixal marking. For example, *zur Schule* will be “to-DAT school” which translates into “to the school”. Ac-

cordingly, I will transcribe non-contracted forms as “Prep the-CASE”. For example, *zu der Schule* will be literally translated as “to the-DAT school” which translates into “to the/this school”.

We will see that most accounts on contracted forms take them as being composed of a singular definite article in dative or accusative case, which has undergone some kind of weakening process and attached to a preceding preposition. Therefore, in chapter 4) accounts on definite descriptions in general will be reviewed, and in chapter 5 the existence of two forms of the definite article in non-Standard German variants will be presented.

In chapter 6, I will discuss accounts that have treated contracted forms: The names for this form vary depending on the analysis employed. For example, we find the terms *Verschmelzungsformen* (“fused forms”, Schaub (1979), Prinz (1991), Hartmann (1978), Hartmann (1980), Hartmann (1982)), *prepositions with enclitic articles* (Scholten (1988)), *inflected prepositions* (Hinrichs (1984), Hinrichs (1986), Stolz (1990)), and *preposition-determiner-contractions* (van Riemsdijk (1998)).

Last, in the proposal in chapter 7, I will argue that the distribution of both forms can be accounted for if one takes non-contracted forms to be anaphoric expressions that require a discourse-old referent. These forms contrast with contracted forms in that the latter can simply be analysed as semantically incorporating prepositions, which are inflected for singular number, gender, and case, and which combine with bare noun phrases.

Chapter 2

Contexts where NCFs are
used or preferred

2.1 Introduction

In the next two chapters we will see in which contexts non-contracted and contracted forms may occur. In this chapter, I will focus on the distribution of non-contracted forms. We will see that these forms, despite having definite articles, are more restricted in their distribution than “regular” definite articles. Before I provide the contexts in which non-contracted forms occur, I will give a short overview of the uses of definite noun phrases assumed here for Standard German. These assumptions are based on English, e.g., by Hawkins (1978), Prince (1981), Prince (1992)).

For English, the uses of definite descriptions have been listed and described, e.g., by Hawkins (1978) and Lyons (1999), and they have been analysed in terms of their semantics (Russell (1905); Neale (1990)) or pragmatics (Prince (1981), Kamp (1981), Heim (1982), based on Christophersen (1939)). Some of these accounts will be discussed in more detail in chapter 4.

2.2 Basic assumptions on the use of definite NPs in German

In order to describe the uses of definite noun phrases in non-contracted forms, we must first make some general assumptions on their use and the contexts in which German definite noun phrases usually occur. In general, definite noun phrases may appear with:

(2.1) Anaphoric expressions whose antecedents have the same NP head.

(2.2) • *Eine Frau betrat den Raum. DIE FRAU trug einen Hut.* (“A

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woman entered the room. The woman wore a hat.”)

- (2.3) Endophoric or referent-establishing expressions, e.g. restrictive relative clauses, appositives, and restrictive modifiers (cf. “associative clauses” by Hawkins (1978)).
- (2.4)
- DAS HAUS, *das auf dem Parlament steht, kommt nach der Renovierung weg.* (“The house that stands on the parliament will be removed after the renovation.”)
 - DIE TATSACHE, *dass ...* (“The fact that ...”), *die Farbe Rot* (“the colour red”)
 - DIE REDE *des Chefs war berührend.* (“The speech of the boss was touching.”)
- (2.5) Expressions with abstract referents, e.g. *der Pathos* (“the pathos”), *das Allgemeine* (“the generality”), *das Schlafen* (“the sleeping”).
- (2.6) Expressions with inferable and specific referents, i.e. the referent can be inferred from a given situation or from a relation with another given entity (cf. “bridging”).
- (2.7)
- *Hans wurde gestern ermordet. DAS MESSER lag in der Nähe* (“Hans was murdered yesterday. The knife lay nearby.”)
 - (sitting on a table with one salt pot) *Gib mir DAS SALZ!* (“Give me the salt!”)
 - DAS RATHAUS *wird umgebaut* (“The town hall is being renovated.”)
 - *Hast du DAS TITELBLATT der Krone gesehen?* (“Have you seen the front page of the Krone?”)

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(2.8) Expressions with inferable and non-specific referents

(2.9) • *Wenn Hans auf Reisen geht, nimmt er immer DEN ZUG.*
(“Whenever Hans makes a journey, he always takes the train.”)

(2.10) Alternative-excluding expressions, such as proper nouns and certain modifiers (cf. “unexplanatory modifiers” by Hawkins (1978)), e.g. *der Mondsee* (“the Moon-Lake”), *DIE beste/einzige/selbe TORTE der Welt* (“the best/unique/same cake of the world”).

(2.11) Generic expressions, e.g. *die Hasenart* (“the rabbit kind”)

As for the discursive function of definite noun phrases, Prince has proposed to distinguish between entities that are known to the hearer, on the one hand, and entities that are known within the discourse model (e.g. Prince (1981) and Prince (1992

1995)).¹ Definite noun phrases ususally refer to discourse-old and hearer-old entities. In contrast, indefinite noun phrases would have discourse-new and hearer-new referents. Proper names can be used without prior

¹More precisely, she argues: “When a speaker first introduced an entity into the discourse, that is, tells the hearer to “put it on the counter“, we may say that it is NEW.“ (Prince (1981, p.235)). Such entities can be brand-new or unused if their presence is taken for granted within the discourse model. If an NP “is uttered whose entity is already in the discourse-model, or “on the counter“, it represents an EVOKED entity“ (ibid., p.236). Evoked entities can be textually evoked, i.e. they have been mentioned before and as such are not new anymore, or they can be situationally evoked from the extra-textual context. The third type of discourse entities are INFERRABLES “if the hearer assumes the hearer can infer it, via logical - or, more commonly, plausible - reasoning, from discourse entitites already Evoked or from other Inferrables“ (ibid., p.236).

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mention and have hearer-old entities, though not discourse-old entities. The same applies to many definite noun phrases whose referents are globally known. However, definite nouns can have discourse-new and hearer-new entities, too, and hence pattern like indefinite nouns. For example, in modal contexts like the following the definite noun can have a non-referential reading:

- (2.12) *Otto wird nie die Frau seiner Träume finden.*
Otto will never the woman his-GEN dreams find
Otto will never find the woman of his dreams.

- (2.13) *Anna will den Chef kennenlernen.*
Anna wants the boss know-learn
Anna wants to get known to the boss.

Similarly, definite noun phrases are found within predicative constructions, such as:

- (2.14) *Anna ist (die) Präsidentin.*
Anna is the president
Anna is the president. (i.e.: of this country/club)

However, the definite noun signals that the described role of president is unique with respect to a given entity (a country or club). The use of an indefinite article would imply that there are several presidents (of different countries/clubs) at issue. Hence, in contrast to indefinite nouns, hearer-new referents of definite nouns can be easily construed by the hearer with the help of the described event or knowledge on unique relations that hold with other (usually given) entities.

Note that I have excluded deictic uses of definite noun phrases with stressed definite articles, which are typical for colloquial and non-Standard German.

- (2.15) *DER/Dieser Bäcker ist gut!*
 THE this bakery is good
 This bakery is good! (pointing to a visible bakery)

In contrast, Standard German employs the distal and proximal demonstrative articles for signaling deixis (i.e. *dies-* and *jen-*, respectively).²

In the following, the uses of definite nouns in Standard German will be discussed in more detail.

2.2.1 Anaphoric use

Definite noun phrases can be anaphoric if they refer to referents of previously introduced expressions. Hereby, I will include only antecedent expressions with the same NP head, like in:

- (2.16) *Anna hat [ein Auto]_i. [Das Auto]_i ist sofort
 eingegangen.
 broke-down
 Anna has a car. The car broke down immediately.*

Anaphoric definite nouns are used as second mention, or, in Prince's terms, for referents that are discourse-old, which implies that they are hearer-old, as well. In contrast to anaphoric uses, definite noun phrases can be also used without previous mention (in fact, nearly 50% of all definite nouns according to a corpus study by Poesio and Vieira (1998)).

²Note that the English definite article cannot be used deictically: Stressing the article like in "Soccer is THE sport" is not interpreted in the same way as "Soccer is this sport" (cf. Abbott (2003)). In non-Standard German, however, the stressed definite article can have the same function as a demonstrative article: *Gib mir DAS/dieses Salz* ("Give me THE/this salt"). The sentence implies that there are other objects with salt around and is interpreted contrastively and hence contrasts with the unstressed definite article.

2.2.2 Endophoric use

Endophoric definite noun phrases are accompanied by explanatory modifiers which help to retrieve a unique and previously unmentioned referent. Examples are given below:

(2.17) *Anna sucht die Bäckerei, die am nächsten ist.*
 Anna seeks the bakery which at-DAT next is
 Anna is looking for the bakery that is next. (Restrictive relative clause)

(2.18) *Die Bäckerei dieser Stadt ist samstags geschlossen.*
 the bakery this-GEN town is Saturday closed
 The bakery of this town is closed on Saturdays. (associative genitive DP)

(2.19) *Anna hat das Buch von Chomsky nicht gelesen.*
 Anna has the book by Chomsky not read
 Anna didn't read the book by Chomsky. (associative PP)

(2.20) *Die Behauptung, dass Spinat viel Eisen enthält, stimmt nicht.*
 the claim that spinach much iron contains is-right
 not
 The claim that spinach contains much iron is not true. (NP complement)

(2.21) *Der Name Algernon und der Buchstabe A beginnen mit A.*
 the name Algernon and the letter A begins with
 A
 The name Algernon and the letter A starts with A. (appositives)

The examples show definite nouns with restrictive (or establishing) relative clauses, associative phrases (cf. the term “containing inferrables” by Prince (1981)), NP complements, and appositive nominal modifiers, which

provide explicit linguistic material that helps to restrict the reference domain of the definite noun.

2.2.3 Generic use

Definite nouns are also felicitous as first-mention if they are **generic** expressions. It has been pointed out for kind-level verbal predicates by Carlson (1977) that these require their arguments to denote kinds, as in:³

(2.22) *Die Kuh ist ein Säugetier.*
 the cow is a mammal
 The cow is a mammal.

(2.23) *Der Dodo ist bereits ausgestorben.*
 the dodo is already extinct
 The dodo became already extinct.

The sentences are true for the species cow and dodo (respectively) and cannot be applied to individual members of these species.⁴ Unlike count nouns, mass nouns may also be bare if they are combined with kind-level predicates:

(2.24) *(Das) Wasser ist rar geworden.*
 the milk is again expensive-KOMP become
 The milk has again become more expensive.

(2.25) *(Die) Milch ist wieder teurer geworden.*
 the milk is again expensive-KOMP become
 The milk has again become more expensive.

³Carlson further distinguished between stage-level predicates which are true of a temporal stage of their subjects and individual-level predicates which are always true of an individual.

⁴Note that replacing the definite by a demonstrative article yields a taxonomic reading: “this kind of cow/dodo”.

(2.26)

Definite articles are also obligatory with expressions that denote concepts or qualities and refer to **abstract** individuals:

(2.27) *(Die) Liebe ist ein seltsames Spiel.*
 the love is a strange game
 Love is a strange game.

(Die) Kommunikationswissenschaft ist noch keine etablierte
 the communication-science is still no established
Wissenschaft.
 science.

Communication science is still not an established science.

(2.28) *(Das) Hantieren mit Feuer und offenem Licht ist*
 the manipulating with fire and open light is
strengstens verboten.
 strictly forbidden
 The fiddling with fire and open light is strictly forbidden.

(2.29) *(Das) Kochen gehört zu den ältesten Kulturtechniken*
 the cooking belongs to the oldest culture-techniques
des Menschen.
 the-GEN human
 Cooking is one of the oldest cultural activities of mankind.

Here, I include nominalized adjectives and infinitives which pattern with abstract and mass nouns in that they can be used bare, as well.

2.2.4 Use with inferable referents

Definite nouns are also felicitous as first mention if their referents can be inferred from the speech situation. As Hawkins (1978) pointed out, inferable referents are entities that are not salient or visible but whose existence is inferable from the immediate or larger situation. For example:

(2.30) *Achtung vor dem Hund!*
 warning before the-DAT dog
 Beware of the dog! (i.e. the dog in the immediate situation)

(2.31) *Ist der Papst unfehlbar?*
 is the pope infallible
 Is the pope infallible? (i.e. the pope in a larger situation)

A referent can also be inferable because it stands in a salient and unique relationship with the referent of a previously mentioned and associate expression, as in:

(2.32) *Otto arbeitet in [einer Bäckerei]_i. Gestern hat er
 Otto works in a bakery yesterday has he
 vergessen, [den Ofen]_j auszuschalten.
 forgotten the oven switch-off
 Otto works in a bakery. Yesterday, he forgot to switch off the oven.
 (i.e. the oven of the bakery)*

(2.33) *Anna ist nach Frankfurt gereist. Der Zug kam
 Anna is to Frankfurt travelled the train arrived
 pünktlich an.
 punctually PRT
 Anna went to Frankfurt. The train arrived in time. (i.e. the train
 to Frankfurt)*

(2.34) *Als der Autobus einging, war der Chauffeur verärgert.
 when the bus broke-down was the driver annoyed
 When the bus broke down, the driver got annoyed. (i.e. the driver
 of the bus)*

In order to retrieve the referent in such contexts Heim (1982) proposed that the hearer has to accommodate it. In a similar vein Prince (1981) proposes that the referent is inferred by “bridging” techniques, i.e. by logical reasoning from discourse entities already evoked in the discourse.

⁵ However, inferable referents need not always be uniquely identifiable.

Consider the next examples:

(2.35) *Anna fährt immer mit der U-bahn.*
 Anna drives always with the-DAT subway
 Anna always takes the subway.

(2.36) *Nach dem Abendessen raucht Anna immer.*
 after the-DAT dinner smokes Anna
 Anna always smokes after dinner.

The referent of subway can be interpreted as being hearer-old, then Anna takes always the same subway. Or, it can be interpreted as a scopally inert and as being about some non-specific subway, which is the preferred reading.⁶ However, the number of the subway has to be one relative to the event described. Note that in English we find a similar class of definites which have either non-specific or specific readings. Carlson and Sussman (2004); Carlson et al. (2006) have proposed that these “weak definites” pattern with narrow scope indefinites and analyses them as type-denoting expressions which are semantically incorporated and whose uniqueness is derived pragmatically. His ideas will be discussed in chapter ??.

2.2.5 Use with “inherently” unique expressions

Definite nouns are felicitous as first mention with proper-like expressions whose referents are hearer-old. Further, definite nouns with superlative

⁵For bridging reference see Haviland and Clark (1974); Clark (1977) and Prince (1981), Prince (1992); for situational or associative uses see Hawkins (1978); and for “situative unika” see Ebert (1970).

⁶Note that stress can influence the readings. While stress on the noun yields a non-specific reading, stress on the definite article only yields a specific reading. Still, this test is only applicable for spoken German.

and “alternative-excluding” modifiers may be used as first mention, as well. Crucially, the latter can be used even if the speaker does not know the referent. Examples for definite nouns with proper nouns and modifiers that signal uniqueness are given below:

(2.37) *Anna liebt den Bodensee.*
 Anna loves the Lake-Constance
 Anna loves Lake Constance.

(2.38) *Das teuerste Hotel steht in Dubai.*
 the most-expensive hotel stands in Dubai
 The most expensive hotel is in Dubai. (i.e. in the world)

(2.39) *Das einzige Hotel war bereits ausgebucht.*
 the only hotel was already booked
 The only hotel was already fully booked. (i.e. in the region)

Note that the use of a superlative requires additional - often implicit - material to restrict the domain of reference (e.g. “the best hotel of/in the world”).

After having presented the contexts in which definite nouns may occur in German, I will discuss the contexts in which non-contracted forms are used. Crucially, we will see that the latter forms are more restricted and cannot occur with all of the above mentioned uses: They are restricted to second mention uses and to inferable referents whose associate expression are discourse-old.

2.3 NCFs as anaphoric definites

Anaphoric reference is a way of taking up a referent that has been introduced in the preceding discourse and is one of the principal functions

of the definite article found in non-contracted forms. For example, the non-contracted form co-refers with the previously introduced bakery in:

- (2.40) *Es gibt [einen Bäcker]_i im Haus. Bei [dem Bäcker]_i hat sich Anna heute etwas gekauft.*
 it gives a bakery in-DAT house at the-DAT
 bakery has REFL Anna today something bought.
 There is a bakery in the house. Anna bought something at the bakery today.

The definite noun phrase in the second sentence establishes a link to the referent introduced in the first sentence. Likewise, consider the following fragment of a story tale and the use of the non-contracted form *an dem Fenster* (“at the window”):

- (2.41) [*line3*] *Die Leute hatten in ihrem Hinterhaus ein kleines Fenster.*

These folks had a little window at the back of their house.

- (2.42) [*line5*] *Eines Tags stand die Frau an dem Fenster und sah in den Garten hinab.*

One day, the wife stood by the (this) window and looked into the garden.

The non-contracted forms establishes an anaphoric link to the previously mentioned window. Note that the antecedent expressions is not immediately preceding, nonetheless, the referent is salient within the described scenario. Since houses typically have more than one window, anaphoric reference is useful if not necessary to retrieve the unique referent.

While anaphoric uses of non-contracted forms can often be felicitously replaced by a demonstrative article, the contracted form is not felicitous for this purpose. Compare:

(2.43) *Ottos Bruder hat ein Kino. [In das, in
 Otto-GEN brother has a cinema into the-ACC into
 dieses, #ins] Kino würde er nie gehen.
 this-ACC into into-ACC cinema would he never go
 Otto's brother owns a cinema. He would never go into this cinema.*

(2.44) *Ich arbeitete damals in einer Bäckerei. [Zu der, zu
 I worked then in a bakery to the-DAT to
 dieser, zu jener, #zur] Zeit wurde man nur
 this-DAT to that-DAT to-DAT time was one only
 angelernt, und das reichte aus.
 trained and this sufficed PRT
 At that time, I was working at a bakery. At this/that time, you
 were only trained but that was enough.*

(2.45) *Kannst Du Dich an den Stromausfall erinnern? -
 Can you you-ACC on the outage remember
 Ja, [an das, an dieses, an jenes, #ans]
 yes on the-ACC on this-ACC on that-ACC on-ACC
 Ereignis erinnere ich mich noch sehr gut.
 event remind I me still very good
 Do you remember the outage? - Yes, this/that event I still
 remember very well.*

We see that, in contrast to non-contracted forms, contracted forms seem to systematically escape anaphoric binding. Consider the different implications of the two forms in the next conversation between two persons A and B:

(2.46) *A: Ein neuer Bäcker hat gestern aufgemacht. Den
 a new bakery has yesterday opened this
 könnte Anna heute ausprobieren.
 could Anna today try-out
 A: A new bakery has opened yesterday. This one, Anna could try
 out today.*

(2.47) *B1: Anna war heute schon bei dem Bäcker.
 Anna was today already at the-DAT bakery*

B1: Anna went already to that bakery. (the mentioned one)

(2.48) *B2: Anna war heute schon beim Bäcker.*

Anna was today already at-DAT bakery

B2: Anna went already to the bakery today. (another one)

While speaker B1 is referring back to the bakery which was mentioned by speaker A, speaker B2 is referring to some bakery and is not referring to the discourse-old bakery. The next fragment shows that the contracted form can have specific or non-specific reference (A2), while the non-contracted form can only refer to a specific and discourse-old referent (A1):

(2.49) *Anna hat sich ein Haus mit [einem Garten]_i gekauft.*

Anna has REFL a house with garden bought

Anna bought a house with a garden.

(2.50) • A1. Sie arbeitet gern in [dem Garten]_i.

”She likes to work in that garden.”

• A2. Sie arbeitet gern im [Garten]_{i/j}.

i. non-specific reading: “She likes doing garden-work.”

ii. specific reading: “She likes to work in the garden.”

The asymmetric anaphoric binding behavior was noted by Schwarz (2006), who discusses their distribution in donkey sentences like:

(2.51) *Jeder Journalist, der einen Politiker interviewt, ist*

every journalist that a politician interviews is

manchmal unfreundlich [zu dem, zu diesem, #zum]

sometimes unfriendly to the-DAT to this-DAT to-DAT

Politiker.

politician

Every journalist who interviews a politician is sometimes unfriendly to that politician.

- (2.52) *Wenn ein Student einen grossen Schreibtisch hat, verbringt er den ganzen Tag [an dem, an diesem, #am] Schreibtisch.*
 when a student a big desk has spends
 he the whole day at the-DAT at this-DAT at-DAT
 desk
 If a student has a big desk he spends the whole day at that desk.

Co-reference is ruled out with the contracted form but good with the non-contracted form. The verbal complex *am Schreibtisch sitzen* has a reading in which the desk is interpreted as non-specific or as modifying the event of sitting (yielding a meaning like “desk-sitting”)⁷.

In a similar vein, non-contracted forms license token anaphors and a strict reading of anaphors as in:

- (2.53) *Anna geht nicht [zu dem_i, ?zum] Arzt, weil sie ihn_i nicht leiden kann.*
 Anna goes not to the to-DAT doctor because she
 him not like can
 Anna does not go to the doctor, because she can’t stand him.

- (2.54) *Anna war bei dem Arzt, Otto auch.*
 Anna was at the-DAT doctor Otto too
 Anna was at the doctor; Otto, too. (Otto was at the same doctor)

In contrast, the referent of contracted forms can be either of the same sort or be the same individual if the context provides a situationally unique individual:

- (2.55) *Anna war beim Arzt, Otto auch.*
 Anna was at-DAT doctor Otto too

⁷The English translation is suggestive as one could think that the German phrase also involves some sort of noun incorporation. However, the phrase implies that someone sits at one singular desk at the time.

Anna was at the doctor; Otto, too. (Otto was either at the same doctor or at another one)

In sum, contracted forms may license either type or token anaphors and are ambiguous between a sloppy and strict reading. Non-contracted forms require discourse-old referents and token anaphors and do not allow for their sloppy reading.

2.4 NCFs as endophoric definites

2.4.1 Restrictive relative clauses

The non-contracted form is obligatory because the definite noun is modified by a restrictive relative clause. The function of a restrictive relative clause is to establish the referent of the noun by introducing and defining it *in situ*. Consider the next example with a non-contracted form and a restrictive relative clause:⁸

(2.56) *Andere übten sich in Mutproben und stibitzen ab*
 others engaged REFL in courage-tests and stole PRT
und zu ein Stück von dem (#vom) frischen Brot,
 and PRT a piece of the-DAT of-DAT fresh bread
das Bäcker Thiessen in der Schulstrasse auf dem
 that baker Thiessen in the Schulstrasse on the
Hinterhof lagerte.
 backyard stored

Others engaged in tests of courage and sometimes stole a piece of the fresh bread that the baker Thiessen stored in the backyard of the Schulstrasse street.

To decide whether a relative clause is restrictive or non-restrictive, one can use the following diagnostic test: If the definite can be replaced by

⁸Reference: <http://www.heider-anzeigenblatt.dedlz-bzarchivkriegsende194520051012.html>
 (27.7.2007)

the cataphoric article (*derjenig*-, “the one”) then the accompanied relative clause is obligatory and can only be interpreted restrictively.⁹ Consider the following example:

- (2.57) *Anna möchte zu dem_i/ demjenigen_i Bäcker, der_i diese guten Weckerl verkauft.*
 Anna wants to the-DAT the-one-DAT bakery that these good scones sells
 Anna wants to go to the (one) bakery that sells these good scones.

A non-restrictive reading would be out for *demjenigen* but is possible with the non-contracted form if it refers to a discourse-old bakery:

- (2.58) *Anna möchte zu dem_i/ #demjenigen_i Bäcker, der_i übrigens diese guten Weckerl verkauft.*
 Anna wants to the-DAT the-one-DAT bakery who by-the-way these good scones sells
 Anna wants to go to the (one) bakery, that - by the way - sells these good scones.

Hence, non-contracted forms can be used either with restrictive or non-restrictive relative clauses. Contracted form pattern differently:

- (2.59) *Sie trafen sich an dem (#am) Tag, den sie schon lange vorher vereinbart hatten.*
 they met REFL at the-DAT at-DAT day that they already long before arranged had
 The met the day they had agreed on long before. (#They met during daylight that they had agreed on long before.)

- (2.60) *Er wohnt in dem (#im) Dorf, das man dort in der Ferne sieht.*
 he lives in the-DAT in-DAT village which one there in the distance sees

⁹Note that Scheutz (1988) observes that in German the demonstrative article “dieser” is deictic or anaphoric, while the demonstrative article “jener” is deictic or kataphoric.

He lives in the village you see from afar. (#He is a villager you see from afar.)

In contrast to non-contracted forms, contracted forms can only be modified by non-restrictive relative clauses and therefore their use is not felicitous in these sentences.

2.4.2 Restrictive modifiers

Non-contracted forms with definite noun phrases can be felicitous as first mention if they occur with modifiers that restrict the domain of reference. These restrictive modifiers can be, e.g., adjectives, prepositional phrases, or genitive DPs. They have in common that the information provided within the modifier phrase is necessary for the unambiguous retrieval of the referent. Consider the first sentence of a news article edited somewhere in Europe where the reader might not have heard about the train accident in Victoria.

(2.61) *Bei dem Zugunglück in Victoria gab es 30 Verletzte.*
 at the train-accident in Victoria gave it 30 hurt
 In the train accident at Victoria 30 people were hurt. (restrictive PP)

(2.62) *Beim Zugunglück in Victoria gab es 30 Verletzte.* (non-restrictive PP)

The contracted form suggests that the reader is supposed to know about the train accident. In other words, both forms seem to differ in terms of what the speaker assumes to be known to the hearer. While the contracted form presupposes the existence of a referent, the non-contracted form “points” toward information that helps to retrieve and construct a

unique referent. Since restrictive modification implies that there is set of individuals and alternative referents, non-contracted forms are compatible with contexts where more than one individual fits the descriptive content of the noun. Contracted forms, in contrast, seem to lack the ability of choosing between alternatives.

2.5 NCFs with inferable referents (“Bridging”)

Definite nouns can be used felicitously if the hearer can infer the referent of an entity from the situation or from its association with other given entities. Consider the next examples, in which the situation described (nine out of ten balls were lost), on the one hand, and the knowledge about the constitution of cars, on the other hand, are necessary to retrieve unique referents.

- (2.63) *Ich habe 10 Bälle verloren und nur 9 wieder gefunden.*
 I have 10 balls lost and only 9 again found
[Beim, Bei dem] fehlenden Ball war die Luft aus.
 at-DAT at the-DAT missing ball was the air out
 I lost 10 balls and only found 9 again. The missing ball was deflated.

- (2.64) *Das Auto ist in der Werkstatt. [Am, An dem]*
 the car is in the garage at-DAT at the-DAT
Motor war etwas nicht in Ordnung.
 engine was something not in order
 The car is in the garage. Something was wrong with the engine.

Crucially, both the non-contracted form and the contacted form can be used felicitously to elicit the missing ball or the engine of the car. However,

I propose that the forms pattern differently with respect to the retrieval of unmentioned and inferable referents. First, non-contracted forms require the associate antecedent expression to have singular number and unique reference, while this is not required for contracted forms. Consider the bare plural *Bestseller* and the associate singular expression *Einband* in:

- (2.65) *Hans hat Bestseller gekauft. Er hat sich [vom,*
 Hans has bestsellers bought he has REFL from-DAT
#von dem] Einband inspirieren lassen.
 from the-DAT cover inspired let
 Hans bought best-sellers. He got inspired by the/#this cover.

If we change the sentence so that the antecedent becomes a singular noun phrase, both forms are good:

- (2.66) *Hans hat einen Bestseller gekauft. Er hat sich*
 Hans has a bestseller bought he has REFL
[vom, von dem] Einband inspirieren lassen.
 from-DAT from the-DAT cover inspired let
 Hans bought a best-seller. He got inspired by the (its) cover.

We will see in the next chapter that the contracted form occurs with expressions that have either unambiguous or non-specific reference. The expression *Zustand* (“state”) in the next example has neither unique nor non-specific reference and the contracted form is not felicitous:

- (2.67) *Anna war stockbetrunken. Wir konnten sie [in dem,*
 Anna was very-drunk we could her in the-DAT
in diesem, #im] Zustand nicht alleine weggehen lassen.
 in this-DAT in-DAT state not alone leave let
 Anna was blind drunk. We couldn’t let her go in this bad state.

- (2.68)

It seems then that the contracted form cannot be used for all types of “bridging” reference and that the retrieval of inferable and unmentioned referents with contracted forms works differently for non-contracted forms. We might have to introduce a more-fine grained distinction for inferable reference: On the one hand, “true” bridging reference is similar to anaphoric reference in that it requires discourse-old associate entities. This is what we observe with non-contracted forms. On the other hand, inferable referents may be retrieved with hearer-old entities but without discourse-old associate entities. This is what we can observe with contracted forms.

2.6 Summary

In this chapter, we have seen that the uses and discursive functions of non-contracted forms are restricted to anaphoric and endophoric uses, and to some extent to inferable referents if these are associated to discourse-old referents. While non-contracted forms can be anaphorically bound, contracted forms seem to lack anaphoric properties at all. Last, non-contracted forms have always specific reference (i.e. discourse-old entities) while contracted forms may have either specific or non-specific reference, as we will see in the next chapter.

Chapter 3

Contexts where CFs are used or preferred

3.1 Introduction

In this chapter, I will provide an overview over the contexts in which contracted forms are used.

3.2 Overview

The following list shows some of the most frequently used forms, according to case and gender (forms in parenthesis are considered non-Standard German):

- (3.1) *am*, *beim*, *im*, *unterm*,
 on-DAT_{M,N} at-DAT_{M,N} in-DAT_{M,N} under-DAT_{M,N}
vom, *zum*, *zur*
 from-DAT_{M,N} to-DAT_{M,N} to-DAT_F
 [on, at, in, under, from, to] (locative preposition)

- (3.2) *ans* (*an'n*), *aufs* (*aufn*), *fürs* (*fürn*), *ins*
 on-ACC_{N(M)} onto-ACC_{N(M)} for-ACC_{N(M)}
(in'n), *durchs* (*durchn*), *übers* (*übern*),
 into-ACC_N through-ACC_{N(M)} above-ACC_{N(M)}
vors (*vorn*)
 before-ACC_{N(M)}
 [on, at, in, under, from, to] (directional preposition)

In this work, I will focus on the forms found in Standard German. As for the frequency of use, the list in figure 3.2 shows how many of the contracted forms were found in the “German Computerzeitung” (Volk (2003)). The list also shows that non-contracted forms are found less often.

Standard German grammars usually distinguish between possible, obligatory, and impossible use of contraction. For example, the following rules are adapted from a freely available German language grammar site:¹

¹Source: <http://www.canoo.net>

B Contracted Prepositions in the Computer-Zeitung Corpus

This appendix lists all contracted prepositions of the Computer-Zeitung (1993-95+1997). The table includes contracted forms for the prepositions *an*, *auf*, *bei*, *durch*, *für*, *hinter*, *in*, *über*, *um*, *unter*, *von*, *vor*, *zu*. In order to illustrate the usage tendency we added the frequencies for the non-contracted forms.

rank	contracted prep.	frequency	prep. + det.	frequency	prep. + det.	frequency
1	<i>im</i>	40940	<i>in dem</i>	857	<i>in einem</i>	2365
2	<i>zum</i>	14225	<i>zu dem</i>	330	<i>zu einem</i>	1578
3	<i>zur</i>	13537	<i>zu der</i>	219	<i>zu einer</i>	986
4	<i>vom</i>	6299	<i>von dem</i>	534	<i>von einem</i>	1061
5	<i>am</i>	6136	<i>an dem</i>	442	<i>an einem</i>	506
6	<i>beim</i>	4641	<i>bei dem</i>	551	<i>bei einem</i>	759
7	<i>ins</i>	2155	<i>in das</i>	1053	<i>in ein</i>	521
8	<i>ans</i>	199	<i>an das</i>	611	<i>an ein</i>	171
9	<i>fürs</i>	154	<i>für das</i>	3787	<i>für ein</i>	879
10	<i>aufs</i>	125	<i>auf das</i>	1281	<i>auf ein</i>	600
11	<i>übers</i>	109	<i>über das</i>	1598	<i>über ein</i>	684
12	<i>ums</i>	60	<i>um das</i>	302	<i>um ein</i>	372
13	<i>durchs</i>	53	<i>durch das</i>	645	<i>durch ein</i>	373
14	<i>unterm</i>	36	<i>unter dem</i>	1062	<i>unter einem</i>	102
15	<i>unters</i>	10	<i>unter das</i>	27	<i>unter ein</i>	6
16	<i>vors</i>	4	<i>vor das</i>	20	<i>vor ein</i>	44
17	<i>hinterm</i>	4	<i>hinter dem</i>	102	<i>hinter einem</i>	5
18	<i>überm</i>	2	<i>über dem</i>	142	<i>über einem</i>	50
19	<i>vorm</i>	1	<i>vor dem</i>	598	<i>vor einem</i>	263
20	<i>hinters</i>	1	<i>hinter das</i>	3	<i>hinter ein</i>	0

Figure 3.1: Contracted and non-contracted forms found in the corpus by Volk (2003)

(3.3) Contraction is obligatory:

- in many fixed and idiomatic expressions, for example:
im Dunklen tappen (“in-DAT dark pad – to be in the dark”
 Cf. ?**in dem Dunklen tappen* (“in the-DAT dark pad”)
im Allgemeinen/Speziellen (“in-DAT general/special –
 generally/specifically”)
ins Grüne fahren (“into-ACC green drive – to go to the
 countryside”)
- with nominalized infinitives, for example:
am (Haus) Bauen sein (“at-DAT house constructing be – to
 be constructing [a house]”)
- with proper names that require the definite article, for
 example:
am Bodensee (“on-DAT Lake Constance – at Lake Constance”
)
- with time and date expressions, for example:
am 13. Feber 2008 (“at-DAT 13. February 2008 – on February
 13th, 2008”)
- with *am* and superlative adverbs, for example:
am besten singen (“at-DAT best sing – to sing best”)
 Cf. **an dem besten singen* (“at the-DAT best sing”)

(3.4) Contraction is impossible:

- if the article is stressed.
- if the noun is modified by a restrictive relative clause.

(3.5) Contraction is possible if the definite article is unstressed.

Proper nouns which require a definite article require also the contracted form.² Common nouns and nominalized adjectives or infinitives are often part of fixed and idiomatic expressions in which case the contracted form is obligatory. The adverbial superlative construction always exhibits the contracted form *am*. Crucially, the non-contracted form can be nevertheless felicitous in anaphoric contexts: For example, the non-contracted form is obligatory with a nominalized infinitive if one wants to create an anaphoric link to an existing “eventive” referent. Therefore, both forms should not be considered simple variants of each other but subject to different semantic and pragmatic constraints.

Note that in non-Standard German we find contractions of prepositions and indefinite articles (cf. Hartmann (1980); Hinrichs (1986)). For example:

(3.6) *Für'ne Mark kannst du eine Stunde telefonieren.*
 for-a Mark can you one hour phone
 For one DM, you can phone for an hour.

(3.7) *Das bring ich auf'nen Basar.*
 this bring I on-a bazar
 I will take this to a bazar.

I will not discuss these forms in this work, though.

²Note that in non-Standard German variants all proper nouns require a definite article and the contracted form: E.g. *beim Otto* versus Standard German *bei Otto* (“at Otto’s house”).

3.3 CFs with semantically unique expressions

Contracted forms occur with expressions which have unique reference, and in this chapter, I will distinguish between expressions with “head-noun-driven” uniqueness, on the one hand, and modified expressions with “modifier-driven” uniqueness, on the other hand.

3.3.1 “Head-Noun-Driven” uniqueness

3.3.1.1 Proper nouns

In contrast to proper nouns of persons, which are used bare in argument positions in Standard German, proper nouns based on common nouns require the definite article, as in:

- (3.8) *Anna liebt [*∅, den] Bodensee.*
 Anna loves the Bodensee
 Anna loves Lake Constance.

These nouns always require the contracted form and are not grammatical with a non-contracted form:

- (3.9) *Anna war mit Otto [*an dem, am] Bodensee.*
 Anna was with Otto at the-DAT at-DAT Lake-Constance
 Anna was with Otto at Lake Constance.

Names of geographical locations like rivers, seas, mountains, regions, and countries which require the definite article occur with the contracted form, as well, such as:

- (3.10) *am Rhein*
 at-DAT Rhine
 at the Rhine, riverine
- (3.11) *ans Mittelmeer fahren*
 at-DAT Mediterranean drive
 go to the Mediterranean
- (3.12) *beim Matterhorn*
 at-DAT Matterhorn
 at the Matterhorn
- (3.13) *im Schwarzwald*
 in-DAT Schwarzwald
 in the Black Forest
- (3.14) *zur Schweiz*
 to-DAT Switzerland
 to Switzerland

Note that in colloquial German it is very frequent (if not the rule) to use the definite article with proper names of persons:

- (3.15) *Die Anna war [beim, *?bei dem] Otto.*
 the-NOM Anna was at-DAT at the-DAT Otto
 Anna was at Otto's place.

If we used a non-contracted form (*bei dem Otto*), the meaning would change significantly and imply that there is more than one individual named Otto in the speech situation. Hence, a non-contracted form with uniquely referring expressions creates a contradictory meaning. The same sentence would have a bare noun in subject position and - noteworthy - a bare preposition instead of a contracted form in non-Standard German:

- (3.16) *Anna war bei Otto.*
 Anna was at Otto
 Anna was at Otto's place.

The list of proper nouns can be extended to a class of common nouns that can be used in a proper-like manner (cf. Longobardi (2001

2005)). These include kinship terms, expressions for house and home, or names for the devil or god (in a mono-“devilic” and monotheistic society). These proper-like nouns also require a contracted form, as in:

- (3.17) *beim Vater, im Haus, zum Teufel, beim Herrgott*
 at-DAT father in-DAT house to-DAT devil at-DAT
 mister-god
 with the father, in the house, for the devil's sake, for God's sake

Finally, note that proper nouns may sometimes be used in predicative constructions. Then, the use of a non-contracted form is felicitous:

- (3.18) *Bei dem Casanova werden alle schwach.*
 at the-DAT Casanova become all weak
 He is like a Casanova who makes everyone weak.
 i. *referential reading: He is Casanova.
 ii. predicative reading: He is like a Casanova.

- (3.19) *Bei/ Beim Casanova werden alle schwach.*
 at at-DAT Casanova become all weak
 Casanova makes everyone weak.
 i. referential reading: He is Casanova.
 ii. *predicative reading: He is like a Casanova.

Crucially, with a contracted form “Casanova” cannot refer to its kind but only to the person named as such.

3.3.1.2 Time and Date expressions

Contracted forms are obligatory with specific dates, as in:

(3.20) [*im*, **in dem*] *Jahre 1944*
 in-DAT in the-DAT year 1944
 in 1944

(3.21) [*am*, **an dem*] *12. Dezember*
 at-DAT at the-DAT 12. December
 on December 12th

(3.22) [*vom*, **von dem*] *ersten bis* [*zum*, **zu dem*]
 from-DAT from the-DAT first until to-DAT to
6. September
 the-DAT 6th September
 from September 1st to 6th

Contracted forms also have a non-specific reading with names of days, months and seasons, as in:

(3.23) *am Montag*
 at-DAT Monday
 on (next/last) Monday; on “a typical” Monday

(3.24) *im Feber*
 in-DAT february
 in (next/last) February; in “a typical” February

(3.25) *im Herbst*
 in-DAT Autumn
 in (next/last) Autumn; in “a typical” autumn

In its specific reading, the prepositional phrase refers to a temporally next or preceding point of time. In this case, a specific time or date has to be inferred from the speech situation. In its non-specific reading, the

prepositional phrase refers to most or all of the instances. In contrast, a habitual reading of the event is not available with the non-contracted form.

- (3.26) *Letzten Freitag wurde gestreikt.* [*An dem,* #*Am*]
 last Friday was struck at the-DAT at-DAT
Freitag hatten wir frei.
 Friday had we free
 Last Friday, there was a strike. That Friday, we had the day off.

The non-contracted form refers to the day that was mentioned in the preceding discourse, unlike the contracted form which is not felicitous.

3.3.1.3 Abstract expressions

Contracted forms occur with expressions that denote concepts and refer to abstract individuals, such as *Freiheit* (“freedom”) in:

- (3.27) *Brüder,* [*zur,* #*zu der*] *Sonne,* [*zur,* #*zu*
 brothers to-DAT to the-DAT sun to-DAT to
der] *Freiheit, Brüder* [*zum,* #*zu dem*] *Lichte*
 the-DAT freedom brother to-DAT to the-DAT light-DAT
empor ...
 up
 Brothers, towards sun, towards freedom, Brothers, way up to the
 light...

In contrast, the non-contracted form is necessary if several instances of freedom are contrasted, as in:

- (3.28) *Wie gelange ich nun* [#*zur,* *zu der*] *Freiheit, die*
 how reach I now to-DAT to the-DAT freedom that
wirklich frei ist?
 really free is
 How do I gain the freedom that is really free?

Nouns can be lexically ambiguous and refer either to concrete or abstract objects. However, with a non-contracted form the abstract reading is dispreferred. For example, the noun *Geschäft* if interpreted abstractly means “business” and if interpreted concretely it means “shop”. With a contracted form, both readings are possible, as in:

- (3.29) *Es ist uns eine Ehre, mit Ihnen ins Geschäft zu kommen.*
 it is us a honor with You into-ACC business to
 come
 It’s a honor doing business with you. / It’s a honor entering the shop with you.

- (3.30) *Es ist uns eine Ehre, mit Ihnen in das Geschäft zu kommen.* (“It’s a honour entering this shop with you.”)

While the preferred reading with a contracted form is idiomatic whereby *Geschäft* is interpreted abstractly, the only available reading with a non-contracted form is non-idiomatic and about a specific and concrete object.

In a similar vein, nominalized adjectives usually refer to abstract entities. We find them obligatorily with contracted forms in many fixed and idiomatic expressions, as in:³

- (3.31) [*ins*, **in das*] *Schwarze treffen*
 in-ACC in the-ACC black hit
 to hit the mark; to make one’s mark

- (3.32) [*im*, **in dem*] *Dunklen tappen*
 in-DAT dark/dark tap
 to be in the dark; to be in a state of ignorance

³Note that nominalized adjectives can be analysed as denoting entity correlates of kinds denoted by the property.

(3.33) *bis ins Einzelne* (“until into-ACC single – elaborately, in detail”)

(3.34) *ins Blaue fahren* (“into-ACC blue drive – go to the country side”)

3.3.1.4 Situationally unique individuals

Contracted forms occur with expressions that refer to situationally unique individuals, i.e. expressions whose referents are inferable from the speech situation. To illustrate, consider the text fragment of a story tale about “Rapunzel”:

(3.35) *line 22: Als es zwölf Jahre alt war, schloss es die Zauberin in einen Turm, der **in einem Walde** lag.*

“After celebrating her twelfth birthday, the Enchantress safely locked Rapunzel in a tower which lay **in a forest**.”

(3.36) *line 34: Er ritt heim. Doch der Gesang hatte ihm so sehr das Herz gerührt, da er jeden Tag hinaus **in den Wald** ging und zuhörte.*

“He rode home. But the singing had touched his heart so deeply, that he returned daily **to the forest** to listen to Rapunzel.”

(3.37) *line 59: Da irrte er blind **im Wald** umher, ass nichts als Wurzeln und Beeren und tat nichts als jammern und weinen über den Verlust seiner liebsten Frau.*

“He wandered blind **through the forest**. He ate only berries and roots, and did nothing but weep and lament the loss of his dearest wife, Rapunzel.”

The referent of *Walde* (“wood”) is introduced into the discourse in line 22 and resumed in line 59 with a contracted form. In line 22, a scenario is created with a tower in a wood. The same wood is resumed a couple

of lines later (line 34) by means of a definite noun phrase and, in line 59, the same referent occurs with a contracted form. The following example is similar:

(3.38) *line 29: Wenn sie nun die Stimme der Zauberin vernahm, so band sie ihre Zöpfe los, wickelte sie oben um **einen Fensterhaken**, und dann fielen die Haare zwanzig Ellen tief herunter, und die Zauberin stieg daran hinauf.*

“When she heard the voice of her mother, the Enchantress, she unfastened her braided tresses and wound them around **a window hook**. Her hair fell twenty ells down, and the Enchantress climbed up.”

(3.39) *line 52: Denselben Tag aber, wo sie Rapunzel verstossen hatte, machte abends die Zauberin die abgeschnittenen Flechten oben **am Fensterhaken** fest.*

“On the same day that she had cast out Rapunzel, the Enchantress fastened the braids **around the window hook**.”

The window hook (*Fensterhaken*) is introduced by means of an indefinite in line 29 and taken up with a contracted form in line 52. The distance between the antecedent and the contracted forms suggest that the referent of the contracted form is not taken up by anaphoric means. Rather, the window hook is hearer-old because it has been introduced before. This does not mean that there is necessarily only one window hook (the tower could have another window with a window hook) but rather that the situation described makes it clear that the window hook referred to belongs to the window of the tower where Rapunzel used to let down her hair.

Referents of contracted forms can also be inferable because of larger situation sets (cf. Hawkins (1978)), as in:

- (3.40) *Otto ist neulich mit dem Gesicht [zur, #zu
 Otto is recently with the face to-DAT sun
 der] Sonne eingeschlafen.
 fall-asleep
 Lastly, Otto fell asleep facing the sun.*

Uttered on the Earth, the non-contracted form would not be felicitous since it implies that there are other suns at issue.

However, contracted forms are ambiguous and may refer to hearer-old or hearer-new entities. The specific reading is preferred in the next sentence uttered in a city with an airport (without having mentioned this airport before):

- (3.41) [*Am, #an dem*] *Flughafen haben sie Anna
 on-DAT on the-DAT airport have they Anna
 unfreundlich bedient.
 unfriendly served
 At the airport, they attended Anna in an unfriendly manner.*

Even if the addressee does not know that the city has an airport she will be able to accommodate the airport's referent (cf. Heim (1982)). The use of the past tense indicates that the sentence has an episodic interpretation and as such the sentence has to be about a specific airport. However, in a generic statement the airport is ambiguous between a situationally unique or non-specific reading.

- (3.42) *Anna holt Otto immer vom Flughafen ab.
 Anna fetches Otto always from-DAT airport
 Anna always picks up Otto from the airport. (the same or a
 different airport)*

In contrast, by using a non-contracted form the utterer has a specific referent in mind:

- (3.43) *Am Bahnhof gibt es immer Zigaretten.*
 at-DAT train-station gives it always cigarettes
 i. non-specific reading: At a train station, there are always cigarettes.
 ii. specific reading: At the train station, there are always cigarettes.
- (3.44) *An (Auf) dem Bahnhof gibt es immer Zigaretten.*
 at on the train-station be it always cigarettes
 i. *non-specific reading: Generally, there are cigarettes at train stations.
 ii. specific reading: At the train station, there are generally cigarettes.

If mass expressions occur with contracted forms they seem to require an implicit measurement unit, which may be inferred from the speech situation. Consider the next cooking instruction:

- (3.45) *Geben Sie die Knödel in kochendes Wasser.* (“put you the knödel in boiling water – Put the Knödel into boiling water.”)
- (3.46) *Geben Sie die Knödel ins kochende Wasser.* (“put you the knödel into-ACC boiling water – Put the Knödel into the boiling water.”)

With a contracted form the utterer is implying that there is some boiling water portion nearby. In contrast, with a bare preposition, this reading is not available. I propose that the difference between a bare preposition and a contracted form is related to the (lack of) singular number: While nouns with bare prepositions are not specified for number and hence interpreted as mass, nouns with contracted forms are specified for singular number and a mass nouns is interpreted as count.

3.3.2 “Modifier-Driven” uniqueness: Superlatives and ordinals

Contracted forms are obligatory with expressions that presuppose unique or maximal reference in all worlds or domains. Nominal modifiers like superlative adjectives and ordinals fall under this group and require the contracted form as in:

- (3.47) [*Im*, **in dem*] *besten Moment die Batterie wechseln*
 in-DAT in the-DAT best moment the battery change
zu müssen, ist ärgerlich.
 to must is annoying
 It is annoying if you have to change the battery in the best moment.

- (3.48) *Das ist ein Foto [vom, *von dem] nettesten*
 this is a foto from-DAT from the-DAT nicest
Kaffee der Welt.
 coffee-shop the-GEN world
 This is a picture of the world’s nicest coffee shop.

- (3.49) *Das reicht mal [fürs, *für das] Erste.*
 this suffices now for-ACC for the-ACC first
 For now, this is sufficient. (idiomatic)

Hawkins (1991, p.422) has pointed out that these nominal modifiers are not good with indefinite articles because they create a contradictory meaning. He argues that indefinite descriptions are generally undefined and neutral with respect to uniqueness, and that they cancel uniqueness of expressions “a best buy” or “a first course”.⁴

⁴Hawkins (1978) noted that expressions like “like” or “similar” always remove the uniqueness entailment and are therefore out with the definite article, as in “a/*the name like Algernon”, “a/*the similar jacket”.

However, what may sound like a contradiction at first sight, can be shown to be feasible in the right context. Consider the following sentence in which a non-contracted form is used with a superlative adjective: It is taken from an internet forum in which “the first time” is discussed and in which the author is contrasting different instances of first-time events, i.e. performed by different persons.⁵

- (3.50) *Meine beste Freundin entstand übrigens bei dem*
 my best friend emerged by-the-way at the-DAT
ersten Mal ihrer Mutter!
 first time her-GEN mother
 By the way, my best friend was conceived during the first time of
 her mother!

We find a correlation between indefinite noun phrases and non-contracted forms since both forms seem to cancel the uniqueness of the NP referent. Unlike contracted forms, they invoke a contrastive set and are not good with expressions that exclude alternatives.

3.4 CFs with non-specific readings

In this section, I will discuss uses of contracted forms with non-specific reference, more precisely, with hearer-new entities. Such referents may either be inferable from the event described or from relations that hold with other individuals. Crucially, these referents need not be uniquely identifiable.

⁵Note that the primary and contrastive stress would be on the possessor phrase. Source: 25.9.2007, http://forum.gofeminin.de/forum/fertilite/_f535_fertilite-Schwanger-bitte-lesen-wichtig.html

3.4.1 Relational use

Contracted forms occur with expressions like “end/begin” which are unique with respect to another entity or event (cf. “functional nouns” by Löbner (1985)), as in:

- (3.51) *Am Ende wird alles gut.*
 at-DAT end becomes everything good
 In the end (Finally) everything will be fine.

- (3.52) *Am Anfang war das Wort.*
 at-DAT beginning was the word
 In the beginning (First), there was the word.

Similarly, consider the next generic description of the term *runksen* and the use of a contracted form:⁶

- (3.53) *runksen: das is [beim, #bei dem] frischen brot das*
 runksen this is at-Dat at the-DAT fresh bread the
abgerundete ende.
 rounded end
 “Runksen”: this is the round end of fresh bread.

The definition holds for any loaf of bread if it has at least one round end. A non-contracted form, in contrast, is not felicitous within this generic statement. Inalienable expressions also stand in a unique relation with their possessors. They may have unique reference if the possessor individual has only one of it (like with “head”). With contracted forms, the possessor is usually inferable from the linguistic context. For example, the subject of the main clause may be interpreted as the possessor, as in:

- (3.54) *Anna hat sich [am, #an dem] Kopf verletzt.*
 Anna has REFL at-DAT at the-DAT head hurt
 Anna hurt her head.

⁶Source: <http://www.ioff.de/archive/index.php/t-35739.html> (27.7.2007).

(3.55) $Anna_i \dots sich_i \dots PRO_i$ Kopf

(3.56) Talking about Anna's left head_j: $Anna_i \dots sich_i \dots dem_{*i/j}$ Kopf ...

In contrast, with a non-contracted form the head needs to be a discourse-old entity and is either interpreted externally (i.e. alienable) or in a contrastive way.

3.4.2 Situational use (“Configurational use”)

Contracted forms occur with non-specific expressions in so-called “configurational” uses (cf. Löbner (1985)), as in:

(3.57) *Sie trafen einander auf dem Weg zur Kirche.*
 they met each-other on the way to-DAT church
 They met on their way to church. (any church or a specific church)

(3.58) *Sie trafen einander auf dem Weg zu der Kirche.* (specific church)

With a contracted form, the verb phrase has typically a conventionalised meaning and implies much more than the mere event of walking to a church. Note that English translates the contracted form into a bare *or* definite noun phrase. Likewise, if a person is asked to list her hobbies she may list *ins Theater gehen* to refer to the act of going to the theatre building and attending a play. The following verb phrases have acquired well-established meanings:

(3.59) *ins Theater gehen, ins Spital fahren*
 in-DAT theatre go, in-DAT hospital drive
 go to the theatre, going to (the) hospital

(3.60) *im Gefängnis sein, im Spital sein*
 in-DAT carcel be, in-DAT hospital be
 be in prison, be in (the) hospital

In all these expressions, the prepositional phrase functions as a locative or directional adjunct in which the noun has no specific referent. Nevertheless, the contracted form presupposes the existence of one theatre per event, even though these referents are not uniquely identifiable. Consider the meaning difference between the contracted and non-contracted form:

(3.61) *Ich habe das Interview im Radio gehört.*

I have the interview in-DAT radio heard.

I have heard the interview on the radio (any device capable of transmitting radio-shows would do).

(3.62) *Ich habe das Interview in dem Radio gehört.* (specific radio)

The non-contracted form can only be interpreted as a specific radio device or a radio station. Last, note that some contracted forms with nominalized adjectives have the function of sentential adverbs and have no referential reading at all:

(3.63) *Die Unternehmer sind [im, *in dem] Allgemeinen tariffeindlich.*
the entrepreneurs are in-DAT in the-DAT general

tariff-hostile

The entrepreneurs are generally hostile to tariffs.

The prepositional phrase has a well-established and fixed meaning in which *Allgemeinen* is not referential. Rather, the whole PP is modifying the proposition expressed. This event or sentence modifying reading is not available with the non-contracted form.

3.4.3 Idiomatic use

In a sense, idiomatic expressions containing a contracted form seem to constitute a special subclass of situational or relational uses which have

acquired a conventional meaning. However, I will dedicate this chapter to idiomatic expressions.⁷

For example, the phrase *zur Welt bringen* (“bring into the world, give birth”) makes reference to the world of the “birth-giver” (in this case, the fairy world of Rapunzel):

- (3.64) *line 20: Du musst mir das Kind geben, das deine
Frau zur Welt bringen wird.*
you must give me the child that your
woman to-DAT world bring will
You must give me the first child your wife brings into the world.

In a similar vein, the fixed expression *im Elend* (“in-DAT misery – in misery”) is interpreted with respect to the subject in:

- (3.65) *line 59: So wanderte er einige Jahre **im Elend** umher und geriet
endlich in die Wüstenei wo Rapunzel mit den Zwillingen, die sie
geboren hatte, einem Knaben und einem Mädchen, kümmerlich
lebte.*

He (the prince) wandered **in misery** for many years. Finally, he wandered into the desert where Rapunzel lived poorly with their two children, a boy and a girl, who she had given birth to in exile.

In the following metaphor, the nest belongs to the beautiful bird:

- (3.66) *line 56: “Aha”, rief sie höhnisch, “du willst die Frau Liebste
holen, aber der schöne Vogel sitzt nicht mehr **im Nest** und singt
nicht mehr, die Katze hat ihn geholt und wird dir auch noch die*

⁷For an analysis of idiomatic expressions, which I won’t be able to offer in this work, see, e.g. Espinal and Mateu (2007).

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Augen auskratzen Für dich ist Rapunzel verloren, du wirst sie nie wieder erblicken!”

“Aha!” she cried, “you wish to fetch your loving wife, but the beautiful bird sits and sings **in her nest** no more. The cat has got it and will scratch your eyes, as well! Rapunzel is lost to you. You will never see her again!”

Contracted forms are obligatory with inalienable expressions in idiomatic expressions as:

- (3.67) *Einem geschenkten Gaul schaut man nicht [ins, #in
a-DAT given horse looks one not into-ACC into
das] Maul.
the-ACC mouth
Don't look a gift horse in the mouth.*

- (3.68) *Wir wollen den Tatsachen [ins, #in das] Auge
we want the facts into-ACC into the-ACC eye
sehen.
look
Let's face the facts.*

- (3.69) *Er lachte sich [ins, #in das] Fäustchen.
he laughed REFL into-ACC into the-ACC fist
He laughed up his sleeve.*

- (3.70) *Die Nachricht traf ihn mitten [ins, #in
the message hit him-ACC middle into-ACC into
das Herz].
the-ACC heart
The message got under his skin.*

More examples are given below:

- (3.71) *am Boden liegen/ sein
on-DAT floor lie be
to be in a sorry state*

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- (3.72) *beim Wort nehmen*
at-DAT word take
to take (so) at the word
- (3.73) *vom Regen in die Traufe*
from-DAT rain in the drip
out of the frying pan into the fire
- (3.74) *zur Verantwortung ziehen*
to-DAT responsibility pull
to call to account
- (3.75) *ans Werk gehen; etwas ans Licht bringen*
on-DAT work go something on-DAT light bring
to start working; to reveal something
- (3.76) *aufs Land fahren/ ziehen*
on-DAT land drive pull
to go rural/ to move to the country
- (3.77) *für jemanden durchs Feuer gehen*
for someone through-DAT fire go
to be loyal to someone
- (3.78) *hinters Licht führen*
behind-DAT light lead
to dupe, to play along

The addressee must know that these expressions convey a meaning which is not compositional. Crucially, contracted forms are obligatorily with idiomatic meanings. With the non-contracted form one gets only a non-idiomatic and non-intended literal reading.

3.5 CFs with eventive expressions

In German, nominalized infinitives can be used bare in argument positions but are bad after bare prepositions, as in:

(3.79) *(das) Händewaschen* (nom., acc) (“the hand-washing”)

(3.80) **von Händewaschen* (“from hand-washing”)

Contracted forms occur with nominalized infinitives in which case they describe a temporal or causal relation between two events. For example:

(3.81) *Beim Händewaschen immer die Seife verwenden!*
at-DAT hands-washing always the soap use

Wash your hands always with soap! (“Use the soap when washing your hands!”)

(3.82) *Ich hab mir beim Händewaschen den Kopf angehaut.*

I have me at-DAT hands-washing the head hit
I hit my head while I was washing my hands.

(3.83) *Vom Zugfahren wird ihm schlecht.*
from-DAT train-driving becomes he-DAT bad

Going by train makes him sick.

(3.84) *Vom Nachdenken bekommt Paul immer Kopfschmerzen*
from-DAT thinking gets Paul always head-ache

Paul always gets a headache from thinking.

(3.85) *Ich bin am Hände waschen.*

I am at-DAT hands washing

I am washing my hands. (progressive reading)

Crucially, the implicit agent of the event described by the nominalized infinitive is often interpreted as coreferential with some expression in the main clause. Consider the next example found as the header of a newspaper article:

(3.86) *Junge Steirer beim Kampftrinken spitze*
 young Styrians at-DAT battle-drinking super
 Young Styrians ahead in battle drinking

(3.87) [Junge Steirer]_i ... PRO_i Kampftrinken

The agent of the event of *Kampftrinken* is interpreted as co-referential with the subject of the main clause, i.e. the young Styrians.

Many German grammars and authors have claimed that contracted forms are obligatory for nominalized infinitives. However, we find also non-contracted forms if one wants to make reference to a particular event. For a felicitous use, we need to create a scenario in which the speaker picks out a specific event, as in the following interjection (found in an internet forum):

(3.88) *Bei dem Tun wird mir schlecht!*
 at the-DAT doing get me bad
 I get sick when doing that!

Here, the definite article of the non-contracted form is used anaphorically to point to a “doing event” which was the topic of the previous discourse. In the same context, contraction would be infelicitous and would only yield the somehow crazy reading that the speaker gets sick “when doing”. Note also that with a non-contracted form the subject of the described event is not interpreted as co-referential with the utterer of the sentence. While with a contracted form the implicit agent of the nominalized infinitive depends on the context (e.g. on the subject of the main clause), with a non-contracted form the agent of the event is interpreted externally.⁸ In a similar vein, the non-contracted form can be used to

⁸We will later see a similar pattern with contracted forms and body parts nouns which are interpreted as inalienables, in contrast to non-contracted forms which evoke

contrast several event tokens:

- (3.89) *Beim Autofahren wird mir normalerweise nicht schlecht,*
 at-DAT car-driving get me normally not sick
aber [#beim, bei dem] Autofahren schon.
 but at-DAT at the-DAT car-driving yes
 Usually, I don't get sick when driving by car, but I do during [#the, this] car travel.

This contrastive reading is not available with the contracted form. Last, eventive expressions with contracted forms are often subcategorized by the verb or noun phrase, as in:

- (3.90) *vom Segeln träumen*
 from-DAT sailing dream
 dream of sailing
- (3.91) *immer nur ans Arbeiten denken*
 always only at-DAT working think
 to have always only work in mind
- (3.92) *beim Putzen helfen*
 at-DAT clean help
 help with cleaning
- (3.93) *im Sterben liegen*
 in-DAT dying lie
 to breathe one's last
- (3.94) *ins Schleudern geraten*
 in-DAT slide get
 to work up a sweat
- (3.95) *die Freude am Spielen*
 the joy at-DAT playing
 the joy of playing

an alienable reading.

- (3.96) *etwas zum Lachen*
 something to-DAT laugh
 something to laugh

These phrases often have a well-established or idiomatic meaning like contracted forms with “regular” noun phrases.

3.6 *am* with superlative adverbs

The contracted form *am* is obligatory within the superlative adverb construction:

- (3.97) *Anna schwimmt [am, *an dem] besten/ schnellsten/ meisten.*
 Anna swims at-DAT at the-DAT best fastest
 most
 Anna swims best/ fastest/ most.

This construction has always the same contracted form and as complement not a referential noun phrase but rather a non-referential adverbial phrase (cf. the adverb *bestens* – “best”). The fact that the non-contracted form is always ungrammatical (rather than merely pragmatically infelicitous or semantically odd) suggests that the contracted form in this construction is not derived from the non-contracted form but has acquired the status of a proper lexical item.

3.7 Backgrounding of referents

Many authors have claimed that in some contexts both contracted and non-contracted forms are possible and that the contracted form is only

preferred because of stylistic reasons. The non-contracted form would be bumpy or redundant. In this section, I will discuss some of these contexts.

Take for example, another text fragment from the tale of “Rapunzel”:⁹

(3.98) *line 22: Als es zwölf Jahre alt war, schloss es die Zauberin in **einen Turm**, der in einem Walde lag und weder Treppe noch Türe hatte; nur ganz oben war ein kleines Fensterchen.*

After celebrating her twelfth birthday, the Enchantress safely locked Rapunzel **into a tower** which lay in the forest and had neither stairs nor doors. Only at the very top it had one tiny window.

(3.99) *line 28: Nach ein paar Jahren trug es sich zu, dass der Sohn des Königs durch den Wald ritt und **an dem Turm** vorüberkam.*

After a couple of years, it came to pass that the son of a king rode through the forest and passed **by the tower**.

(3.100) *line 39: Und den folgenden Tag, als es anfang dunkel zu werden, ging er **zu dem Turme** und rief: ”Rapunzel, Rapunzel, Lass mir dein Haar herunter!”*

On the following day when it dawned, the Prince came **to the tower** and cried: ”Rapunzel, Rapunzel, Let down your hair!”

A tower is introduced into the discourse in line 22 and resumed some lines later by means of a non-contracted form. The use of the non-contracted forms in line 28 and line 39 seems puzzling, though: Why are these and not the contracted form used if there is only one situationally unique tower in

⁹Note that to evoke the main character the gender-neutral personal pronoun is used (“es”). Apparently, the author takes Rapunzel to be a diminutive name, which in German is marked by neutral gender.

the story? Are there any stylistic reasons to use the non-contracted form rather than the contracted form?

The difference between using one of both forms seems to be more generally connected to the way a discourse referent is “foregrounded” or “backgrounded” in the story. In the fragment above the tower is foregrounded but not contrasted to other towers. In a similar vein, Delisle (1988) argues that the referent of non-contracted forms is “marked”, while the referent of the contracted form is unmarked and backgrounded. In other words, in line 28 and line 39 the non-contracted form has the pragmatic function of topicalizing the tower’s referent. This function is not available with contracted forms, though. Hence, the information status of discourse referents is different with contracted and non-contracted forms. For example, a focused and discourse new prepositional phrase is felicitous with a contracted form but not with a non-contracted form. Consider:

- (3.101) *Was tut Anna gern? Anna [arbeitet gern [im, #in
 what does Anna likely Anna works likely in-DAT in
 dem] Garten]_F
 the-DAT garden
 What does Anna like to do? Anna likes to work in the garden.*

Note that the new referent associated with *Garten* can be either understood as hearer-new or hearer-old if the addressee knows that Anna has a garden. In contrast, with a non-contracted form the noun’s discourse referent is old:

- (3.102) *Was tut Anna gern in dem Garten, der vor
 what does Anna likely in the-DAT garden that before
 ihrem Haus steht? Anna [arbeitet]_F gern [#im, in
 her house stands Anna works likely in the
 dem Garten]_T.
 garden*

What does Anna like to do in the garden that is in front of her house? Anna likes to work in that garden.

The ability of a non-contracted form to function as a topic is related to the anaphoric properties of the definite article (note that it has a deictic element *d-*), while the contracted form seems to lack any anaphoric force.

3.8 Summary

In this chapter, we have seen that a contracted form is obligatory in contexts in which the descriptive content of the noun fits only one individual. We have seen that this is not only true for “alternative-excluding” expressions but also for individuals that can be uniquely inferred from a particular situation (situationally unique) or from the relation with another (specific or non-specific) individual. Further, contraction is obligatory with small clause events expressed by nominalized infinitives. However, if anaphoric reference is established to some given events, the contracted form is not felicitous anymore. Further, we have seen that many fixed and idiomatic expressions have contracted forms and get a literal and odd reading with non-contracted forms. Last, we have seen that contracted forms may appear with backgrounded referents, and are not felicitous with topicalized expressions, in contrast to non-contracted forms which are anaphoric expressions and hence eager to refer to discourse-old topics.

Chapter 4

Definite Descriptions

4.1 Introduction

Contracted forms have been commonly related to definite articles. Hence, I will proceed as follows: In this chapter, I will describe the uses of the definite article in Standard German and discuss accounts that have dealt with the semantics and pragmatics of definite descriptions mainly focussing on English. Hereby, I will focus on accounts that describe definite noun phrases in terms of semantic uniqueness, on the one hand, and in terms of pragmatic uniqueness or unique discourse reference, on the other hand.

Before turning in detail to accounts on definite descriptions, I will sketch the distribution of the definite article according to different noun types in Standard German.

4.2 Overview

Discourse-driven and pragmatic approaches focus primarily on the anaphoric behavior of definite noun phrases, and take familiarity, identifiability, or discourse-giveness to be the defining property of definite noun phrases.¹ However, pragmatic analyses are generally problematic for first mention definite nouns, which need not to be discourse-old or hearer-old (i.e. their referents need not be uniquely identifiable). First mention definite noun phrases are then better explained in terms of semantic uniqueness if the descriptive content of the noun or its modifiers fits one individual in every situation, in a certain situation, or in a certain relation with another indi-

¹For identifiability, see Gundel et al. (1993); Jeanette (1996), for givenness, see Wallace (1976); Prince (1981

1992), relevance and accessibility, see Sperber and Wilson (1995) and Ariel (1988), respectively.

vidual. Crucially, such uniqueness has to be understood both as a dynamic notion depending on the speech situation or salient relation. In contrast, second mention uses of definite noun phrases cannot be accounted for by semantic accounts since anaphoric uses are a means to retrieve unique referents whenever the descriptive content of the noun phrase does not fit exactly one individual. In the next chapter, we will see that some non-Standard German dialects have two forms of the definite article, a reduced and non-reduced form, and that these pattern with semantically and pragmatically definite nouns, respectively.

4.3 Distribution of nouns and definite articles in Standard German

Basically, we may distinguish between the following nominal expressions in Standard German:²

(4.1) Proper nouns with single reference:

used bare (*Anna*); proper-like nouns are common nouns that are used like proper nouns (*Mutter* – “mother”);

(4.2) Proper nouns based on common nouns with single reference:

require a definite article (*der Bodensee* – “the Lake Constance”); even though *die Alpen* (“the Alps”) is plural, also with single reference (i.e. the group of mountains that are part of the Alps);

(4.3) Common nouns:

²The presented scheme is adapted from Ebert (1970) who works on two types of definite articles in Fering.

- (4.4) Mass nouns with plural and cumulative reference:
 may be used bare (*Wasser* – “water”);
- (4.5) Abstract nouns with non-perceptual reference:
 may be used bare (*Freiheit* – “freedom”; *Laufen* – “running”)
- (4.6) Count nouns with distinguishable (i.e. either singular or plural) reference:
 require an article or number assignment (*die/eine Kuh* – “the/a cow”).

Count nouns can be used bare in argumental positions but are then restricted to certain lexically governing items and have a conventionalised interpretation. For now, I will exclude these bare singular nouns, as in *Anna fährt Auto* (“Anna is car-driving.”). It has been proposed to analyse these nouns in terms of semantic incorporation through the verb.³ These singular nouns seem to be semantically neutral or underspecified with respect to number, in contrast to the singular nouns found with contracted forms.

As for proper nouns, we find two types in Standard German, one type is used bare, the other type requires the definite article. Both have single referents which are supposed to be known to the addressee.

Mass and abstract nouns occur bare or are used with an article. With a definite article, a mass noun refers either to the totality of a substance, or to an inferable measure unit of this substance. For example, *Gib mir das Wasser!* (“Give me the water!” is felicitous if the speaker refers to, e.g.,

³For the analysis of bare singular nouns, e.g., Van Geenhoven (1996 (published in Stanford: CSLI Publications, 1998); Geenhoven (2002) proposed semantic incorporation, F. Farkas and de Swart (2003) proposed “unification”, and Chung and Ladusaw (2004) proposed “Restrict”.

a cup/bottle/etc of water. Löbner (1985) argues that the definite article is in fact neutral with respect to the mass/count noun distinction. His example adapted to German is:

(4.7) She always puts (an) apple into the salad. *The* apple makes the salad a little sweeter.

(4.8) Sie gibt immer (einen) Apfel in den Salat. *Der* Apfel macht den Salat süß.

This example would show that “Apart from being introduced as a count or a mass term [...] there is no clue to decide the mass/count status of the noun *apple* [...]” (Löbner, 1985, p.282). Hence, taken in isolation, the definite noun phrase should not be specified for the mass/ count distinction.

As for abstract nouns, such as nominalized expressions (nominalized adjectives, adverbs, or infinitives), they may combine with the definite article, as well. Longobardi (1994) and Tsimpli (1999) have argued for Romance languages and Greek, respectively, that the article of such expression has the mere function of turning a non-nominal argument of the semantic type $\langle e, t \rangle$ into an argumental expressions of type $\langle e \rangle$.

To sum up, table 4.3 shows the distribution of nominals without articles and the definite article in Standard German.

4.4 Accounts

In a corpus study on definite descriptions by Poesio and Vieira (1998) the majority of the found items were used as first-mention. In detail, from the 1.400 definite descriptions about 50% were classified as first mention and 50% were second mention or bridging references. As first mention were

	Bare	Def.
proper nouns I (<i>Anna</i>)	OK	*
proper nouns II (<i>der Bodensee/die USA</i>)	*	OK
mass nouns (<i>Wasser</i>)	OK	OK
abstract nouns (<i>Freiheit</i>)	OK	OK
count nouns (<i>Kuh</i>)	*	OK

Table 4.1: Distribution of bare and definite noun phrases in Standard German

used definite nouns with globally unique referents (cf. “larger situation sets”, Hawkins (1978)), and definite nouns with semantically functional interpretations (cf. Löbner (1985)). This study suggests that in order to account for all the uses of definite noun phrases one needs to take into account both its semantics and pragmatics.

Pragmatic accounts take familiarity to be the decisive property of definite noun phrases (as in framework of File Change Semantics, Heim (1982), or DRT Kamp (1981)). Definite nouns with familiar referents have referents which have been previously introduced into the discourse model and are typically anaphoric expressions. The advantage is that one can account for the difference between definite and indefinite nouns, since the latter require new and non-familiar referents.

However, familiarity in this sense only applies to a subgroup of definite noun phrases, as the above mentioned study reveals. Discourse-new definite noun phrases face a general problem for familiarity accounts because they take the anaphoric use as the “default” use of definite descriptions.

Therefore, an extended notion of familiarity has been proposed, e.g., by Roberts (2003) who argues that one has to distinguish between strong and weak familiarity in order to cover all uses of definite noun phrases.

Many first-mention definite nouns can be analysed as constructing their referent right away, which would mean that they create and introduce a file card, which is reserved for indefinite nouns. However, this strategy is also a repair mechanism for accommodated referents of definite nouns whenever reference to a familiar referent fails.⁴

In the following, I will discuss accounts that describe definite nouns in terms of uniqueness, on the one hand, and unique reference, on the other hand.

4.4.1 Definite NPs are unique

4.4.1.1 Absolute and relative uniqueness

Russell (1905) notes the following on denoting expressions that are formed with the definite article:

Take as an instance ‘the father of Charles II was executed’. This asserts that there was an *x* who was the father of Charles II and was executed. Now *the*, when it is strictly used, involves uniqueness; we do, it is true, speak of ‘the son of So-and-so’ even when So-and-so has several sons, but it would be more correct to say ‘a son of So-and-so’. Thus for our purposes we take *the* as involving uniqueness. Thus when we say ‘*x* was the father of

⁴In the following, I will skip the discussion of accounts based on saliency (e.g. von Heusinger (1996) who derives the situational use of definite nouns phrases as the primary use), or accessibility (cf. Epstein (1999) and Epstein (2002)).

Charles II' we not only assert that x had a certain relation to Charles II, but also that nothing else had this relation. Russell (1905, p.481-482)

While both definite and indefinite noun phrases would be logically existential quantifiers, only the definite noun phrase combines the existential condition and the matrix predication with a uniqueness condition:

(4.9) Indefinite descriptions: "An F is G ."

$$\exists x(F(x) \wedge G(x))$$

There is an F that is G .

(4.10) Definite descriptions: "The F is G ."

$$\exists x((F(x) \wedge G(x)) \wedge \forall y(F(y) \rightarrow x = y))$$

There is an F that is G ; At most one thing is F . Or: There is a unique F and everything that is F is G .

Abbott (2003) discusses two possibilities to analyze the definite article with mass- or count nouns: With count nouns the definite article indicates totality (and uniqueness is an implicature), while with mass and plural nouns it indicates uniqueness (and totality is an implicature). In a similar vein, Sharvy (1980) proposes that with mass nouns and plural nouns the definite article signals totality or exhaustiveness of the noun's description rather than uniqueness.

Under a Russellian view, the felicitous use of definite noun phrases depends on the uniqueness of their referents in a fixed domain, and that this uniqueness is logically entailed and asserted.⁵ Hence, the definite article

⁵Strawson (1950) modified the Russellian view by assuming that the uniqueness implications are presuppositions rather than entailments (cf. also Kadmon (1987 1990); Roberts (2003); Abbott (1999)).

has a built-in uniqueness condition which is context independent. Kadmon also takes uniqueness as the defining property of definite descriptions but permits accommodation of silent material at the level of logical form to make the description absolutely unique (Kadmon (1987

1990)). For example, one can use the definite noun phrase “the mayor” felicitously if the speech situation helps to restrict the domain of reference so that a unique individual can be identified:

(4.11) Yesterday, I met the mayor. (e.g. the mayor of the town the utterer is living in)

These context-dependent uses of definite noun phrases (“incomplete” descriptions) require an additional restriction on the domain of reference, otherwise they fail to refer. Therefore, some authors have proposed to analyse the definite description as a restricted quantifier whose domain of quantification can be shifted, and, consequently, whose domain of reference can be shifted, as well (cf. Brown (1992); Stanley and Williamson (1995)). Similarly, Löbner (1985) suggested that the uniqueness claim of incomplete descriptions can still be saved if one allows to narrow down the domain so that the referent is unique.⁶

Last, let me point out the difference between referential and non-referential readings of definite noun phrases, observed by Donnellan (1966):

(4.12) Attributive: Whatever is uniquely F is G.

“I don’t know the mayor.”

(4.13) Referential: The specific individual F is G.

“I met the mayor.”

⁶Vater (1963) links emphatic accenting to a meaning change by either widening or narrowing the meaning of the definite article.

Donnellan argued that uniqueness accounts cannot derive the referential use of definite noun phrases but only capture the attributive use. However, it has been argued that Donnellan's distinction is in fact a matter of pragmatics and speaker meaning - i.e. a matter of what the hearer knows about the referent, and plays no role for the semantics of definite.⁷

4.4.1.2 Functional concepts

Löbner (1985) analyzes definite descriptions (DDs) as referential terms and recurs to the notion of functionality:

This analysis accounts for the global properties of DDs, such as existence of a referent and non-ambiguity of the noun. It explains the logical status of DDs as terms (and not quantifiers proper). It predicts correctly that the definite article is obligatory with functional nouns and non-redundant in all other cases. [...]

The definite article indicates that the noun must be interpreted in one of two fundamental ways, viz. as a functional concept or as a sortal concept. Both kinds of concepts are equally rep-

⁷Kaplan (1978) notes that definite noun phrases with referential uses are in fact quasi-demonstratives. Abbott (2000b) proposed that the distinction might be a matter of scope at the level of the speech act, comparable with the *de dicto/de re* distinction. Under this view, an attributive assertion would be an expression of a *de dicto* thought, while a referential assertion would express a *de re* thought. Also, Sennet (2002) takes that the difference between the uses not to be semantically significant. Kripke (1977) also denies that definite descriptions are ambiguous between these two readings and argues that the difference stems from speaker's reference versus semantic reference: What the speaker means and refers to has to be distinguished from what is literally said.

resented in the lexicon of natural languages. Under a sortal interpretation the referent of the noun is taken to be of a certain sort, under the functional interpretation it is linked to other objects by general relations. Löbner (1985, p.320)

Löbner takes indefinite noun phrases as denoting quantifier phrases and definite ones as referential terms akin to proper names. Definite noun phrases denote term individuals and may refer either to single individuals (singular DPs), sums of simple individuals (plural DPs), or homogeneous quantities of the same substance (mass DPs) (cf. Link (1983)).⁸

Under a functionality-based account, the definite article is not part of the lexical meaning of the expression but rather indicates the way of reference which must be unique (*eindeutig*). Russellian uniqueness gets thus obsolete because per definition referential terms refer uniquely to objects. Hence, uniqueness is not taken as an inherent property of the descriptive material of the definite article.

Basically, Löbner distinguishes between sortal, relational, and functional nouns, which in combination with the definite article yield always functional concepts. Sortal nouns classify objects and their referents (one-place predicates). Relational nouns describe objects which stand in a relation to other objects (2 or n-place predicates). Functional nouns form a special subclass of relational nouns and describe relations which relate objects unambiguously to others and always identify one referent. Under this view, “house” would be a sortal noun, while “brother” is a relational noun because it stands in a possessor-relationship to another individual

⁸Löbner regards as definite noun phrases also demonstratives, possessive and personal pronouns, and proper names. As pronouns lack a noun their functional interpretation depends on the linguistic context.

which could have more than one brother. Last, “mother” belongs to a special class of relational nouns, i.e. functional nouns, which always yield one individual value. Since every person has only one biological mother a functional interpretation of “mother” is required. Proper nouns are, under this view, inherently functional because they always refer to one individual, which is why they can be uttered without previous mention.

In addition, Löbner identifies the configurational or situational use of definite noun phrases like in:

- (4.14) *Anna fährt immer mit der U-bahn.*
 Anna drives always with the-DAT subway
 Anna always takes the subway.

Since Anna can only take one subway at a time, the subway is interpreted uniquely with respect to each event, and the uniqueness claim can be saved. Löbner proposes that the situational or configurational use of definite nouns requires a “situation” argument that enables the functional interpretation of the noun. Thereby, a definite noun phrase with a sortal noun like “the house” can be licensed in a context in which the predicate can be coerced to a function in that context.

To account for the various uses of definite NPs, Löbner makes a difference between semantic and pragmatic definite noun phrases. Pragmatic definite noun phrases refer unambiguously because of a particular situation or because of a linguistic antecedent. Their referents are uniquely identifiable only in contexts in which the referents are discourse given. In contrast, semantic definite noun phrases refer unambiguously because of general constraints, such as the functional meaning of a noun. Functionality is hence relevant for semantic definite noun phrases but not for pragmatic definite noun phrases.

4.4.1.3 Critics on uniqueness-based accounts

One problem with uniqueness- or functionality based accounts is that uniqueness seems not to be a necessary condition for the proper use of definite noun phrases. First, uniqueness-based accounts fail to account for anaphoric uses of definite noun phrases. In the next example, the use of the definite noun phrase is felicitous, even though the situation described has two mayors:

(4.15) A mayor has resigned. *The mayor* had done filthy business with another mayor.

Rather than referring to a unique mayor in the world, “the mayor” refers to the mayor which, in the sense of Heim (1982), was dynamically constructed in the first sentence.

Next, Löbner’s account predicts that functional nouns should not be good with indefinite articles (cf. criticisms by Cieschinger (2006)). However, this is not the case, since we can say:

(4.16) A mother entered the room.

The indefinite noun introduces a discourse-new entity which, nevertheless denotes a unique relation with another entity (a child). Hence, while the functional reading arises from the lexical meaning of mother, the non-unique reading has to do with the information status associated with the referent of mother.

Another problem for uniqueness accounts are definite noun phrases with non-unique body part expressions. Consider:

(4.17) *Anna hat sich den Kopf/ Arm/ ?Finger verstaucht.*
 Anna has REFL the head arm finger sprained
 Anna sprained her head/arm/finger.

Arms are not unique with respect to their possessor, but nevertheless they stand in a unique relationship with their possessors. Levinson (2005 2006) investigates the distribution of body part expressions with definite and indefinite articles and notes that dual body parts may occur with the definite article, even though they are not unique. A corpus analysis would show that there is a correlation between the total number of certain body parts and the use of the definite and indefinite article. The higher the number (i.e. more than two), the lower the identifiability of the referent, and the higher the probability that the body part noun occurs with an indefinite article. Levinson concludes that the use of the indefinite article is only felicitous with non-unique body parts, but that the definite article can be used with all body parts. He proposes that what seems to matter for the choice of article is the distinguishability of body parts rather than uniqueness.

In general, relational readings of definite noun phrases with possessives appear not to require uniqueness, as has been pointed out by Barker (1995 in press). Consider the non-unique reading of the first sentence in:

(4.18) I hope the cafe is located on *the corner of* a busy intersection.
 ok if (more than) one corner

(4.19) I hope the cafe is located on *the corner near* a busy intersection.
 ok if one corner

The corner needs not be discursively unique with a relational interpretation of the head nominal. In contrast, the corner in the adjunct of the second example has a non-relational reading. Barker formulates a felicity condition for the use of a definite description in terms of discourse uniqueness, according to which there must be (at most) one entity

in the discourse model that satisfies the descriptive content of its nominal complement (ibid., p. 95). Possessive definite descriptions would hence systematically refer to non-unique objects. For the analysis of relational definite nouns, Barker argues the following (emphasize is mine):

I will propose a single meaning for *the* on which it uniformly triggers uniqueness presuppositions on all of its (productive) uses. The key to understanding weak definiteness will depend on identifying what exactly must be required to be unique in each case: for normal, non-relational examples, what must be unique is the referent of the entire description. *For relational examples, it is the relation itself that must be unique.* [...] If the uniqueness presupposition associated with the definite determiner applies to the first element it combines with semantically, rather than with the first element it would normally combine with syntactically, we correctly predict that weak interpretations emerge only in the presence of a relational nominal. ((Barker, in press, p.90))

Unlike genitival PPs of definite noun phrases, which constitute a proper syntactic argument of the relational head noun, locative PPs are not arguments but adjuncts, and modify the syntactically non-relational definite noun phrase.

Last, another class of definite noun phrases not covered by a uniqueness or functionality approach are **generic** definite noun phrases (cf. critics by Poesio (1994)). “The tiger” does not denote a unique individual in “the tiger is a fierce animal”. However, if the definite noun phrase is analysed as denoting its kind, and if kinds are proper name of sets of

properties (cf. Dayal (1999)), then generic definite noun phrases refer to unique individuals as specific definite noun phrases do.

Overall, it seems that definite nouns with a situational or relational reading are not globally unique but rather are unique with respect to the situation described or have a unique relation with their possessors. That said, Russell's example "the father of Charles II" describes the relationship "Father(x, Charles)" where x is unique with respect to Charles, but "the son of Charles" describes the relationship "Son(x, Charles)" where x is not necessarily the only son of Charles.

4.4.2 Definite NPs are discourse-old

4.4.2.1 The Heimian view

Heim (1982) develops a theory on definite and indefinite noun phrases,

[...] according to which all definite noun phrases and indefinite noun phrases are quantifier-free, i.e., consist of an essential free variable and the descriptive predicate (if any). For instance, "A cart arrived" is analysed as "cart(x) & arrived(x)." [...]

Since a variable-analysis of both definite noun phrases and indefinite noun phrases *prima facie* obliterates the distinction between the two, it must be accompanied by a new theory of the definite-indefinite contrast. This theory must account for the different conditions under which definite noun phrases and indefinite noun phrases can get bound, and for the exclusive capacity of definite noun phrases for deixis and anaphora. All these differences can be predicted if the uniform semantic anal-

ysis of definite noun phrases and indefinite noun phrases is supplemented by suitable assumptions about their contrasting felicity conditions (presuppositions): Felicitous definite noun phrases must be “familiar” variables, felicitous indefinite noun phrases must be “novel” variables. Heim (1982, vii-viii)

Under a Heimian view, the variables introduced by definite noun phrases are free but existentially bound higher up within the linguistic context at some informational level and are accompanied by novelty or familiarity constraints.⁹ Definite noun phrases are then felicitous if the discourse participants know the described object, or else, if they are able to accommodate the existence of such an object. The presence of the referent within the discourse would lead to unique identifiability of the definite expression. Hence, Heim argues that uniqueness of definite noun phrases is a mere consequence of the requirement of unique reference as to which the hearer has to identify a unique index among the file cards. A new card is created by indefinite NPs, existing cards are referred to by definite NPs.

But new file cards are not only introduced by indefinite noun phrases. Heim assumes that a referent can also be manifestly salient in the non-linguistic context or permanently familiar because of shared background knowledge, and that, in this case, the hearer might accommodate a suitable referent in the discourse model even though the referent has not been mentioned before. Some examples are given below:

(4.20) A man_i came in. Then the man_i sat down. [Manifestly salient]

⁹Christophersen (1939) was the first who brought up the term of familiarity to describe the function of definite noun phrases: If the noun is associated with a previously known referent, the definite article can be used to establish unique reference.

(4.21) (Context: A goat_{*i*} walks into the room) The goat_{*i*} stinks!

(4.22) The moon_{*i*} shone. [Permanently familiar]

(4.23) (Context: talking about a book (which has an author_{*i*}.) The author_{*i*} is unknown. [Bridging]

Accommodation must apply with definite nouns which have no direct link to a familiar referent but which refer by means of a visible referent or a linguistic antecedent. Endophoric definite noun phrases like “A man saw *the dog* that bark at him” would refer via accommodation, as well, because the referent of dog can be resolved by the pronoun “him” which, in turn, is linked to “a man”.

In a similar vein, Szabó (2000) argues also that definite descriptions are semantically existentially quantified expressions (rather than unique) and that uniqueness implications can be explained by pragmatics and the requirement to pick out a specific and familiar referent. He adds two constraints on the update of files (in some way extensions to the conversational maxims of quantity, quality, relevance, and manner, by Grice (1975)):

(4.24) Non-Redundancy: When filing an utterance, don’t create redundancy (i.e. do not use an indefinite where a definite is less redundant)

(4.25) Non-arbitrariness: Don’t make arbitrary choices (i.e. don’t use a definite if you cannot identify the referent uniquely). (Szabó (2000, p.38))

However, note that the maxim for non-arbitrariness can be cancelled if the speaker cannot identify the referent, as in “Anna always takes the bus.”

4.4.2.2 Strong and weak familiarity

Roberts (2003) proposes a refinement of familiarity and introduces the distinction between strong and weak familiarity. If the referent of a definite noun phrase has a linguistic antecedent, it is strongly familiar. Weak familiarity, in contrast, is given with definite noun phrases whose referents were not mentioned in the previous discourse but nonetheless refer uniquely. Roberts includes in this group expressions with perceptually accessible referents (i.e. with deictic uses), globally familiar referents like “the pope/sun/president”, restrictive relative clauses, contextually entailed referents, and bridging referents. The difference between contextually entailed and bridging referents is exemplified, respectively, in:

(4.26) I lost 10 marbles and only found nine of them. *The missing marble* is probably under the sofa. (contextually entailed referents)

(4.27) Otto bought a book. He forgot the name of *the author*. (bridging referents)

She argues against a Russellian analysis of definite descriptions in terms of entailed uniqueness and argues that

[...] the uniqueness in question is presupposed, and not entailed, as reviewed in Kadmon (1990). In this respect, Strawson (1950) was right, and definite noun phrases don't simply assert existence. Second, the existence and uniqueness in question are not about referents in the actual world, as Russell had it, but about discourse referents in the common ground of the interlocutors. On this view, existence amounts to Heim's (1982) familiarity presupposition [...] with familiarity understood as

weak familiarity. And the uniqueness presupposition of definite descriptions is the requirement that sufficient information has been given to uniquely indicate the intended discourse referent antecedent among all those in the common ground of the participants. Roberts (2003, p.306-307)

Generally, weak familiarity holds for the following types of referents (ibid., p.298ff):

(4.28) Weak familiarity

- (4.29)
- The existence of the entity is entailed by the local context.
 - The entity referred to is *globally familiar* in the general culture or at least among the participants in the discourse, e.g. through perceptual acquaintance, although not mentioned in the immediate discourse.
 - The introduction of the NP's discourse referent is licensed by *contextual entailments* alone.
 - The introduction of the NP's discourse referent is licensed by giving a functional interpretation to the definite description whose function may have to be *accommodated*.

Noteworthy, Roberts takes pronouns and demonstratives also to be weakly familiar. Pronouns would carry the additional presupposition that the discourse referent is maximally salient, which is why uniqueness effects are generally triggered by definite descriptions but not by pronouns.

Under this view, definiteness presupposes both uniqueness and familiarity with respect to the overall information of the discourse participants without requiring absolute uniqueness of the definite noun's denotation in the world.

4.4.2.3 Identifiability

Some authors have claimed that the referent of definite noun phrases must be (uniquely) identifiable rather than unique, cf. Lyons (1999), Wallace (1976), Du Bois (1980) for identifiability, and Givon (1984), Gundel et al. (1993) and Birner and Ward (1994) for unique identifiability. In addition, Gundel et al. make a distinction between familiar and uniquely identifiable referents. A description is uniquely identifiable if the addressee can identify the speaker's intended referent on the basis of the nominal alone. In contrast to familiarity, unique identifiability is a necessary condition for definite reference. Under this view, the use of determiners depends on the cognitive status of their referents ordered in a "Givenness hierarchy":

(4.30) [+GIVEN] > [-GIVEN]:

in focus ("it") > activated ("that; this (N)") > familiar ("the/that N") > uniquely identifiable ("the N") > referential ("this N") > type identifiable ("a N")

Unique identifiability would hold for first-mention definite nouns and familiarity for second mention definite nouns.

In a similar vein, Hawkins (1978

1991) argued that a definite description entails that the hearer is capable of identifying the situation of which the referent is part before she can identify the referent within that situation. In other words, the referent must belong to a shared P-set. In addition, he assumes Russellian uniqueness for definite article:

Borrowing Grice's (1975) concept of a 'conventional implicature', I propose that the definite article in English carries the following conventional implicature (S and H abbreviate speaker

and hearer respectively):

(8) *The: conventional implicature: P-membership*

The conventionally implicates that there is some subset of entities, {P}, in the universe of discourse which is mutually manifest to S & H on-line and within which definite referents exist and are unique.

The logical meaning of *the* (existence and uniqueness) is thereby supplemented by a non-truth-conditional conventional meaning, as defined. (Hawkins (1991, p.414))

The difference between indefiniteness and definiteness would be driven by conversational implicatures of quantity and informativeness alone. The indefinite article would be logically an existential quantifier and neutral with respect to uniqueness, while the definite article would have uniqueness defined relative to a P-set, i.e. the description of the NP must be satisfied within a given P-set (ibid., pp.408).

Hawkins argues that P-sets can be:

(4.31) Previous discourse sets: e.g. “(a professor) ... the professor”

(4.32) Immediate situation sets: e.g. “Pass me the bucket!”

(4.33) Larger situation sets: e.g. “The moon shone.”

(4.34) Association sets: e.g. “(the car) ... the engine”

Previous discourse sets license all anaphoric uses of definite noun phrases. Pronouns and demonstratives are more restricted and require the actual physical perception of entities or explicit textual mention of entities ((Hawkins, 1991, p.414)). Immediate situation sets of the utterance are given if a unique referent is in the field of vision. For *larger situation set* the physical

location of utterance is the defining point. Last, *association sets* contain associative relationships which are predictable or functionally acceptable hold for unique referents.

Hawkins argues that in some cases the appropriate P-set is inferred from explanatory modification, i.e. information provided within the definite itself. This is the case with endophoric definite nouns and alternative-excluding expressions, like: “the roof of my house” (genitive phrase), “the professor of my linguistics class” (prepositional phrase), “the bucket over there, the professor we were talking about” (relative clause); “the A-est N of N”, “the only N of N”, and “the same N of N”, “the centre/top of the N”.

We conclude that Hawkins takes definite nouns to denote unique referents within a certain domain. This domain might be defined through the linguistic context with previous discourse sets or the extra-linguistic context.

4.4.2.4 Critics on pragmatic accounts

We can say that pragmatic accounts on definite noun phrases take unique reference as their defining property and uniqueness as a necessary condition for a felicitous filing of unique referents. Definite nouns used as first mention are explained by restricting the domain of reference so that unique reference is ensured.

Still, in some contexts this referent needs not be necessarily known to the hearer or to the speaker. For example, definite nouns with superlatives need not be familiar nor uniquely identifiable. Rather, they are be unique and presupposed. Hence, “I want to meet the best guy” can be uttered without previous mention and without knowing the referent.

Abbott brings examples in which familiarity can be cancelled, but uniqueness cannot (e.g. Abbott (1999

2000a

2003)). This would provide an argument for familiarity being a conversational implicature, and uniqueness being a conventional implicature. Consider:

(4.35) The new curling center at MSU, which you probably haven't heard of, is the first of its kind.

In a similar vein, Abbott argues that stressed definite articles in English highlight not familiarity but uniqueness:

(4.36) Soccer is **THE** sport.

What the speaker would want to communicate with this sentence is that soccer is the only sport. In contrast, the non-uniqueness of indefinite descriptions could be derived as a conversational implicature (cf. Hawkins (1991)). Consider:

(4.37) Russell was the author of Principia Mathematica, #in fact there were two.

(4.38) Russell is an author of Principia Mathematica, in fact the only one.

If the indefinite article is used, this implies that the definite article would be inappropriate which, in turn, implies that the descriptive content of the NP does not apply uniquely. Hence, the indefinite has no uniqueness implications, and the definite must be unique rather than familiar.

The familiarity theory of definiteness by Heim assumed accommodated familiarity for inferable referents. However, if we assume that beds are usually not associated with bags of chips (and that hence the latter cannot be accommodated) then the felicitous use of the definite noun is puzzling, as in (c.f. Birner and Ward (1994); Ward and Birner (1995 1997)):

(4.39) Please go into my bedroom and bring me the bag of chips that is lying on the bed.

The definite noun presuppose uniqueness rather than familiarity and as such differs from indefinite nouns which are not unique. Hence, if trucks are associated with having only one hood, then this licenses the use of a definite but not indefinite article. In contrast, if trucks are associated with several hubcaps then the indefinite article is felicitous:

(4.40) I bought a truck. The hood was scratched.

(4.41) I bought a truck. A/?The hubcap was scratched.

Note that the definite article is not totally out, though. We have seen that the definite article occurs with dual body parts and has hence a non-specific and non-familiar referent (cf. dual car parts like “the front light”).

We find more of these non-familiar readings with “weak definites” in examples discussed by Carlson et al. (2006) and Carlson and Sussman (2004):

(4.42) Mary went to *the* store.

(4.43) I will read *the* newspaper when I get home.

(4.44) Fred listened to the Red Sox on *the* radio.

Note that the hearer needs not to be able to retrieve a unique referent for the store, the newspaper, or the radio. Carlson argues that:

“While an informed person might well be able to guess which store, newspaper, or radio is involved in the event described, the truth or falsity of such examples does not depend on such an identification - we only need some store, newspaper, or radio in order for the sentences to be true.” Carlson et al. (2006)

These class of definite nouns would pattern more with bare singulars and indefinite nouns, Semantically, he assumes them to have narrow scope and be lexically controlled, for example, by prepositions and verbs. Since they are interpreted within the verb phrase they have the same meanings as bare singulars. Hence, Carlson proposes to analyse weak definite noun phrases as type-denoting expressions which are semantically incorporated. By implicature, these types can be familiar and contextually unique. For example, the fact that the meaning of being “in prison” or “in the prison” is the same “could be thought of as simply alternative formal expressions of the same underlying semantics” (Carlson and Sussman (2004, p.27)). Bare singular nouns are more restricted than definite noun phrases because they need to be lexically governed. But with both forms, the event described is interpreted in a semantically enriched manner, as in “to be in (the) hospital”. Note that this phrase does not mean only being physically in the hospital building.

4.5 Some predictions for CFs and NCFs

In this chapter, I will discuss the possibility that contracted forms are variants of the definite article in German. In the literature (and as we will see in chapter 6), contracted forms have often been treated as some form of reduced definite article which has assimilated phonologically to a preposition. Many non-Standard German variants actually have two phonologically differing forms of the definite article, a reduced or weak definite and a non-reduced or strong definite article.

At first sight, it seems that contracted forms can then be better described by uniqueness-based accounts on definiteness, and non-contracted forms can be better described in terms of familiarity. Non-contracted forms are primarily used anaphorically to refer to discourse-old entities and, hence, would have familiar or unique referents. Contracted forms occur with unique referents which are inferable from the speech situation but also with non-specific referents. They behave not like anaphoric expressions and cannot be easily bound. The latter can also be observed for definite nouns which seem to be problematic for both familiarity and uniqueness-based accounts.

4.5.1 CFs are unique, NCFs have unique reference

Depending on the knowledge of the hearer, a discourse entity can be new or old. Expressions with non-contracted forms require unique reference to a discourse-old entity:

(4.45) In dem Supermarkt bekommt man alles. (in the-DAT supermarket
gets one everything)

- i. “You get everything in the supermarket.” (specific reading if there is a unique supermarket in the previous discourse)
- ii. *“You get everything in a supermarket.” (non-specific reading)

In contrast, contracted forms need not have unique reference, as we see in:

- (4.46) *Im Supermarkt bekommt man alles.* (in-DAT supermarket gets one everything)
- i. “You get everything in the supermarket.” (specific reading if there is a unique supermarket in the speech situation)
 - ii. “You get everything in a supermarket.” (non-specific reading)

The referents of contracted forms need not be known to the speaker either, as we see with the continuation in A2:

- (4.47) *Anna war beim Bäcker.*
 Anna was at-DAT bakery
 Anna was at the bakery.

- (4.48) *A1. Er heisst John.*
 he names John
 His name is John. (referential)

- (4.49) *A2. Wir würden gerne wissen, wer er war.*
 we would likely know who this was
 We would like to know who he was. (non-referential)

The use of a non-contracted forms, in contrast, implies that the speaker knows the identity of the referent. The continuation in A2 would be odd, then:

(4.50) *Anna war bei dem Bäcker, der neu aufgemacht hat.*
 Anna was at the-DAT bakery that new opened has
 Anna was at the bakery that opened recently.

(4.51) A1. *Er heisst John.*
 he names John
 His name is John. (referential)

(4.52) A2. *??Wir würden gerne wissen, wer das war.*
 we would likely know who this was
 We would like to know who he was. (non-referential)

Contracted forms do neither require uniqueness nor unique reference with dual body part nouns, in contrast to non-contracted forms:

(4.53) *Sie legte ihm die Hand [aufs, #auf das] Knie.*
 she layed him the hand on-ACC knee
 She put her hand on his knee.

Birner and Ward (1994) have discussed a variety of examples that do not require unique identifiability of the definite noun phrases' referents, either. For example, with mass nouns the definite article is felicitous although the units are not distinguishable, and although the speaker does not intend to individuate the milk units, as in "Pass the milk, please". Still, one could still argue that mass nouns with the definite article require an implicit and distinguishable unit or portion of the substance, like *one* cup or bottle of milk.

However, the unique identity of the referent is not always required with the definite article. Consider the following sentence:

(4.54) He spent a week in the hospital.

The same argument against unique identifiability applies to contracted forms:

- (4.55) *Anna liegt im Spital.*
 Anna lies in-DAT hospital
 Anna is in (the) hospital.

Only the non-contracted form would be a true definite in Hawkins' account since their referents need to be always uniquely identifiable.

Carlson and Sussman (2004) observes that certain definite noun phrases allow a sloppy reading of VP anaphora, while others allow only a strict identity reading. In German, we can also observe this ambiguity:

- (4.56) *Fred geht in die Küche, und Alice auch.* (“Fred goes into the kitchen and Alice too”)
 (ok if different kitchens)

- (4.57) *Fred geht in die Arbeit, und Alice auch.* (“Fred goes into the work and Alice too”)
 (ok if different jobs)

If Fred and Alice live in the same flat with one kitchen, the strict reading will be preferred over the sloppy reading. With contracted forms, the same ambiguity arises:

- (4.58) *Fred geht zum Supermarkt, und Alice auch.* (“Fred goes to-DAT super-market and Alice too”)
 (ok if different stores)

- (4.59) *Fred geht zum Schreibtisch, und Alice auch.* (“Fred goes to-DAT desk and Alice too”)
 (ok if different desks)

Crucially, non-contracted forms have only the strict identity reading:

(4.60) *Fred geht zu dem Supermarkt, und Alice auch.* (must be same)

(4.61) *Fred geht zu dem Schreibtisch, und Alice auch.* (must be same)

For contracted forms, I would rather argue that their nominal arguments are semantically incorporated by the verb (in the vein of Van Geenhoven (1996 (published in Stanford: CSLI Publications, 1998), F. Farkas and de Swart (2003)). Unlike Carlson, though, I will take contracted forms to be marked for singular number, in contrast to bare singular nouns which are underspecified for number.

4.5.2 CFs have weak, NCFs have strong familiarity

Under Robert's analysis (Roberts (1999

2003)), and assuming that contracted forms have definite articles, they pater rather with weakly familiar definite noun phrases. Non-contracted forms have rather strongly familiar referents. We have seen that contracted forms occur with globally familiar entities, which are weakly familiar, like the moon:

(4.62) *Den Mond sehen alle anders.* - *Im Mond*
 the moon see everyone differently - in-DAT moon
sehen alle etwas anderes.
 see all something different
 Everyone sees the moon differently. - Everyone sees something
 different in the moon.

Further, contracted forms occur with situationally familiar entities whose existence can be entailed by the local context:

(4.63) Calling Hans' house for the first time, his wife answers and says:

(4.64) *Einen Moment, Hans ist #in dem/ im Garten.*
 one moment Hans is in the in-the yard
 Just a moment, Hans is in the yard.

(4.65) During your first visit to the town hall, the receptionist says:

(4.66) *Damit muessen Sie #zu dem/ zum Ordnungsamt*
 with-this must you to-the / to-the order-office
 With this, you have to go to the Ordnungsamt.

The referent of inalienable expressions would have to be accommodated since it requires a functional interpretation of its possessor. This would be a property of weak familiar referents, as well.

(4.67) *Du bist nicht ganz richtig im Kopf!*
 you are not totally right in-the head
 You are totally crazy!

In contrast, non-contracted forms can be regarded strongly familiar because they can have as its antecedent a discourse referent introduced via a subordinate clause.

Note also that unique reference can also stem from the meaning of the modifying phrase. If we want to adopt Roberts' approach, we have to assume that superlatives adjectives or self-referring adjectives ("same") can license weakly familiar referents. This again would explain why these typically occur with contracted forms and we could maintain the claim that they require weakly familiar referents.

(4.68) *Mir fällt beim besten Willen kein Beispiel ein.*
 me falls at-the best will no example in
 For Gods sake, I cannot think of any example.

(4.69) *Wir sitzen alle im selben Boot.*
 we sit all in-the same boat
 We are all sitting in the same boat.

A problem for contracted forms having weakly familiar referents could be their occurrences in non-referential as in:

- (4.70) *Im Nachhinein kann man das immer sagen.*
 in-the after-the-event can one that always say
 Afterwards one can always say that.

Another problem is related to accommodation of weakly familiar referents: We have seen that non-contracted forms can have inferable referents but these is not a property of strongly familiar referents. Hence, we could not predict why both the contracted and non-contracted forms is possible in:

- (4.71) *Babo hat ein neues Auto. [An dem/ Am] Kühler
 Babo has a new car at the-DAT at-DAT radiator
 prangt ein Stern.
 displays a star
 Babo has a new car. It has a star on the radiator.*

- (4.72) *Das Haus ist alt. [An dem / Am] Dach gibt
 the house is old at the /at-the roof there-are leaky
 es undichte Stellen.
 places
 The house is old. The roof has leaks.*

There is a difference between forms, though, which is related to whether the associate expression has a unique referent or not. Compare:

- (4.73) *Auf Reisen treffen sich Hans und Karl meistens [#an
 On trips meet Refl. Hans and Karls usually at
 dem / am] Bahnhof.
 the / at-the train-station
 On trips Hans and Karl usually meet at the train station.*

The example shows that the non-contracted form cannot be used for all types of inferable and weakly familiar referents. And, it shows that the contracted form can be used in generic contexts. However, if reference to concepts or kinds is understood as reference to semantically unique entities (cf. Carlson (1977)), then contracted forms could be regarded to have weakly familiar referents.

4.6 Summary

In this section, we have seen that under a Russellian view on definite descriptions these are semantically unique. Under a Heimian view on familiarity, definite nouns introduce free variables which have to be co-indexed with a familiar, i.e. discourse-old, referent. In general, first-mention uses of definite noun phrases are better explained by means of semantic uniqueness. Subsequent-mention uses are better explained by means of unique reference and familiarity. Contracted forms occur sometimes with globally unique expressions but also occur with non-specific expressions and seem to display narrow scope behaviour with respect to the event. Non-contracted forms, in contrast, seem to be restricted to occur with familiar discourse referents and to anaphoric contexts. This complementary distribution has been related to the existence of two morphologically distinct definite articles found in non-Standard German, which will be presented in the next chapter.

Chapter 5

Two morphologically distinct definite articles

5.1 Introduction

In this chapter I will discuss the paradigm of non-reduced and reduced forms of the definite article in Fering and Bavarian, two non-Standard German variants. Löbner argues that his distinction between semantic and pragmatic definiteness is morphologically marked within these reduced and non-reduced definite articles, respectively.

In the following, I will discuss the descriptions and analyses by Ebert (1970) for Fering and by Brugger and Prinzhorn (1996) and Scheutz (1988) for Bavarian and the question whether contracted forms are derived from reduced definite articles.¹ Last, the historical development of the definite article and of the contracted forms will be outlined.

5.2 Fering (Ebert, 1970)

The paradigm of weak and strong articles was early studied and described in a systematic manner by Ebert (1970) for Fering, a dialect of North Frisian spoken on the island of Föhr in North Frisia (Germany). Ebert refers to both forms as A-articles or D-articles, respectively. The forms she investigates are listed in table 5.2 (*ibid.*, p.9).

Ebert finds the A-article with expressions that have a unique meaning for the speaker and hearer (*Monosemantika*) including kind names, such as names of:

- Persons, religious and ethnic groups, geographic places

¹Note that reduced and non-reduced (or weak and strong) definite articles also have been observed, e.g., for Egerländisch (Schiepek (1908)), for Amern (Heinrichs (1954)), for Fering in North Frisian (Ebert (1970)), for Mönchengladbach in the Rhineland (Hartmann (1982)), and for Bavarian (Scheutz (1988), Brugger and Prinzhorn (1996)).

	m.Sg.	f.Sg.	n.Sg.	Pl.
A-forms	a	at	at	a
D-forms	di	det(j'ú)	det	d'on (d'o)

Table 5.1: Two forms of the definite article in Fering

- Occupations or rangs and names of general human groups (*die Leute* - "the people").
- Relationships and kinship
- Generally known concepts if they are used as such and not nearer defined
- Parts of the human, animal or plant body
- Parts of the mental and spiritual organism
- Parts of Clothes
- Substances

In addition, she takes nominalizations of adjectives, possessive pronouns (if Monosemantika), superlatives, infinitives, and participles as *Monosemantika* if they are not situationally used. The referents with A-articles have in common that they can be identified without further specification like expressions with:

- Cumulative and "non-specific" reference: Examples: "at weeder" (the water), "a mensken" (the humans), "a frihaaid" (the freedom)

- Reference to specific entities if globally or situationally unique, or provided through context. Examples: "a san" (the sun), "a prääster" (the priest), hüüs...a döör" (house... the door)

The D-article is used for textual or situational deixis (discursive function), or if restrictively modified by an adjectival or prepositional phrase (determining function) or restrictive relative clause (correlative function). In order to identify the referent with D-articles one needs more information which is provided in the linguistic context.²

Ebert attributes two basic functions to the definite article, a grammatical function and a communicative function. Crucially, she takes the latter to be optional. If the definite article does not contribute to the meaning of the sentence, and no context is necessary, it has a purely grammatical function and the A-forms are used. In contrast, the D-article has apart from the grammatical a communicative function and requires contextual clues for the retrievable of a referent.

In sum, the uses of A- and D-articles differ with respect to the speaker's assumptions about the familiarity of the referent. Ebert concludes that we have to distinguish between different kinds of knowledge: On the one hand, lexical or encyclopedic knowledge is speech-act independent and compatible with A-articles. On the other hand, there is knowledge that is speech-act dependent which can be either reconstructed or not. If it cannot be reconstructed, D- or A-articles can be used. If it is reconstructable, only the D-article is felicitous. In other words, anaphoricity is a property of D-articles, but not A-articles.

²Ebert notes that D-articles are also used with kind-naming nouns, or other types of nouns that can ad hoc form kinds if the referent is little known and far. Topicalization of referents seems, hence, to be another function of the D-article.

We conclude that the referents of A-articles are either not further specified because they are known as with proper names, or because they cannot be specified as with mass and abstract nouns. Contracted forms seem to pattern alike but may have either specific or non-specific referents. If the A-article has only a grammatical function and assigns case to an expression with not further specified referents, we could think that in a context where case assignment has already been taken care of by another functional expression A-articles should get obsolete. Contracted forms in German could be thought of in a similar way: If case assignment has already been taken care of by an inflected preposition a definite article should not be required anymore, either.

5.3 Bavarian

5.3.1 Forms

Bavarian dialects are spoken in Southern Germany and Austria and have two morphologically different definite articles, a reduced and non-reduced form, as in:

- (5.1) *Da Schnaps is teia woan.*
 the-NOM_{red} Schnaps is expensive become
 Schnaps or a situationally unique Schnaps has become expensive.
 (generic or specific)

- (5.2) *Dea Schnaps woa gestern urteia.*
 the-NOM_{non-red} Schnaps was yesterday very-expensive
 The Schnaps from yesterday was quite expensive. (specific)

The declension classes for the two forms of the singular definite article in Bavarian are listed in table 5.3.1, together with the Standard Ger-

man paradigm (cf. Brugger and Prinzhorn (1996)). Note that there is no genitive case in Bavarian: Possessive relations are expressed with the dative possessor construction “the-DAT *possessor* his/her/its/their-NOM *possessee*”.

Case	the (SG)	the-RED (B)	the-FULL (B)
Nom.	der (masc.), die (fem.), das (neutr.)	da, (d)i, (i)s	dea, di:, des
Gen.	des, der, des	0	0
Dat.	dem, der, dem	(i)m, d(a), (i)m	dem, dea, dem
Acc.	den, die, das	(i)n, d(i), (i)n	den, di:, des

Table 5.2: Declension of the definite articles in Bavarian (B) and Standard German (SG)

For Viennese, a South Bavarian dialect, Schuster and Schikola (1984) published its first grammar and lists the declension class of the definite article (table 5.3.1) and the demonstrative article (table 5.3.1).

Singular	case 1, 3, 4
masc.	da, in, in
fem.	di (d), da, di (d)
neutr.	s, in, s
Plural	case 1,3,4
all	di (d), denan (in), di (d)

Table 5.3: default

Noteworthy, in Standard German we find three different forms for the demonstrative article: *dieser* (“this”), *jener* (“that”), and *derjenige* (“the one”). Viennese, in contrast, only has one demonstrative article

Singular	case 1, 3, 4
masc.	da, den, den
fem.	de, dęara, de
neutr.	des, den, des
Plural	case 1,3,4
all	de, dena, de

Table 5.4: default

which differs from the definite article in its declension and its longer vowels (i.e. it needs to be stressed). Schuster also points out that in order to strengthen the demonstrative function, *do* is suffixed, even twice: compare *dęado*, *dedę*, *desdę*, with *deadęda*, *dedęda*, *desdęda* (ibid., p.135).³ Note that Schmitt (2007) investigates Hessian relative clauses and their restrictive and non-restrive readings in relation to the presence and order of relative and wh-pronouns. Although Schuster does not mention this issue, I suppose that Schmitt’s observations hold for Bavarian and Viennese, as well.

5.3.2 Prinzhorn and Brugger (1995)

Brugger and Prinzhorn (1996) (henceforth, B&P) have proposed a syntactic distinction to account for the interpretative differences of reduced and non-reduced definite articles in Bavarian.⁴ They note that the reduced

³Note that the relative pronoun (*dea*, *de*, *des*) may be repeated inside relative clauses as in: *Dea Må, (dea) wqs...* meaning “The man, who”.

⁴Studler (2001) discusses their approach and applies it to Swiss German.

article is employed with the following expressions:

- Proper names: *da Hans* (“the_{Red} Hans”)
- Situative unika: *da Pforra* (“the_{Red} priest”)
- Superlatives: *da hechste Berg* (“the_{Red} highest mountain”)
- Abstrakta: *is Glück* (“the_{Red} luck”)
- Inalienables: *da Kopf* (“the_{Red} head”)
- Generika: *da Schnaps* (“the_{Red} Schnaps”)

In Bavarian, proper noun of persons must have the reduced definite article and abstract and mass nouns take usually the reduced definite article.⁵ Inherently unique expressions like proper names, situative unika, superlatives, and relational expressions refer uniquely because of logics, nature, or conventions and occur with the reduced forms. Crucially, incomplete definite descriptions, whose interpretation depends on actual domains of reference, are compatible with both forms. Noteworthily, they argue that the non-reduced article is not a demonstrative for several reasons: First, unlike the demonstrative, the non-reduced article is not always stressed. Second, the unstressed non-reduced article can be modified by a restrictive relative clauses, while demonstratives cannot (they only allow non-restrictive modification).

Syntactically, B&P assume a strictly ordered set of functional projections inside DP, which would reflect the semantic properties of nominals. More precisely, B&P assume a universal structure for DPs hosting their

⁵Note that in Standard German proper nouns of persons must be bare and abstract and mass nouns can be bare.

own agreement phrase DAgrP. The definite article can be construed in D^0 and, in some languages, in DAgr 0 . For Bavarian, there are two options and depending on whether the definite article is located in DAgr 0 or D^0 , we get a reduced or non-reduced definite article, respectively. The syntactic structure they assume is:

(5.3) Reduced definites: *da Schnaps* (“the_{Red} Schnaps”)

$$[DP[D\emptyset[DAgrP[DAgr\ da\ [NP[N\ Schnaps\]]]]]]$$

(5.4) Non-reduced definites: *dea Schnaps* (“the_{Full} Schnaps”)

$$[DP[D\ d\text{-}\ [DAgrP[DAgr\ \text{-}ea\ [NP[N\ Schnaps\]]]]]]$$

B&B propose that in the agreement phrase of DP (DAgrP) case is assigned and also uniqueness in the Russellian sense.⁶

P&B follow that, in order for the reduced article to be felicitous, *forall* $i|NP| = 1 \in D_i$ must be fulfilled. In other words, the cardinality of the set that satisfies the descriptive content of the NP is equal to one independently of actual domains of discourse. Crucially, this uniqueness condition is only fulfilled if the definite article is located in the head of DAgrP. In contrast, in the higher DP projection, a set of alternative referents is construed and as such the uniqueness constraint does not hold with non-reduced definite articles.

As for subextraction effects, B&P show that extraction of a nominal complement is allowed if it has a reduced article but not a non-reduced article:

⁶Note that in Swiss German and Ruhrdeutsch, there is also a reduced/non-reduced paradigm for plural definites. So, rather than constraining the number to apply to only one individual, it should apply to a singleton set or to the totality of a set. I will exclude definite plurals noun phrases in this work, though, since contracted forms in Standard German are always inflected for singular number.

- (5.5) *Von wem hast du [s, *des] Auto*
 from whom have you the-ACC_{red} the-ACC_{non-red} car
hingmocht?
 broken
 Whose car did you break?

P&B point out that subextraction is allowed with reduced articles whose nominal complement is specific.⁷ The continuations A and B are both felicitous which shows that the reduced article can have either a specific or non-specific reading, respectively.

- (5.6) *Gestern hob i a Büd von an Mo in da Zeitung*
 yesterday have I a picture from a man in the newspaper
gsegn.
 seen
 Yesterday I saw a picture of a man in the newspaper.

- (5.7) A: *S' Büd woa leida unschoaf.*
 the-RED picture was unfortunately out-of-focus
 Unfortunately, the picture was out of focus.

- (5.8) friend from me B: *Da Mo von dem i'*
 the-RED man from whom I
s Büd gsegn hob is a oida Freind von
 the-RED picture seen have is a old
mia.

The man I saw the picture of is an old friend of mine.

P&B also argue against another solution to subextraction proposed by Campbell (1996) according to which a filled specifier of DP is blocked as a potential landing site for extracted nominals. This specifier could be filled

⁷Note that Fiengo and Higginbotham (1981) and Enc (1991) argue that specific nouns must denote entities which are a subset of a contextually familiar set J. Definite nouns must denote the maximal subset of J.

by a specificity operator or by a demonstrative. But specificity cannot be the reason to block subextraction since the continuation in example 5.8 is not out.

Further, P&B propose that restrictive relative clauses are not compatible with the uniqueness condition and hence are not felicitous with reduced articles. Restrictive modification would presuppose an alternative set for which the statement does not hold (cf. Bach (1974)). Syntactically, they assume for non-restrictive clauses that they are construed in the scope of D^0 and outside the scope of $DAgr^0$. Since reduced definites (and demonstratives) lack a filled $DAgr^0$ they cannot be modified by restrictive clauses. In contrast, non-reduced articles can be modified by either restrictive or non-restrictive relative clauses depending on whether the clause attaches to D^0 or $DAgr^0$. The structural representation B&P assume for both types of articles with non-restrictive and restrictive relative clauses is:

(5.9) Non-restrictive RC:

Reduced definites:

$$[DP[D\emptyset[DAgrP[DAgr\textit{is}[NP\textit{Buach}]]][CP\textit{wasdaChomskygschriemhot}]]]$$

Full definites:

$$[DP[Dd[DAgrP[DAgr\textit{-es}[NP\textit{Buach}]]][CP\textit{wasdaChomskygschriemhot}]]]$$

(5.10) Restrictive RC:

*Reduced definites:

$$[DP[D\emptyset[DAgrP[DAgr\textit{is}[NP\textit{Buach}]]][CP\textit{wasdaChomskygschriemhot}]]]$$

Full definites:

$$[DP[Dd[DAgrP[DAgr\textit{-es}[NP\textit{Buach}]]][CP\textit{wasdaChomskygschriemhot}]]]$$

Note that restrictive modification by means of adjectives or PPs is compatible with reduced articles. Schmitt (2007) concludes that one would

have to add the restriction for restrictive APs and PPs so that these are part of the NP, so that they can contrast with restrictive relative clauses which attach to D^0 (ibid., p.256).

In general, P&B's account predicts that depending on the language the definite article can be located in DP or DAgrP (see table 5.3.2).

	D^0	DAgr 0
SG	+	+
Italian	+	+
English	+	-
Bavarian (Red.)	+	-
Bavarian (Non-Red)	-	+

Table 5.5: D^0 and DAgr 0 , cross-linguistically

If the article is base generated in DAgr 0 , it has a reduced form. If it has moved to D^0 , the article has a non-reduced form. In Italian and Standard German, the definite article can be located in either positions, while in English the definite article is always construed in D^0 .⁸

⁸Note that Sportiche (1995) also assumes different syntactic structures for definites in French versus English but less functional projections:

(5.11) French: [DP [D *le*] [NP *livre*]] - weak article

(5.12) English: [DP *the*] [D \emptyset] [NP *book*]] - strong article

For the two definites in German variants, this would mean that the reduced definite article is within the specifier of DP and as such would correspond to the French definite. The full article, by contrast, sits in D and correspond to the English article. Hence, the full article is either base generated in the same position as the reduced article from which it moves to SpecDP, or, it is base generated within SpecDP. This has to be contrasted with the demonstrative article which is base generated within the NP (cf. Campbell

Schmitt (2007) explores the distribution of restrictive and non-restrictive relative clauses in Hessian German and argues against an analysis in the lines of Brugger and Prinzhorn (1996) for Bavarian.⁹ In Hessian German, restrictive clauses are formed with *wo (des)* (“where this – who”)(W pattern) in contrast to descriptive clauses which are formed with *die wo* (“this where – who”)(DW pattern). Schmitt notes that with *situative Unika* (in the vein of Ebert (1970)) and proper names restrictive readings of relative clauses are out. The relative clauses can hence not have the W pattern:

(5.13) *Die Petra Roth/ die Bejermeisterin, die wo isch kenn,*
 the Petra Roth/ the mayor the where I know
hat zwaa Bembel gepetzt.
 has two Bembel drunk
 Petra Roth/The mayor, who I know, drank two Bembel. (DW
 pattern)

(5.14) **Die Petra Roth/ die Bejermeisterin, wo (des) isch*
 the Petra Roth/ the mayor where the I
kenn, hat zwaa Bembel gepetzt.
 know has two Bembel drunk
 Petra Roth/The mayor who I know drank two Bembel. (W pattern)

She concludes for Hessian relative clauses that the W pattern cannot be non-restrictive and the DW pattern cannot be restrictive (or amount). Schmitt discusses the analysis by Prinzhorn and Brugger but claims that - adopted for Hessian - makes some false predictions: The position of the definite article would not determine whether a Hessian relative clause will be restrictive or non-restrictive.

(1996)) and moves to SpecDP.

⁹Like Bavarian, Hessian displays two types of definite articles, referred to by N- and S-paradigm: The latter is obligatory with stressed definite articles or when the restrictive relative clause modifies a DP which has an amount reading (ibid., p.259). The N-paradigm occurs with the rest of cases.

While it would be true that with a reduced article the Hessian relative clause is non-restrictive, it would not be true that the relative clause is always restrictive with non-reduced articles. Rather, it can be restrictive or non-restrictive. Hence, the choice of determiner would have no influence on the choice of relative clauses which would be an argument against analysing Hessian relative clauses in terms of two distinct definite articles which occupy two distinct scope-bearing positions.

We have seen that P&B take the reduced article in Bavarian to presupposes semantic uniqueness, while the non-reduced form does not and rather is used to chose a unique referent out of a contrastive set. The fact that the Bavarian definite article has two forms which differ in meaning and use is under this view correlated to the existence of two functional projections which maps syntactic onto semantic structure.

5.3.2.1 Prediction: CFs have DAgrPs

The reduced article seems to be obligatory in the same contexts as contracted forms are. Hence, one could assume from the discussion above that contracted forms have reduced definite articles that have attached to a preposition. Non-reduced articles, in contrast, correlate with the properties found with non-contracted forms. Consider the examples:

- (5.15) *Vom Schnaps wird da Anna*
 from-DAT_{reduced} Schnaps becomes the-NOM_{reduced} Anna
imma schlecht.
 always bad
 From Schnaps, Anna gets always sick.

- (5.16) *Von dem Schnaps wird da*
 From the-DAT_{non-red.} Schnaps becomes the-NOM_{reduced}
Anna schlecht.
 Anna bad

From this/that Schnaps, Anna gets sick.

The syntactic structure of contracted forms could then be the following, adapting the syntax for the reduced definite article by P&B:¹⁰

(5.17) P-DAgr: [PP vom_i [DP \emptyset [DAgrP t_i [NP Schnaps]]]]

Syntactically, a reduced definite determiner head adjoins to the preceding prepositional head. Crucially, the syntactic structures would predict the existence of the ungrammatical form **vom in* (“from the-DAT_{reduced}”) and would have to be ruled out by means of a post-syntactic rule. A P-DAgr analysis of contracted forms has to account for the fact that the moved reduced definite article has crossed a potential landing site, namely the empty D⁰. This move could be prevented by assuming that the reduced determiner phrase does not project as DP but only as DAgrP.

A further problem with this analysis is that contracted forms occur in the superlative adverb construction since adverbs should in principle not project as DPs (along with DAgrPs) at all. The same could be argued for contracted forms with nominalized infinitives (which should project as deverbal NPs).

Alternatively, we could assume the projection of a PP with a base-generated preposition which assigns case to its nominal complement (thereby making it argumental) with which it agrees. This is what I will propose in chapter 7.

5.3.3 Scheutz (1988)

Scheutz (1988) discusses the weak/strong paradigm of the definite article in Bavarian, or the DA/DE paradigm, respectively. The two paradigms are

¹⁰A similar structure is also assumed by van Riemsdijk (1998), as we will see later.

listed in table 5.3.3 for the DA-paradigm, and in 5.3.3 for the DE-paradigm.

DE	Sg masc	Sg fem	Sg neutr	Pl all
Nom	de, dea	de:	de:s	de:
Dat	den	dera	den	de:, dea
Acc	den	de:	de:	de:

Table 5.6: DE paradigm (IPA ignored)

DA	Sg masc	Sg fem	Sg neutr	Pl all
Nom	da	d	s	d
Dat	e:n	da	e:n	de:, dea
Acc	e:n	d	s	d

Table 5.7: default

Scheutz departs from the assumption that the definite article enables localisation of its referent and is not a quantifier like the indefinite article. For the demonstrative use the DE-forms are used (note that in Bavarian there is no demonstrative article *dies-*).¹¹

In Standard German both the definite and demonstrative article can be used for localisation of the referent, but the demonstrative article indicates additionally that the referent is somewhere in the nearer linguistic or extra-linguistic context. Both the definite and demonstrative article can be used contrastively if there is a set of potential referents from which the

¹¹In order to express proximity the DE-forms are combined with the deictic adverbs *da* (“here”) and *dort* (“there”) as in: *der Mann da/dort* (“the man here/there” - this/that man”).

appropriate referent has to be picked out. According to Scheutz, one difference between both articles can be observed with relative clauses. Relative clauses are non-restrictive if the referent is already defined, e.g. because of the previous context. Relative clauses are restrictive if the referent is defined *in situ*, i.e. by means of information provided in the embedded relative clause. Scheutz argues:

Während *der* sowohl rück- als auch vorverweisend gebraucht werden kann, ist *dies-* auf den rückverweisenden Gebrauch festgelegt. (ibid., p.236).

(“While *der* [“the”] can be used both anaphorically and cataphorically, *dies-* [“this”] can only be used anaphorically.”)

Another difference is that the demonstrative article cannot refer to general notions, like, e.g. *Gewerkschaft* (“trade union”) as in:¹²

- (5.18) *Der* *Gegenvorschlag* *kam* *von* [*#dieser, der*]
 the counterproposal came from this the
Gewerkschaft.
 trade-union
 The counterproposal came from the trade union.

Scheutz argues that the two forms of the definite articles (he roughly adopts the uses observed by Hawkins (1978), Vater (1984)) distribute as follows:

- (5.19) DA with abstract-situative use (cf. “larger situation use”,

Hawkins (1978))

Example: *Der* *Präsident* *will* *in* *der* *Gedenksitzung* *eine* *Rede*

halten. (“The president wants to give a speech in the memorial.”)

¹²Scheutz marks the demonstrative article as being ungrammatical, which I regive here as being pragmatically infelicitous.

(5.20) DA with associative-anaphoric use (cf. “bridging”)

Example: *Mein neues Auto muss zur Reparatur. Der Motor war eingerostet.* (“My new car has to get fixed. The engine was rusty.”)

(5.21) DE with anaphoric use and cataphoric use (e.g. with restrictive relative clauses)

In general, Scheutz proposes a binary tree of definite reference based on Krifka (1984) who distinguishes between *W-Definitheit* and *K-Definitheit* (“world- and context-definiteness”). Scheutz argues:

[...] dass eine Trennlinie zu ziehen ist zwischen NP_n, deren Referenten vorgegeben (d.h. im Alltagswissen der Interaktanten verankert) sind, und NP_n, deren Referenten (kon)textuell eingeführt und spezifiziert werden müssen, um sie eindeutig ‘lokalisierbar’ - also definit - zu machen. (ibid., p.247)

(“[...] that one has to distinguish between those NPs whose referents are given (i.e. anchored within the common knowledge of the discourse participants), and those NPs whose referents are introduced (con)textually and require specification in order to be unambiguously ‘localisable’ - i.e. definite.”)

Scheutz claims that the DA-paradigm of the definite article is uniformly used with w-definites since their referents are unique and part of the general background knowledge. The DE-paradigm, in contrast, is used for k-definites whose referents are unique because of the preceding text or the immediate situation. The generic use of definites would be related to world-definiteness and is only found with DA-forms:

Definitheit bei generischer Referenz bezieht sich also auf ‘konzeptuell etablierte’ Gattungen und repräsentiert damit einen klaren Fall von W-Definitheit; (ibid., p.251)
 (“Definiteness and generic reference refers then to ‘conceptually established’ kinds and represents a clear case of W-definiteness;”)

Scheutz concludes that, while both DE- and DA-forms to enable unambiguous localisation of referents, they differ as to whether these referents are unique in the world or in the linguistic context. Consider the following examples and the referents of the definite noun phrases in:

(5.22) w-definites with DA may have:

- Generic reference:¹³
 Example: *Da Schnaps is ungesund.* (“Schnaps is unhealthy.”)
- Non-generic reference:
 Example: *Da Schnaps steht aufm Tisch.* (“The Schnaps is on the table.”)

(5.23) k-definites with DE may have:

- Textual reference:
 Example: (Talking about some Schnaps_i) *Dea_i Schnaps (#da/dort) woa teia.* (“The/this/that Schnaps was expensive.”)
- Situative reference:
 Example: *Den Schnaps da/dort wü I ned.* (“This Schnaps, I don’t want.”)

¹³Note that in Standard German mass nouns like *Schnaps* can be used bare to establish generic reference.

As for definite nouns with situative reference, Hawkins distinguished between the visible situation use, which is felicitous with the demonstrative article, and the immediate situation use, which is not. Consider the examples:

(5.24) *Kannst du mir die (diese) Tasche geben?*

“Can you give me the (this) bag?” (visible situation use)

(5.25) *Warnung vor dem (#diesem) Hund!*

“Beware of the (#this) dog!” (immediate situation use)

Scheutz argues that the difference between both situational uses is that the visible situation use does not require general knowledge about the objects that are typically found within a certain situation. Hence, visible situation uses of definite nouns require k-definite referents. In contrast, definite nouns used within the immediate situation require world knowledge and w-definite referents.

5.3.3.1 Prediction: CFs are *w*-definite

Scheutz analyses contracted forms as enclitic determiners which fuse with prepositions and which are based on the forms of the DA-paradigm. In Bavarian we find, for example, the following forms:

(5.26) *bain* (SG: beim - “at-DAT”), *fian* (SG: für den - “for the-ACC”), *ausn* (SG: aus dem - “out of the-DAT”), *midn* (SG: mit dem - “with the-DAT”), *aufm* (SG: auf dem - “on the-DAT”), *uman* (SG: um den - “around the-ACC”), *neman* (SG: neben dem/den - “beside the-DAT/ACC”).

Contracted forms would then have w-definite referents, while non-contracted forms would have k-definite referents. We have seen that contracted forms are good with immediate situation uses (which require w-definiteness), but not visible situation uses (k-definite) which are good with non-contracted forms. Consider:

(5.27) *Kannst du [zur, zu der, zu dieser] Tür gehen?*
 can you to-DAT to the-DAT to this-DAT door go
 Can you go to the/this door? (visible situation use)

(5.28) [*Vom, #Von dem, #Von diesem*] *Gleis*
 from-DAT from the-DAT from this-DAT rails
zurücktreten!
 step-back
 Mind the/#this gap! (immediate situation use)

Scheutz predicts for contracted forms that they are good with abstract-situative uses (since they require w-definite referents), e.g., of the noun *Parlament*:

(5.29) *Der Präsident will eine Rede halten [im, #in*
 the president wants a speech hold in-DAT in
dem] Parlament.
 the-DAT parliament
 The president wants to hold a speech in the parliament.

Note that parliament is ambiguous between an abstract and concrete reading, i.e. the noun may either refer to the institution or to a building. With the non-contracted form the nouns has only a non-abstract interpretation.

His analysis predicts further that contracted forms are felicitous with associative-anaphoric uses (w-definite). Crucially, non-contracted forms are also felicitous with these uses although they should have k-definite

referents. But we have seen that non-contracted forms are restricted to appear with certain types of associate expressions. Consider the donkey sentence:

- (5.30) *Wenn Otto in einem Studio ist, sitzt er immer [am,*
 if Otto in a studio is sits he always at-DAT
 #an dem] Computer.
 at the-DAT computer
 Whenever Otto is in a studio, he sits on the computer.

The non-contracted form is not felicitous since the sentence is generic and the antecedent expression *Studio* has not unique reference (or, in the sense of Scheutz, fails to enable localisation of the referent of computer). In contrast, the contracted form is felicitous because the existence of a unique computer is associated relative to *some* studio. Consider also the Bavarian example by Schwager (2007) (where the reduced definite article has the DA-paradigm, and the non-reduced one the DE-paradigm):

- (5.31) *Ogott, mia ham vogessn, dass ma [s',*
 oh-god we have forgotten that we the-NOM_{reduced}
 des] Kind abhoin!
 the-NOM_{non-red} child pick-up
 Oh god, we have forgotten to pick up the child!

Schwager notes that the non-reduced definite article signals that there is a child that is crying and perceptually salient in the situation. The reduced one, in contrast, is ambiguous and may either refer to the child of the speaker (in which case child is used in a proper-like manner) or to another child that can be identified via the presupposition that it has to be picked up. Having said this, I will assume that there is an interpretational difference between relational readings with contracted and non-contracted forms. For the example (5.30) this would mean:

(5.32) *am Computer* (of a studio):

$$\exists x \lambda y [Have(x, y) \wedge Studio(x) \wedge Computer(y)]$$

(5.33) *an dem Computer* (of a studio): $\iota x \lambda y [Have(studio, computer)]$

We can conclude for contracted forms (and possibly for the DA-paradigm, as well) that they differ from non-contracted forms (DE-paradigm) in that they do not require localisation of their referents but rather uniqueness within a possibly generic context.

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5.4 Diachronic remarks

In this section I will shortly outline the historical development of the definite article in German, on the one hand, and of the contracted form, on the other hand. We will see that in Old High German nouns were used without articles but had a much richer suffixal inflection than they have nowadays. In early German, the definite article in its present form did not exist yet. Instead, there were demonstrative pronouns which were preposed to the nominal and from which the definite article arose. In Middle High German, this definite article became obligatory and was extended to other than demonstrative uses, as well.

Crucially, some of the most frequent contracted forms (*zëro*, *imo*) existed already in Old High German where articles were still not obligatory and only the “pragmatic” definite article (aka demonstrative pronoun) existed. ontracted forms would then be prepositions to which a demonstrative pronoun is attached rather than a definite article. Further, it seems that the distinction between reduced and non-reduced definite articles was still

not present at this early stage of German. If this idea is right then it provides a strong argument against treating contracted forms as enclitic reduced definite articles. However, since I won't offer a diachronic analysis of contracted forms in this work, these remarks remain speculative.

5.4.1 The historical development of the definite article

In many languages the definite article has developed from a demonstrative expression (cf. Greenberg et al. (1978) for the grammaticalization from the demonstrative pronoun to the definite article in various languages, and Juvonen (2000) for Finnish). In some of these languages, further grammaticalization has led to suffixation of the definite article to the noun (e.g. in Swedish, Danish, or Basque), or to its prefixation to the noun (e.g. in Arabic).

In Modern Finnish definiteness is not marked by definite articles but rather by word order and case marking. It has been argued for spoken Finnish, though, that the demonstrative pronoun “se” functions like a definite article (Laury (1997)). While in the beginning this pronoun was used only if the referent was introduced previously, with the time it came to be used also when the referent could easily be identified by the addressee without having been mentioned before. For previously introduced and prominent referents, the demonstrative form (“tämä”) is instead used.

We can observe a similar development for German. Nübling (2006, p.241ff) describes the development of the definite article and compares the zero-article system in Old High German (750-1050, henceforth OHG) with the article system in Modern High German (from the 17th/18th century

up to now, MHG).¹⁴

In MHG, singular nouns are usually accompanied by determiners or quantifiers, which are marked for case, gender, and number. In contrast, in OHG nouns were used bare but had an inflectional suffix, e.g. *tage* (“the/a-DAT day”). Nouns could hence be interpreted as being definite or indefinite. In MHG, a definite interpretation requires the definite article (cf. “der/ diu/ daz” for Middle High German, and “der/die/das” for Modern Standard German).¹⁵ For example:

(5.34) OHG: *tag-e* (“the/a day”)

[_N*masculine, dative, singular*]

(5.35) MHG: *d-em tag(-e)* (“the day”)

[_D*definite, masculine, dative, singular*]

([_N*masculine, dative, singular*])

We conclude that in OHG nominal suffixes marked the noun for gender, number, and case and that definiteness was still not marked grammatically but contextually entailed. Later, these agreement features got transferred onto other elements, i.e. the definite or indefinite article, which were also grammatically marked for (in)definiteness. In this sense, the MHG definite article can be considered a *portmanteau morph* because it can be segmented into definiteness (the “d-” part), on the one hand, and an unsegmented rest (the inflectional ending), which was previously found on the nominal, on the other hand.

¹⁴Note that Middle High German covers the period between 1050 and 1350 (sometimes up to 1500). It is preceded by Old High German and followed by Early New High German.

¹⁵Cf. Old English and Gothic “sa/thata/so”.

Similarly, the MHG indefinite article if stressed functions as a counting device and unstressed has an existential indefinite meaning. Note that the indefinite article did not have the latter meaning in OHG but rather a purely cardinal meaning.¹⁶ This cardinal, following Lehmann (2002), was semantically weakened to a number neutral indefinite pronoun. This had the consequence that the opposition to other cardinals was lost, and that the indefinite article could evolve. In a similar vein, the demonstrative article was semantically weakened when it developed to the “deictically neutral” definite article (cf. *Desemantisierung*, Nübling (1998)).

Heinrichs (1954) correlates the continuing loss of nominal suffix with the emergence of the demonstrative pronoun in prenominal position as a reference marker.¹⁷ We conclude, that the definite article originally had a demonstrative function which was lost over time. The demonstrative function was then passed over to the compound demonstrative forms *dies-* (“this”), which is a combination of the definite article (“*der/diu/daz*”), the deictic particle (“*-se-*”) and the inflectional ending for strong adjectives. We find then following forms for OHG and MHG:

(5.36) OHG: demonstrative pronouns

[+*deictic*] - pragmatic definites

(5.37) MHG: definite articles: *der/diu/daz* > *der/die/das*

[±*deictic*] - semantic and pragmatic definite

demonstrative articles *dies-*

[+*deictic*]

¹⁶Note that the indefinite article is derived from the numeral *eins* -“one”.

¹⁷Note that, alternatively, one could argue that the change of stress from the last to the first syllable in MHG has caused the loss of nominal declension, which, in turn, has promoted the use of definite articles (cf. Behagel (1923); Holmberg (1993)).

Nowadays, we still find petrified expressions with bare nouns that have proper-like meanings and unique reference. These nouns have a rich inflectional ending, as in: *auf Erden* (“on earth-ACC – on Earth”), or:

(5.38) *ein burg ist thar in lante...* (O.I.11.23, Demske (2001))

“a town is there in (the) country”

(5.39) *tho ward himil offan* (O.I.25.15, *ibid.*)

“there was (the) sky open”

Hinterhölzl (to appear) argues that the grammaticalization of the definite article in German passed, in fact, two phases: First, the determiner was used only for discourse-given referents only (demonstrative use). In the second stage, the determiner was used for uniquely identifiable nouns and abstract nouns. The historical development of these functions would hence mirror the distribution of semantic and pragmatic definites, as defined by Löbner (1985). Before the 11th century, the definite article occurred only with pragmatic definites, after that it occurred also obligatory with semantic definites. We have seen that, in non-Standard German dialects the definite article has developed into two different forms, one used for semantic, the other one used for pragmatic definites.

5.4.2 The historical development of CFs

In this section, I want to shortly review the development of contracted forms as presented by (Nübling, 2006, chap.11.3) who takes them to be the result of synthetic advance (*Syntheseschub*). He notes that with the weakening of nominal endings articles evolved and the use of prepositions expanded. While the development of the definite article would mark the path from synthetic to analytic forms, Nübling takes contracted forms to

be the result of a reverse evolution, namely synthetic advance. Contracted forms mainly arose in the 15th century (Middle High German), though these three forms had already arisen before (cf. Braune (1975)):

(5.40) Old High German (600-1050): *imo*, *zëmo*, *zëru*

(“in-DAT_{sg;masc/neutr}, to-DAT_{sg;masc/neutr}, to-DAT_{sg;fem}”)

(5.41) Middle High German (15th century): *im*, *zum*, *zur* (s.a.)

For example, the Old High German preposition *zi* (“to”) and the dative form of the demonstrative pronouns *thëmo*/*dëmo* (“them”) fused to become the contracted form *zëmo*, which later lost the inflectional suffix and became *zëm*/*zum* (possibly, because of de-accenting):

(5.42) *zi thëmo/dëmo* ▷ *zëmo* ▷ *zëm* ▷ *zum* = ‘to the

(masc./neut.sg.dat.)’

(5.43) *zi thëru/dëru* ▷ *zëru* ▷ *zër* ▷ *zur* = ‘to the (fem.sg.dat.)’

(5.44) *zi thën/dën* ▷ *zën* (▷ **zun*) = ‘to the (pl.dat.)’

In the beginning only a few prepositions were affected but by the time of Middle High German this fusion involved about 15 prepositions and definite articles. Nübling (1998) focuses on the ability of definite articles to fuse to contracted forms. He suggests that fusability has to do with frequency of use, and that only very frequent contractions may develop to “special” clitics (see below). His findings are summarized in table 5.4.2.

Note that in Modern Standard German contracted forms are orthographically not marked as clitics but as proper lexical items. Consider the word *zum*:

(5.45) *zwischen’s* or *zwischen’s* (“between-ACC”)

	die	der	den	das	dem
Standard	-	zur	-	ans, ins	am, im, vom, zum
Non-Standard	inne	-	in'n, hinterm	unters, vors, ins	unterm

Table 5.8: “Fusability” (Nübling (2006))

(5.46) *zum* versus **zu'm* (“to-DAT”)

To conclude, Nübling argues that contracted forms may gradually develop from isolated words to words with enclitic definite articles (where the base form is a preposition), to words with inflectional endings (*Flexiv*).

5.5 Summary

In this chapter we have seen that Frisian has two different definite articles which correlate with the properties ascribed to semantic and pragmatic definites by Löbner (1985). The syntactic approach by Brugger and Prinzhorn (1996) for Bavarian departs from two distinct DP projections, where the lower one hosts reduced definite articles and requires semantic uniqueness of the NP (DAgrP), and the higher one hosts non-reduced definite articles (DP). Restrictive relative clauses would attach to DP and hence be not possible with reduced definite articles. Scheutz (1988) takes definite articles to signal localisation of their referents which can be w-definite or k-definite. In Bavarian the reduced definite article is used to retrieve a w-definite referents, i.e. by means of world knowledge. K-definite referents, in contrast, require contextual knowledge and their referents are not globally unique.

We could say that the reduced definite article is a functional item that hosts agreement features of a nominal and which turns the property-denoting NP into an argument. The definite nominal would then have unique reference only because of the noun's meaning, e.g. if the expression is semantically definite and interpreted in a functional way. We will see in the next chapter that contracted forms have been treated as a fusion between a preposition and a definite article which - depending on the theory - has been phonologically weakened, cliticized, or syntactically adjoined to its host. I will propose that the preposition is a functional item that hosts agreement features of a nominal, as stipulated for reduced definite articles, which turns the property-denoting NP into an argument and case-assigned expression. The contracted form would then yield unique reference only for semantically definite noun phrases.

Chapter 6

Previous analyses of CFs and NCFs

6.1 Introduction

In this chapter, I will discuss some accounts that have dealt with contracted forms from a phonological, morpho-syntactic, and “contextual” or semantic-pragmatic perspective. Crucially, most of them have in common that they assume an underlying definite article which has amalgamated with a preposition.

6.2 Accounts on the morphological status of CFs

In this chapter, accounts that are related to the morphological status of contracted forms will be discussed.

6.2.1 Phoneme elision

Schaub (1979) takes contracted forms as containing an article that has cliticized to a preposition, and refers to such forms as contracted form of prepositions and forms of the definite article (*Verschmelzungsformen*, “fused forms”).¹ She argues that these forms are

[...] koartikulatorische Phänomene und gehören daher primär

¹Schaub points out that the terms that were used in the literature for describing fused preposition-article forms or slurred forms (*Verschleifungsformen*) or contracted forms were not equally adequate. For example, the term inflected preposition is inappropriate because it focuses on the grammatical and not on the primarily phonological aspect (*ibid.*, p.69). Another inappropriate term would be short forms (*Kurzformen*, cf. Vater (1963)) because it focuses too much on the article and ignores the dependence of the article on the preposition and determiner.

dem Bereich der gesprochenen Sprache an. Dabei soll die Kennzeichnung ‘koartikulatorisch’ hier im weiteren Sinne verstanden werden als ‘die unmittelbare Nachbarschaft von Phonemen betreffend’ bzw. als ‘aus unmittelbarer Nachbarschaft zweier Phoneme resultierend’. In diesem Verständnis bietet der Terminus ‘koartikulatorisches Phänomen’ eine übergeordnete Perspektive, unter der sich auch verwandte Vorgänge wie Assimilation und Elision erfassen lassen [...]. Schaub (1979, p.63)

(“[...] phenomena of *co-articulation* and belong primarily to spoken language. Co-articulation has to be understood in a wider sense than ‘affecting the immediate neighbourhood of phonemes’ or ‘being the result of immediate neighbourhood of two phonemes’, though. Under this view, the term ‘co-articulation phenomenon’ comprises also related operations like assimilation and elision [...]”)

Schaub’s aim is to turn away from normative linguistics and describe non-Standard German spoken and written language (more precisely, in the Ruhrgebiet), which are not considered to be well-formed in Standard German grammars.

Basically, Schaub takes fusion as involving two word forms or morphemes which are combined and where one or more phonemes are deleted from the second or both word forms. She presents a phonological description of the involved word forms, viz. the article and the preposition whereby she regards the existence of weak or reduced forms of the definite article as preconditions of the development of contracted form. Soundless vowelism (*tonloser Vokalismus*) would be responsible for the emergence of contracted form, hence, her phonetic analysis regards two steps as being

necessary ((Schaub, 1979, p.82ff)):

- (6.1) Phoneme elision of the beginning “d-” of the definite article results in weak forms: *a*, *es*, *em*, *en* (where the vocals are Schwa’s).
- (6.2) The final phonemes of the preposition are adjacent to the rest of the definite article.

Phonetic weakening processes would occur with unaccented words and be scalar ranging from quantitative and qualitative vowel reduction to consonant elision. Accenting an article would equal to emphatic or demonstrative usage and is characteristic for the strong article forms. Weak forms of the definite article represent transition states in-between strong forms and contracted form. However, while weak forms are only characterised by phoneme assimilation, contracted form show phoneme elision.

In her qualitative corpus analysis, Schaub explores 36 prepositions that are fused with a determiner out of which 17 were monosyllabic, 18 bisyllabic, and 1 trisyllabic.² She notes that contracted forms occur with any type of preposition independently of the relation they describe: They can be spatial (“beim, im”), temporal (“vorm, im, nachm”), modal (“ausm, im”), or causal (“durchm, wegem”). She correlates the frequency of fused preposition-articles with factors like speaker attention or negligence, size of the locutors, size of the room, psychological factors (tension, fear of microphones, relaxation, confidence), and sociological factors (ibid., p.76). Further, Schaub argues for the communicative function of non-contracted forms that they can be relevant within a certain situation, while redundant and “hyper-correct” or inadequate in others (ibid., p.90).³

²Note that I will not discuss her phonetic description in detail (cf. ibid., p.82).

³Note that Haberland (1985) discusses contracted forms and distinguishes between forms that may, must, or may not contract: *bei der* may never contract, while *am*,

Interestingly, Schaub distinguishes between obligatory and optional fusion and between fully and partly integrated contracted forms, respectively. Full integration is given with contracted forms whose non-contracted variants do not exist. She claims that this holds with the superlative adverb, with nominalized infinitives and proper nouns. Part integration would be given with idiomatic expressions where the non-contracted form is viable but requires a literal interpretation. In other words, Schaub already suggests that some forms are more lexicalized than others and that the distinction between fully and partly integrated contracted forms might not be only a matter of phonology. Her approach can explain why some contracted forms are equally acceptable with non-contracted forms, e.g. as in the fixed expression [*aufs, auf das*] *Beste* - “on-ACC on the-ACC best”), but predicts that the contracted and non-contracted forms should be equally acceptable. Schaub’s listing of factors that influence the frequency of contracted forms tell us nothing about the meaning or distribution of the contracted form, since they merely state that they exist and reduce them to a social and psychological phenomenon. Considering the semantic and pragmatic constraints we have observed with contracted form this analysis is not sufficient.

In sum, Schaub presents the rich inventory of contracted form, citing evidence not only from normative grammars but also from a spoken corpus. She describes in a systematic way the phonetic properties of contracted form and the psycho-social environments in which they occur. Schaub
ans, beim, im, ins, vorm, zur would have to contract. Haberland notes that the forms that may contract depend on personal preferences and the speech situation. But, if the speech situation influences whether a contracted form is used or not, this suggest that the choice is restricted by semanto-pragmatic constraints.

also notes that some contracted forms are more integrated than others and thereby silently admits that contracted forms have another meaning and function than non-contracted forms.

6.2.2 From simple clitics to inflectional endings

In (Nübling, 1992, p.54ff) contracted forms are analysed as enclitic articles within a prepositional phrase. The enclitic article would be syntactically dependent on the noun head but phonetically fuse with the preceding preposition.⁴

In later work, Nübling argues that contracted forms are ambiguous between simple clitics, special clitics, and inflectional endings (cf. his work on their historical development in chapter 5.4.2). While the difference between simple and special clitics is that only the former is optional, the difference between clitics and inflectional endings is that the latter is obligatory. Depending on its status, the contracted form *vom* would then have either a simple or special enclitic definite article or an inflectional ending:

(6.3) 2 Words ▷ simple Clitic ▷ special Clitic ▷ Inflection

(6.4) *von dem* ▷ *vom/von dem* ▷ *vom/#von dem* ▷ *vom/*von dem*

“before the ▷ before-Dat/before the ▷ in-Dat#in the ▷ in-Dat/*in the”

Under this view, contracted forms are prepositions with inflectional endings if a non-contracted form is not at all available and ungrammatical. Contracted forms with special enclitics differ in their semantics and

⁴Under his view of clitics these do not allow interruptions. Note that Hinrichs (1986) takes this to be a property of affixes, not clitics.

pragmatics from non-contracted variants. Last, contracted forms with simple clitics have the same meaning as non-contracted forms and hence are fast speech phenomena. Prepositions with inflectional endings occur, e.g., in “*im Iran*” (“in-DAT Iran”) where the non-contracted form is generally not acceptable, namely **in dem Iran*” (“in the-DAT Iran”). In the same vein, “*vom Rauchen*” (“from-DAT smoking”) and “*am besten*” (“on-DAT best”) must have inflectional endings rather than special clitics. Further, contracted forms as inflected prepositions would occur abstract and mass nouns, nouns with a generic or kind reading, and fixed or idiomatic expressions.

Finally, Nübling makes an interesting observation regarding questions and elliptic answers with contracted forms:

- (6.5) *Bist du AM oder IM Wasser gewesen?* -
 were you on-DAT or in-DAT water been -
*Am und im/ *An und in.*
 on-DAT and in-DAT on and in
 Have you been on or in the water? - On and In.

The example suggests that contracted forms are not simple prepositions because otherwise the answer consisting of bare prepositions should be felicitous. It also suggests that contracted forms are not simply cliticised versions of prepositions. To conclude, Nübling proposed that contracted forms are often analysable as inflections rather than simple/special clitics.

Scholten (1988) investigates the non-Standard German variant spoken in the Ruhrgebiet and takes contracted forms as having clitics, as well:

- (6.6) Enclitic pronouns: Verb + pronoun. E.g. “*ist sie*” (is she) ⇒ “*isse*”

- (6.7) Enclitic articles: Preposition + definite. E.g. “*von der*” (from the)
 ⇒ “*vonne*”

(6.8) Enclitic particles: Verb + particle. E.g. “h” or doch einmal” (listen but once) \Rightarrow “h” oddoma”

According to her, contracted forms are *Verschleifungen* () and have instances of enclitic articles. However, the arguments brought up by Hinrichs (1986) have shown that contracted forms cannot be analysed in terms of cliticization.

Schiering (2006b) is interested in the general question on how a functional word can acquire grammatical categories which are usually attributed to lexical words. They present a cross-linguistic study of adjacent function words that may be contracted. Schiering (2002) investigates contracted forms in Middle Frankish (a German variety spoken around the city of Nürnberg in Northern Bavaria) and notes that not all of them can be analysed in the same way. Some forms would be highly register-dependent, others would constitute words and fusions of two function words, i.e. a preposition and a determiner. Register-dependent forms would not require a special discourse-pragmatic context.

Kabak and Schiering (2006) analyse function word contractions within the framework of HPSG, and suggest that non-contracted forms are required if “one needs to be clear and emphatic or to contrast an idea. In other cases, the norm is to contract them” (ibid., p.67). Schiering (2006a) investigates contracted forms in a study on cliticization processes, e.g. contractions with subsequent function words like articles and pronouns can be observed for, e.g., Catalan, Celtic, Maltese, Maori, and, more generally, in Romance, Semitic and Germanic languages. She concludes that function word contractions are gradual and may evolve from simple clitics to inflectional words. Since her analysis mainly focusses on the prosodic representation of function-lexical word sequences ([Fnc Fnc Lex]), I will not

discuss it in this work. However, I will take their suggestion seriously in that contracted forms can adopt the status of inflectional words apart from being only cliticized words.

6.2.3 Inflected prepositions

Hinrichs (1986) discusses phonological and morphological analyses of contracted forms and comes to the conclusion that contracted forms are inflected prepositions and proper lexical units rather than clitics. He argues that the complementary distribution of contracted and non-contracted forms suggests that there is a non-phonological process at hand. Contracted forms would be used with generic and specific expressions, while non-contracted forms would be used with anaphoric and deictic expressions. These four uses are characteristic for the use of the definite article in German, according to the classification by Hartmann (1982). However, note that this classification is too little fine-grained since anaphoric and deictic uses always imply a specific use, even in generic contexts as in:

- (6.9) *Ich hab ein altes Bett. In dem Bett kann ich nie schlafen.*
 I have a old bed in the-DAT bed can I never sleep
 I have an old bed. In that bed, I can never sleep.

Hinrichs argues against Schaub (1979) and, generally, against a phonological analysis of contracted forms because of paradigmatic gaps as the following for non-Standard German:

- (6.10) *für das Auto* (“for the-DAT_{non-red} car”) \gg *für es Auto (“for the-ACC_{reduced} car”) \gg fürs Auto (“for the-ACC car”)

If the contracted form *fürs* (which is also accepted in Standard German) is derived from the weakened or reduced definite article then we would expect *für es* to exist, as well. Hinrichs argues that such paradigmatic gaps are not compatible with the view that contracted forms have clitics, neither. Next, Hinrichs notes that the fact that some contracted forms are obligatory (superlative adverbs) are neither expected under a purely phonological nor cliticization approach. Consider:

- (6.11) *Anna schläft [am, *an dem] längsten.*
 Anna sleeps on-Dat on the longest
 Anna sleeps longest.

We have seen that many contracted forms obligatorily occur within idiomatic expressions and that with non-contracted forms the idiomatic meaning is not available. This would also show, according to Hinrichs, that non-contracted forms and contracted forms are not only alternative variants but have different meanings.

Further, Hinrichs argues that unlike with clitics adjacency is not sufficient for the contraction of prepositions and articles (cf. van Riemsdijk (1998)). Consider:

- (6.12) *Das Haus, [in dem, *im] Fritz wohnt, wird*
 the house in the-DAT in-DAT Fritz lives is
verkauft.
 sold
 The house, in which Fritz lives, is being sold.

If attachment was phonologically productive, one would expect it to extend to the homophonous relative pronoun *dem*, as well. Zwicky and Pullum (1983) proposes for contracted forms that they are formed by a readjustment rule and by cliticization, similar to auxiliary reduction in

English (e.g. “he’d”). German contracted forms would then have the following structure after and before readjustment takes place:

(6.13) Readjustment rule: [Prep [Det Noun]] \gg [[Prep-Det] Noun]

Hinrichs argues that cliticization of the definite article may happen to nearly every syntactic category, such as auxiliaries, adverbs, nouns, and verbs. However, he proposes that these cases are different from contracted forms since the attachment of articles to preceding material is highly dependent on the rate of speech, while combinations of prepositions and determiners are independent of rate of speech. While contracted forms like *zum* would be sensitive to parenthetical remarks and hesitation pauses, the attachment of articles to other preceding material is not. Consider:

(6.14) **Er ist zu ... 'm fünften Mal hier.*
 he is to ... DAT fifth time here
 He is here for ... the fifth time. (Prep ... Det-DAT)

(6.15) *Sie trug ... 's goldene Halsketterl*
 she wore ... ACC golden necklace
 She wore ... the golden necklace. (Verb ... Det-ACC)

Hinrichs concludes that one would expect no syntactic rules to affect the combinations of preposition-articles if these were true cases of simple cliticization. Consequently, he takes articles that contract with any kind of catagorical words (as long as they are preceding) to be phenomena of cliticization, while contractions of articles with prepositions are cases of affixation. But there are other tests that decide whether something is a clitic or an affix (cf. Zwicky and Pullum (1983)). As a first criterion, clitics exhibit a low degree of selection regarding their hosts, while affixes exhibit a high degree. Since contracted forms exhibit their hosts to be of

a special syntactic category, namely prepositions, they must have affixes. Next, arbitrary gaps in the set of combinations are characteristic of affixed words, which also applies to contracted forms, as we have already seen above. For example, in Standard German only one preposition combines with the feminine form, *zur* (“to the-DAT”) and we won’t find the feminine form with, e.g., **vonr* (“from-DAT”). Also, it is striking that no plural forms are attested - for Standard German, at least. These facts would show that the paradigm of contracted forms is lexicalized.

Hinrichs points out that clitics are not sensitive to coordination and to the requirement of identity in interpretation of the coordinated expressions. Contracted and non-contracted forms, however, are sensitive and coordination of a contracted and non-contracted form is out:

(6.16) **im oder bei dem Haus; *in dem oder beim Haus*
 in-the or at the house in the or at-the house
 intended: in or at the house

(6.17) *in dem oder bei dem Haus; im oder beim Haus*
 in the or at the house in-the or at-the house
 in or at the house

Hence, the example shows that the non-contracted form is not identical in meaning with the contracted form. Else, what is conjoined must be single constituents rather than cliticized versions of prepositions. Last, Hinrichs points out that semantic idiosyncrasies are characteristic only of affixed words and not for cliticized words, and that the complementary distribution of contracted and non-contracted forms shows that cliticization cannot be at hand. Hinrichs proposes that contracted forms are case-marked prepositions. Adopting the framework of GPSG, he proposes a structure like:

(6.18) *vom* (“from-DAT”) = $\langle n, [P1N1]_{P2}, \dots \rangle$ where P2 is
 $[\alpha case], [\beta number], [\gamma gender], [\delta definite]$

(6.19) *von dem* (“from the-DAT”) = $\langle n, [P1N1]_{P2}, \dots \rangle$ where P2 is
 $[\alpha case]$ (Note: and N1 is $[\alpha case], [\beta number], [\gamma gender], [\delta definite]$)

Note that Hinrichs assumes the inflected preposition (P2) to be marked for definiteness. Instead, I will propose that what has attached to the inflected preposition is “just” a strong adjectival case ending marking case, number, and gender of its complement.

Stolz (1990) argues against the strict separation between lexical and functional words and argues on the hand of contracted forms which he considers to be inflected appositions or appositional inflections. He proposes that contracted forms are the result of a gradual evolution to prototypical appositional inflections which is farther developed in colloquial German. These forms would prove that the division between lexical and functional words is less clear cut than it seems. Since the distribution of contracted form is asymmetric to the one of non-contracted form, other than phonological or frequency factors must be considered. More frequent prepositions are only more eager to contract. He points out that lexical-semantic restrictions are influential on whether a contracted form can be used or not, but does not discuss these restrictions in detail. Generally, he claims that many languages use contracted forms with relational concrete nouns, which may be localised temporally or spatially. Examples are nouns that denote body parts or that divide the space (e.g. *Kante*, *Seite* - “edge, side”). Formally, inflected prepositions are marked for gender, case, and number, and localisation. Note that he does not assume a “definiteness” marker. Localisation can be expressed by allative case (*zum*, *zur*, *ans*

- “to-DAT, to-DAT, on-ACC”), adessive case (*am* - “at-DAT”), inessive case (*im* - “in-DAT”), and illative case (*ins* - “in-ACC”). Noteworthy, Italian also has contracted forms, but, in contrast to German the definiteness paradigm is present. The preposition “di” (“from”) combined with the definite article (“lo/la”) is an inflected preposition marked for a local relation, definiteness, gender, and number (Note that he does not mention case): “del, dello, dell’, della, dei, degli, delle”.

These Italian inflectional prepositions have been discussed in great detail by Napoli and Nevis (1987) who argue that these forms are lexicalized and are unanalyzable units. As for the question why there are forms like inflected prepositions at all, Napoli and Nevis (1987) only state that they derive from fast speech coalescence in early Italian which had led to cliticization and morphologisation of these forms (cf. Latin: *de illa, in illa* – > Early Italian *della, nella*).

They argue that neither a phonological, nor allomorphy, or cliticisation rule is responsible for these forms.

The next list summarises the assumptions on these contracted forms, according to different analyses and together with counter-arguments brought up by Napoli et al.:

Phonological analysis A preposition combines with a following article.

Contra: This rule would be exceptional for Italian. Contra: Inflected prepositions behave like syntactic units under coordination.

Allomorphy analysis A preposition converts to P’ if it is followed by an article.

Contra: s.a.

Cliticisation analysis An article attaches to a preceding preposition.

Contra: Inflected preps behave like syntactic units under coordination. Contra: Right node raising (“del e con il ragazzo”)

Lexical analysis A complex form is base generated.

- Case-marked article, i.e. the PP is in fact a DP. Contra: NP movement is out if the NP is an initial topic. Contra: No Subject-Verb agreement. Contra: Conjunction of PP and NP is out.
- Inflected prepositions, i.e. the PP has case/number/gender agreement.

Napoli et al. argue that the fact that coordination of inflected and uninflected prepositions is not grammatical can only be explained in terms of their differing syntactic structures. While inflected prepositions would introduce N', the uninflected preposition introduces N". This prohibits them from being coordinated under identity of structure, but also from combining with pronouns or names which are both N" in Italian (or DPs). Hence, they argue for a lexical analysis and inflected prepositions and note that the ending of inflected prepositions is the same as of articles, demonstrative, and adjectives. As such they belong to the class of non-predicative items that are inflected for gender and number in Italian. No additional rules are required to reproduce inflected prepositions if they come out as such out of the lexicon. Like “real” PPs they can satisfy certain subcategorization requirements of certain verbs for directional and locative PPs. Further, since inflected prepositions project PPs and not NPs, NP movement and subject-verb agreement is blocked. As for conjunction, a PP with an inflected preposition can conjoin with other PPs, which is independent of whether the prepositional head is inflected or not. Napoli

and Nevis (1987) note that contracted forms in German could be analysed in a similar way. However, the meaning difference between contracted and non-contracted forms is not addressed in their analysis.

6.2.4 D-to-P raising

van Riemsdijk (1998)[651ff] discusses preposition-determiner contractions in German and takes them as instances of head adjunction and subject to the Head Adjacency Principle, and as such opposed to instances of head substitution. This principle states that head adjunction affects two phonetically identified heads which are necessarily adjacent before they can be merged into one head, i.e. (footnotes ignored):

The Head Adjacency Principle (HAP):

A transformational process that affects two head position must be either Head Adjunction or Head Substitution.

- a. Head Adjunction (HA): two phonetically identified heads are joined, yielding an adjunction structure, in which case the two heads must be strictly linearly adjacent at the moment of application of the rule;
- b. Head Substitution: a head is moved into head position which is phonetically empty but which may contain ϕ -features, thereby unifying the two morphosyntactic feature matrices. (van Riemsdijk (1998, p.644ff))

The aim of his paper is to show that head adjunction requires immediate adjacency while head substitution does not. Riemsdijk discusses constructions in various languages arguing for the validity of the HAP, and

one of them are contracted forms in German. For contracted forms, he assumes article reduction on the morpho-phonological level followed by head adjunction, and more precisely, D-to-P raising. The first step ensures that only combinations that are morpho-phonologically possible can be generated.⁵ He mainly focuses on the question whether contracted forms are the result of a non-syntactic or phonological process. He argues that, if linear adjacency of the preposition and the determiner is sufficient for their contraction, it would be a non-syntactic process. In contrast, if the preposition and the determiner must be adjacent in a local structural domain, then their contraction is a syntactic process. Relative clauses headed by a prepositional phrase would show that local adjacency is not sufficient since contraction is not possible. Van Riemsdijk gives examples where a verbal particle, which is homophonous with a preposition, is followed by a definite article and where contraction is ruled out:

- (6.20) *Er fängt [an dem, *am] Hans einen Brief zu*
 He starts to-PRT the to-DAT Hans a letter to
schreiben.
 write
 He starts to write a letter to Hans.

A preposition followed by an embedded complex modifier cannot be contracted, either, as in:

⁵Note that Riemsdijk points out in a footnote that it is a determiner that amalgamates with a preposition although there is no visible D-projection: “Why should the D-projection be absent in precisely those contexts in which the presumably bound morpheme which normally attaches to [d] can find a prepositional host; in other words, why should the presence vs. absence of the D-projection be phonologically conditioned?” (ibid. fn.30). In contrast, I will later argue for an analysis in terms of incorporation in which no D-projection is assumed.

- (6.21) [*Von dem, *vom*] *König treu ergebenen Dienern*
 from the from-the king faithful committed servants
 from the servants, loyally committed to the king

Hence, Van Riemsdijk shows that syntactic structure matters for whether contraction may take place. Likewise, the following phrases would show that immediate adjacency is not sufficient for contraction:

- (6.22) **Adv Det** Noun - *genau das Gegenteil* ("exactly the-NOM opposite")

- (6.23) Prep **Adv Det** Noun - *von genau dem Gegenteil* ("from exactly the-DAT opposite")

- (6.24) (?) **Adv Prep Det** Noun - *genau von dem Gegenteil* ("from exactly the-DAT opposite")

- (6.25) **Adv Prep-Det** Noun - *genau vom Gegenteil* ("from exactly the-DAT opposite")

- (6.26) ***Det Adv** Noun - *das genau Gegenteil* ("the-NOM exactly opposite")

- (6.27) ***Prep Det Adv** Noun - *von dem genau Gegenteil* ("from exactly the-DAT opposite")

- (6.28) ***Prep-Det Adv** Noun - *vom genau Gegenteil* ("from exactly the-DAT opposite")

These phrases show, according to van Riemsijk, that nothing can intervene between a preposition and a definite article (***Det Adv** Noun) and this is the reason why the non-contracted form and contracted form are

out out, as well. Therefore, strict adjacency is a requirement for their contraction rather than solely immediate adjacency.⁶ However, note that the examples related to strict adjacency also show that a non-contracted forms in the structure “(?) **Adv** Prep **Det** Noun” is ungrammatical but felicitous only in certain contexts. This suggests that something else than syntax is going on - something that makes the definite article feel redundant or “hypercorrect” (cf. Schaub).

One problem for his own account, Van Riemsijk argues, could be the prenominal dative possessive construction found in non-Standard German:

- (6.29) [*vom*, **von dem*] *Bürgermeister sein Gehalt*
 from-DAT from the-DAT mayor his salary
 the mayor’s salary

The dative possessor is supposed to sit in the specifier of a DP. But, if only heads can adjoin, then the specifier should be blocking D-to-P raising. Consequently, Van Riemsdijk reformulates the constraints on systematic adjacency so that specifiers are recursively accessible to D-to-P raising. The construction above can be recursive, as in:

- (6.30) Vom Hans seiner Mutter ihrem Freund seinem Geld (“from-the
 money of the friend of Hans’ mother”)

In contrast, articles in positions governed by some intermediate head are not accessible to D-to-P raising and disallow contracted forms. Riems-

⁶van Craenenbroeck and van Koppen (2002) have pointed out that case-checking between a preposition and the DP it selects is morphologically marked by a contracted form only if P is directly merged with DP. Under Long Distance Agree no contraction would be possible, and this is the case with intervening adverbs. Therefore “von genau dem Gegenteil” (Prep Adv Det Noun) cannot be contracted in “*vom genau Gegenteil” (Prep-Det Adv Noun).

dijk notes that D-to-P raising does not only exist in German but also in Portuguese and cites an example from Benucci (1992):

- (6.31) *Antes [da, *de a] chuvada estalar no*
 Before of-the of the downpour to-rattle in-the
pavimento, entrou pela vila uma charrete.
 soil entered in-the village a borrow.
 Before the rain rattled onto the soil, a borrow entered the city.

The complex conjunction “antes da” (“before the”) consists of a preposition followed by a contracted form, which is obligatory. Likewise, in Spanish and Catalan we find the obligatory forms “del”, and in Italian we find “dello” (both “from the”).⁷ Riemsdijk’s point is that the definite article “a” sits, along with the subject of the clause (“chuvada”), in the specifier of IP before it merges with the preposition “de”. Head adjunction must allow, hence, an determiner to raise from a specifier position. Likewise, elements at the left edge of SpecDP must be accessible to elements outside that DP, and this is how Van Riemsdijk accounts for the grammaticality of contracted forms with possessive dative constructions.

In sum, Riemsdijk offers a syntactic and morpho-phonological analysis of the conditions under which an element may attach to an immediately preceding element. He shows that there are cases where pure adjacency and co-occurrence are not sufficient for two heads to merge, which leads him to assume that contractions are sensible to syntactic structure. To conclude, van Riemsdijk explains how one could syntactically derive contracted from non-contracted forms, but remains neutral as to the semantic and pragmatic conditions under which both forms can be felicitously used.

⁷The obligatory contraction were discusses by Napoli and Nevis (1987) for Italian who argued that they must be lexical units.

6.3 Accounts on the semanto-pragmatic restrictions of CFs

In this section I will discuss some accounts that deal with the contextual restrictions of contracted forms. Hartmann argues that contracted forms require Unika (Hartmann (1978), Hartmann (1980), Hartmann (1982)), and Löbner (1985) takes contracted forms as instances of semantic definites which refer to globally unique individuals. Delisle (1988) argues that contracted forms signal that their referents are uniquely identifiable without further specification and that they have unmarked referents. Last, Schwarz describes contracted forms in terms of presupposition and accommodation and concludes that they are instances of free definites (Schwarz (2006 2008)).

6.3.1 Unique reference

Hartmann (1980) investigates contracted forms of prepositions with definite and indefinite articles in spoken and written language, more precisely those found in the newspaper “Die Zeit” and in spoken text corpora from Berlin and Freiburg. Hartmann argues that these fusions are both semantically and pragmatically determined: While pragmatic conditions are decisive for the anaphoric and deictic uses of non-contracted forms, semantic conditions are decisive for unique object reference with contracted forms.⁸ Phonologically, contracted forms are characterised by phoneme elisions while reduced (or: weak) forms of articles are characterised by phoneme weakening. The following example shows such a weakening pro-

⁸Note that unique object reference can be argued to be conditioned by pragmatics, as well.

cess of a preposition and definite article in which the vowel of the latter becomes a Schwa vowel and its initial dental is voiced or even dropped:

(6.32) *mit dem* (“with the-DAT”) ▷ *midEm* ▷ *mitm* ▷ *mIm*

However, Hartmann argues that both contracted and reduced articles are contextually restricted. The reduced forms can only evolve from definite articles without emphatic or contrasting accent. As for the distribution of contracted forms, he identifies the following contexts which are allowed for contracted forms:

(6.33) Fixed expressions with proper names: *am Rhein* (“on-DAT Rhine”)

(6.34) Idioms: *am Leben bleiben* (“on-DAT life remain” - “to remain alive”), *im Begriff sein* (“in-DAT term be” - “to do right now”), *Hand aufs Herz* (“hand on-ACC heart” - “to be honest”)

(6.35) Time, Date expressions: *am Tag der Abreise* (“on-DAT day of departure”)

(6.36) Superlative adverb construction: *am + Superlative* (“on-DAT + superlative”)

(6.37) Progressive expressions with nominalized infinitives: *Sie ist am Lernen*. (“she is on-DAT learning” - “She is studying.”)
Sie ist beim Laufen ausgerutscht. (“she is at-DAT running slipped” - “She slipped while running.”)

In general, he argues that contracted forms are used with unique referents and have to be used in a non-anaphoric and non-deictic way. These

referents can be uniquely retrieved by means of situational knowledge and need not necessarily be retrieved by previous mention or perception. Another difference between contracted forms and non-contracted forms would be that the former can have a specific or non-specific reading, while the latter can only have a specific reading.

Hartmann assumes that the definite article in Standard German can be used for either specific or generic reference, but he notes that indefinite noun phrases can have specific readings, as well, but then imply uniqueness of their referents only for the speaker. The definite article, in contrast, signals uniqueness of the referent for speaker and hearer. Being able to localise the referent is, in Hartmann's view, an inherent property of nouns with definite articles. Specific object reference would be given with:

(6.38) Anaphoric or second-mention uses; Hartmann includes here also relational uses, such as in:

Fritz mähte den Rasen. Das Gras war zu hoch. (“Fritz mowed the turf. The grass was too high.”)

(6.39) Cataphoric uses, e.g. before relative clauses;

(6.40) Deictic uses, i.e. if the referent is visible and hence identifiable;

(6.41) *Unika* in spaces of perception:

die Tür abschliessen (“the door close”)

(6.42) *Unika* in social spaces:

der Pfarrer/die Mutter (“the priest/the mother”)

Hartmann concludes that only the anaphoric, cataphoric, and deictic uses are felicitous with non-contracted forms, and only *Unika* can be used

with contracted forms. Noteworthily, Hartmann includes relational uses in anaphoric uses and hence predicts them to occur with non-contracted forms (which is correct) but not with contracted forms. We have seen that contracted forms occur with relational and inferable referents in which the referent need not be uniquely identifiable, though.

Hartmann argues that, in addition to specific reference, the definite article can also have generic or conceptual reference. His semantic translation is as follows:

(6.43) Generic reading:

Die Gans schnattert. - “The goose cackles.”

$\forall x[Goose(x) \wedge Cackle(x)]$

(6.44) Conceptually (stereotyped) generic reading:

Der Katalane ist sparsam. - “The Catalan is frugal.”

$GENx[Catalan(x) \wedge Frugal(x)]$

Conceptual expressions are felicitous with contracted forms, as we have seen. Hartmann argues that the indefinite article differs from the definite article in that it can also have a non-specific reading. The non-specific reading neither implies uniqueness nor existence of its referent and as such has to be differentiated from the generic reading, which presupposes the existence of a group of referents. However, we have seen that definite nouns can also have non-specific and hearer-new reference. Hence, Hartmann’s generalizations about the use of definite articles ignores the existence of non-specific and non-referential readings of definite nouns (e.g. in modal contexts and predicative constructions). As such, his account does not predict the existence of non-specific readings with contracted forms, either.

6.3.2 Functional concepts

Löbner (1985) takes contracted forms as instances of semantic definites which are found in configurational uses, as in:

- (6.45) *Er muss [ins, #in das] Krankenhaus; Er muss*
 He must into-ACC into the-ACC hospital he mus
[zur, #zu der] Schule.
 to-DAT to the-DAT school
 He has to go to (the) hospital; He has to go to (the) school.

With non-contracted forms, which he assumes to be pragmatic definites, the sentences would be about contextually unique individuals. Löbner defines semantic definites as referring in a globally unique way and independently of the utterance situation. Semantically definite expressions are proper names and definite noun phrases with functional nouns (e.g. “mother”). Pragmatic definite nouns, in contrast, are sortal nouns whose referents are not unique (e.g. “house”) but refer uniquely because of information provided in the utterance situation. Anaphoric, endophoric, or kataphoric and deictic definites would be such pragmatic definites. Recall that Löbner introduces the notion of functionality to explain the function of the definite article (see chapter 4):

The definite article indicates that the noun must be interpreted in one of two fundamental ways, viz. as a functional concept or as a sortal concept. Both kinds of concepts are equally represented in the lexicon of natural languages. Under a sortal interpretation the referent of the noun is taken to be of a certain sort, under the functional interpretation it is linked to other objects by general relations. Löbner (1985, p.320)

One problem with this account is related to his indirect claim that contracted forms, being semantic definites, should always refer to functional concepts. Consider the next ambiguous sentence:

(6.46) *Beim Bäcker gibt es Brot.* (“at-the bakery gives it bread”)

- i. A specific bakery (functional reading)
- ii. A non-specific bakery. (sortal reading)

The specific reading can be derived straightforwardly in a functionality account if the noun comes with a situational argument - then *Bäcker* would be a functionally interpreted noun and refers to a situationally unique individual. The non-specific reading is more puzzling, since the noun has a sortal interpretation and no specific reference.

Levinson (2005) and Levinson (2006) have pointed out a problem for Löbner’s functionality account, and in fact for all accounts that assume uniqueness to be a necessary property of definite nouns. Although body part are usually attributed to unique individual possessors, the definite noun can be used to establish reference to body parts which are not unique but dual. This can also be observed with contracted forms which are felicitous with body parts that come in pairs:

(6.47) *sich aufs Ohr legen; sich am Knie verletzen*
 REFL on-the ear lay, REFL on-the knee hurt
 to lay down on one’s ear; to hurt one’s knee

Although these expressions refer to one body part (ear, knee) they do not refer to a specific body part. Hence, contracted forms and definite nouns can be non-referential expressions which do not denote functional concepts.

In a similar vein, Cieschinger (2006) has discussed some examples that are problematic for Löbner's classification of sortal, relational, and functional nouns and his claim that semantic definites have always functional nouns. For example, the non-contracted form is preferred over the contracted form although the noun *Titel* is functional:

- (6.48) *Fritz hat gestern eine Rezension über ein interessantes
 Fritz has yesterday a review about a interesting
 Buch gelesen, das er sich heute kaufen wollte. [Von
 book read that he he-REFL today buy wanted from
 dem, #Vom] Titel hatte er sich allerdings nur
 the-DAT from-DAT title had he he-REFL but only
 den ersten Buchstaben gemerkt.
 the first letter remembered
 Yesterday, Fritz read a review about an interesting book which he
 wanted to buy today. Still, of the title, he only remembered the
 first letter.*

Although in the example the noun *Titel* refers to exactly one title, she regards the contracted to be less felicitous than the non-contracted form. Rather, I would take both the contracted form and non-contracted form to be well-formed, but different in their assumptions and instructions for the hearer. With a non-contracted form the speaker makes an anaphoric link to the associate expressions *Buch*, which must be uniquely identifiable, and is compatible within a situation with several books and several titles. In contrast, with a contracted form the speaker presupposes that the hearer can infer the referent, which is uniquely identifiable from the situation described.

Cieschinger proposes a classification of the uses of definite descriptions in order to account for the use of contracted forms: Definite descriptions could have a specific use or a generalised use. When a definite noun is used

in a generalised way, it does not refer to a particular object, but to some referent of which descriptive content of the noun fits.⁹ In contrast, a definite noun is used in a specific way if it refers to a particular object within a given “small world”, i.e. a locally restricted domain or a particular community. Local names, bridging anaphors would be used in that way. In addition, specific readings arise with contextually uses which covers all phoric uses of definite nouns. Her classification takes specific and generic uses as the primary uses of definites where the former establishes reference by means of the linguistic context (anaphoric definites) or by extra-linguistic context (deictic definites, definites that require “situation/world” knowledge). Within this classification, she claims that contracted forms are used either for specific reference in small-worlds contexts or for generalized reference.

We have seen that, according to a functional analysis, the contracted form occurs with functional nouns and is a semantically definite expression. A problem for this account are contracted forms with expressions that can have other than a functional interpretation. Consequently, the claim that semantic definites cover contracted forms might be true but the reverse claim, i.e. that contracted forms are always semantic definites, is not true.

6.3.3 Unique identifiability

Delisle (1988) aims to describe the communicative function of contracted forms and argues that:

By either using CF or NCF, the speaker guides the hearer toward the referent. If the referent is known to both the speaker

⁹Following Donnellan’s distinction between referential and attributive use of proper names, she proposes that contracted forms are - more or less - referentially used, and non-contracted forms attributively.

and the hearer *and* if the speaker assumes that it can be uniquely identified by the hearer, then the speaker will use the contracted form. If, however, the speaker assumes that even though the referent is known to him/her as well as to the hearer but that it *cannot* be uniquely identified by the latter without help, then the non-contracted form is used. By using NCF, the speaker is in fact telling the hearer that he/she has provided or will provide the hearer with the referent, either linguistically or deictically. (Delisle (1988, p.278))

Unique reference is generally assured with proper names and geographic names, specific dates, but - she argues - also generically used terms. Consider her examples:

(6.49) [*Im/*in dem*] *Winter halten Bären immer einen Winterschlaf.*

(“In winter, bears hibernate.”)

(6.50) [*Am/*an dem*] *Rhein stehen viele Burgen.* (“On the Rhine, there are many castles.”)

(6.51) [*Im/*in dem*] *Norden sind die Winter oft milder als [im/*in dem] Süden.* (“In the north winters are often milder than in the south.”)

(6.52) *Frankfurt liegt [am/*an dem] Main.* (“Frankfurt is on the Main (river).”)

(6.53) *Ich besuchte ihn [am/*an dem] 1.Mai 2007.* (“I visited him on 1st of May 2007.”)

Idiomatic expressions would fall under generically used terms, and replacement by a non-contracted form yields only a specific, non-idiomatic,

and strictly locative meaning.¹⁰ For example:

- (6.54) *sich im Grabe umdrehen, am Ende sein* (“to turn over in one’s grave, to reach the end, or, to be exhausted”)

DeLisle points out that a stressed definite article disallows contraction, but that an unstressed definite article does not necessarily contract. For example, both a contracted and non-contracted form with an unstressed article are possible in:

- (6.55) *Am Ende des Ganges war eine grosse Tür. Nach dem Abendessen ging Eddie zu der/zur Tür zurck, um das Schloss zu untersuchen.*
 “At the end of the corridor there was a big door. After dinner, Eddie returned to this/the door in order to investigate the lock.”

Unstressed articles can also be found with restrictive relative clauses, where contracted forms are not possible, as in:

- (6.56) *Wo wohnt Mark? Er wohnt [#im, in dem] Haus, das Peter gerade gekauft hat.*
 “Where does Mark live? He lives in the house that Peter just bought.”

Hence, DeLisle concludes that the claim that stressed articles cannot be contracted is correct but is too general because it can only handle a subgroup of the non-contracted forms. Instead, DeLisle relates the choice between contracted and non-contracted forms to the way the speaker guides

¹⁰Stvan (1998) has investigated PPs with bare nouns in English. She points out that the meaning of locative prepositions with bare nouns differs from the ones found with definite nouns: While the former have also a non-locative meaning, the latter have only a strictly locative meaning.

the hearer to retrieve the referent. Uniqueness of reference is assured if the speaker provides a specific frame or scenario. For example, on a wedding, any persons that are typically involved in such a situation can be referred to by first-mention definites (e.g. “the bride”, “the priest” or “the clerk”, “the ceremony”, “the wedding party”). Such frames or scenarios would make the use of contracted forms felicitous, as well (e.g. *zur Braut* – “to-DAT bride”, *beim Bräutigam* – “to-DAT groom”, *vom Pfarrer* – “from-DAT priest”).

Unique reference would also be ensured if the referent is “the most likely one, usually the one closest in time, location, or experience“ (ibid., p.279). Consider her examples:

(6.57) *Wann hat Karl angerufen? Am Dienstag.*

“When did Karl call? On Tuesday.” (i.e. last tuesday, closest in time)

(6.58) *Wann wird Karl anrufen? Am Dienstag.*

“When did Karl call? On Tuesday.” (i.e. next tuesday, closest in time)

(6.59) *Wo muss ich mich melden? Im Rathaus.*

“Where do I have to report myself? In the town hall.” (i.e. of this town, closest in location)

(6.60) *Wo ist Karl? Im Garten.*

“Where is Karl? In the garden.” (i.e. in the most likely garden, or closest in experience, not necessarily the closest in location)

(6.61) *Im Krieg haben die Leute gehungert.*

“In the war people suffered hunger.” (i.e. in the most likely war, the closest in experience but not necessarily the closest in time)

DeLisle concludes that without a contextual analysis, no proper description of contracted forms is possible. Further, the referents with non-contracted forms are “marked”, while contracted forms have “non-marked” referents. The question is now how to formally embed these insights into a semantic and pragmatic analysis.

6.3.4 Free definites

Schwarz (2006) argues that the difference between contracted forms and non-contracted forms is connected to accommodation and presuppositions. He proposes that in German there is a morphological distinction between bound and free definites which is mirrored in non-contracted and contracted forms, respectively. Non-contracted forms would require a linguistic antecedent, while contracted forms have to be free and cannot be bound. While bound definite nouns are anaphoric and linked to existing discourse referents, free definite nouns are non-anaphoric and trigger accommodation. This complementary distribution would be problematic for theories of presupposition and for uniqueness-based accounts of definiteness, as well as for familiarity-based accounts. However, in later work he points out that bridging referents *are* possible with non-contracted forms and discusses the interpretative difference between both forms (Schwarz (2008)). While both forms could have inferable referents, they involve different types of bridging mechanism. Contracted forms would require situational uniqueness of their referents, while non-contracted forms would require associative anaphora.

Consider the following donkey sentence in which the non-contracted

form is not felicitous:

- (6.62) Wenn ein Musiker viel zu tun hat, verbringt er den ganzen Tag
 [#in dem/im] Studio. (cf. Schwarz 2006)
 If a musician has a lot of work, he spends the whole day in the
 studio.

While the referent of *Studio* can be accommodated with a contracted form from the generic referent *Musiker*, the non-contracted form cannot. The next example shows the reverse distribution: The contracted form is not felicitous because it cannot be bound by the antecedent expression *Schreibtisch* while the non-contracted form can:

- (6.63) Wenn ein Student einen Schreibtisch hat, verbringt er den ganzen
 Tag [an dem/#am] Schreibtisch
 If a student has a desk, he spends the whole day at the desk.

In sum, Schwarz (2006) argues that the complementary distribution of contracted and non-contracted forms is a problem for dynamic views of anaphora in terms of discourse familiarity (cf. Kamp (1981); Heim (1982)). Under this view, a definite noun can be accommodated or bridged, and pick up unique referents. Still, while non-contracted forms cannot be accommodated nor bridged, contracted forms cannot be anaphoric nor link their (unique) referents to existing ones. Schwarz brings convincing arguments to show that non-contracted forms can be anaphorically bound and bridged, on the one hand, and that contracted forms cannot be anaphorically bound and require referents that are hearer-old and presupposed. However, we have seen that contracted forms also occur with hearer-new entities and need not to have unique referents. Hence, it seems that they

are not definite expressions at all which would explain their non-anaphoric behaviour.

6.4 Summary

We have seen that phonological accounts like the one by Schaub (1979) take the contracted forms to have phonologically weakened definite articles that have fused with prepositions. This analysis has the disadvantage that it predicts no semantic and pragmatic differences between a full and weakened definite, and reduces contracted forms to a phenomenon of fast speech. Morpho-syntactic accounts deal mainly with the question of whether the definite article is a clitic or affixed to a preceding preposition. van Riemsdijk (1998) has proposed that contracted forms result from phonological weakening of a definite followed by syntactic head movement (D-to-P raising). He assumes morpho-phonological rules to explain why contractions are not fully productive and why some forms are out (“unpronounceable”, *ibid.*, p.652). Thereby, he accounts for the existence of these forms but not for the meaning differences to non-contracted forms.

Hinrichs (1986) argues that contracted forms show the behavior of affixes rather than clitics, and that they are inflected prepositions marked for case, gender, number, and definiteness. The advantage of treating contracted forms as proper lexical items instead of cliticized definites is that contracted forms are not longer optional variants of non-contracted forms, which is a desired result considering their differing meanings and uses. Accounts on the semantics and pragmatics of contracted and non-contracted forms mainly argue that the former are instances of reduced definite articles and require unique or uniquely identifiable referents.

We will see that the most puzzling case for all kinds of accounts are contracted forms with non-specific expressions, on the one hand, and non-referential uses with superlative adverb construction, which always take the contracted form (*am besten* - “best”). We may conclude that an analysis that departs from the assumption that contracted forms have definite articles should be able to account for why we get narrow scope readings, on the other hand, and non-referential readings with contracted forms, on the other hand.

Chapter 7

Proposal for CFs

7.1 Introduction

In this chapter, I will analyse the morpho-syntax and semantics of contracted forms and non-contracted forms to show why contracted forms and non-contracted forms are felicitous in different contexts. I will propose that contracted forms are semantically incorporating prepositions that combine with bare noun phrases. Uniqueness effects will be derived from the singular inflection found on the contracted form and from contextual entailments. There is also an analogy to reduced forms of the definite article found in non-Standard German: Unlike with reduced definite articles in which the inflectional ending attaches to the preceding functional head of a determiner phrase, with contracted forms the inflectional ending adjoins to the functional head of a prepositional phrase.

7.2 Summary of previous chapters

In chapters 2 and 3, I have given an overview over the contexts in which non-contracted and contracted forms are used. We observed that for the felicitous use of contracted forms what matters is that the descriptive content of the noun phrase fits one individual, and that in some contexts this may yield unique identifiability. In other words, we do not want to commit to the claim that the referent with contracted forms is “globally” unique, since the speaker needs not to have a specific and uniquely identifiable referent in mind. For the use of non-contracted forms, we have seen that anaphoricity is decisive together with the fact that the descriptive content of the NP alone does not suffice to retrieve a unique referent.

In chapter 4, we have seen reasons to distinguish between semantic and pragmatic definiteness. We saw that some definite noun phrases are

good as first mention definites and better analysed in terms of semantic uniqueness (in the sense of Russell (1905) or Löbner (1985)), while others require a linguistic antecedent or perceptually visible referent and are better described in terms of discourse givenness or familiarity (in the sense of Kamp (1981) and Heim (1982)). Pragmatically definite noun phrases have unique reference because they are coindexed with a previously mentioned and therefore familiar expression. This coindexation is necessary for retrieving a unique referent whenever the meaning of the NP holds for more than one individual.

Semantically definite noun phrases may refer uniquely because of the lexical meaning of the noun phrase, e.g. with proper nouns. The relational meaning of nouns enables the identification of a unique relation to a (possibly known) possessor. Depending on what we know about the constitution of the possessor, the relational noun may have a functional interpretation and have unique reference. In certain situations, a noun may be used in a proper-like fashion and refer to a situationally unique individual (cf. “Situative Unika” by Ebert (1970)). For example, “the tower” has unique reference in the speech situation if the domain of reference is narrowed down so that it contains a unique tower individual. Semantic definites may also refer uniquely because of the alternative-excluding meaning of their modifiers. For example, superlative modifiers can be used with first-mention definite nouns, but crucially, these referents need not be hearer-old.

In chapter 5, we saw that non-Standard German variants are sensitive to this distinction between semantic and pragmatic definiteness. We find two morphologically different definite articles where the reduced one is semantically definite and the non-reduced definite is pragmatically definite.

In chapter 6, we have seen that most accounts take contracted form

as having reduced definite article. In fact, the contexts in which reduced definites are found correlate strongly with the contexts in which contracted forms occur. For example, whenever a unique referent can be inferred, the reduced form of the definite and a contracted form is felicitous. In contrast, whenever a definite noun is used deictically or anaphorically, the non-reduced definite article is necessary and the non-contracted form is used.

Note that we find contracted forms not only in non-Standard German where this semantic/pragmatic paradigm exists but also in Standard German where there is only one form for the definite article which presumably can function as a semantic or pragmatic definite. This fact could give support to the idea that Standard German has reduced definite articles only within contracted forms. Or, this fact could make us assume that contracted forms in Standard German are not derived from reduced articles but constitute proper lexical words. Nübling (2006) has suggested that contracted forms pattern like simple clitics, on the one hand, and special clitics and inflected prepositions, on the other hand. This would explain why in some contexts the non-contracted form is “only” pragmatically infelicitous, while in others it is semantically deviant or ungrammatical. Consequently, we could conclude that the contracted forms found in Standard German are proper lexical units (e.g. inflected prepositions and special clitics), while contracted forms found in non-Standard German are not lexicalised items but instances of simple clitics.

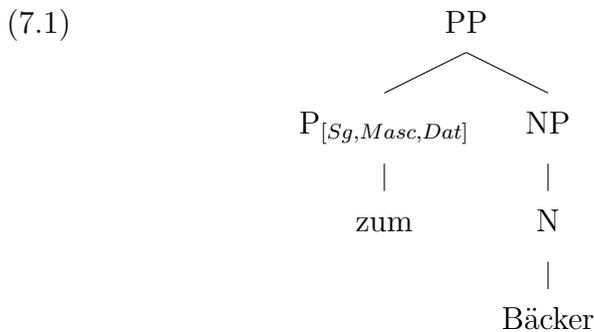
I will adopt this last idea, i.e. that contracted forms in Standard German are not derived from enclitic or reduced definite articles but rather are inflected prepositions - and, noteworthy, without markers of “definiteness” (cf. Stolz (1990)). Semantically, I will analyse these inflected

prepositions as incorporating a noun with singular number. Crucially, the requirement on singular number is compatible both with uniquely identifiable individuals and individuals that are unique relative to the event or another individual. The advantage of the analysis presented here is that it provides the right predictions for the distribution of contracted forms with specific and non-specific readings.

7.3 The Morpho-Syntax of CFs and NCFs

7.3.1 CFs = Inflected-P + NPs

For the morpho-syntactic analysis of contracted forms, I will assume that they are inflected prepositions and take as complement a noun phrase.¹ For example, *zum Bäcker* (“to-DAT baker”) will have the syntactic tree in:



The contracted forms or inflected prepositions have an inflectional ending marked for number, case, and gender, and assign case and thematic roles to the complemental noun phrase. Crucially, I assume no marking

¹To represent the syntactic structure of contracted forms and their complements, I will roughly use the representation developed within the X-bar theory (Jackendoff (1977), Chomsky (1986)).

of “definiteness” (cf. Prinz (1991)). The inflectional ending of contracted forms is generally found on items with strong inflection, and not only on definite articles. Adjectives following a definite article have a weak ending, while adjectives following an indefinite article have either strong endings (in nominative or accusative case), or weak endings (in genitive or dative case). The strong ending is also found on certain articles and bare nominalized adjectives. Consider the distribution (STR=strong inflection, W=weak inflection):

(7.2) *das_{STR}kleine_WBuch* (“the small book”)

(7.3) *ein_Wkleines_{STR}Buch* and *einem_{STR}kleinen_WBuch* (“a small book” in nominative and dative case)

(7.4) *der gute Bäcker; ein guter Bäcker*
the_{STR}good_Wbaker; a_Wgood_{STR}baker

(7.5) **der gute Bäcker; ein gute Bäcker*
**the_{STR}good_{STR}baker; a_Wgood_Wbaker*

(7.6) *beim guten Bäcker*
at – DAT_{STR}good_Wbaker

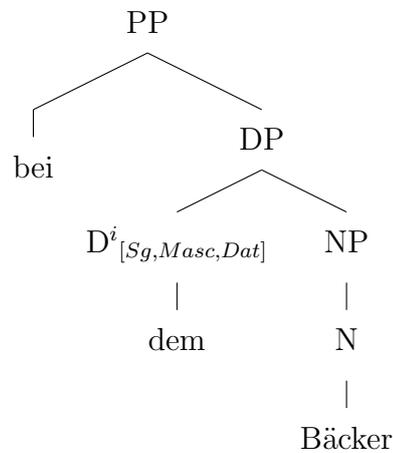
(7.7) **beim gutem Bäcker*
**at – DAT_{STR}good_{STR}baker*

We see that adjectives that follow contracted forms must have weak inflection which indicates that contracted forms have strong inflectional endings. Since contracted forms have no deictic element *d-*, I will assume that they have the primary function of assigning case and number to a noun phrase.

7.3.2 NCFs = P + DPs

Non-contracted forms are under this proposal regular or uninflected prepositions that combine with definite noun phrases that refer to discourse-old entities. The definite noun phrase projects as a determiner phrase marked for number, case, and gender of its nominal complement.² The definite article has a deictic element *d-* which introduces an index to a discourse-old entity and which has a strong inflectional ending.

(7.8)



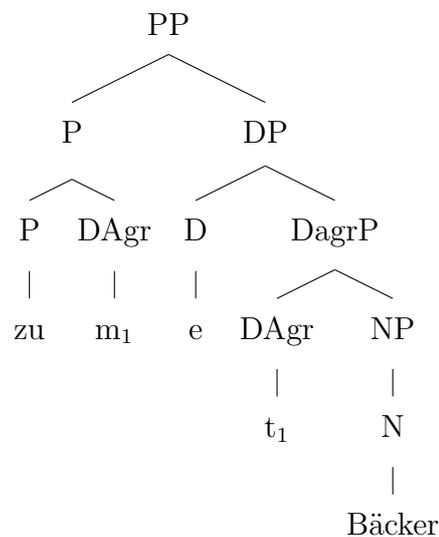
Wiltschko (1998) discusses the contrast between d-pronouns and personal pronouns in German. She argues that d-pronouns (*der, die, das* – “the-NOM_{masc, fem, neutr}”) are definite determiners with a full DP and an empty NP, while personal pronouns (*er, sie, es* – “he/she/it-NOM”) “are merely the spell out of phi features (AgrD) not containing an NP-projection” (ibid., p. 143). This analysis can be compared with a similar idea of ? : While non-reduced definite articles in Bavarian project as full DPs, reduced definite articles have no filled DP and are generated in DAgrP. The difference is that Prinzhorn and Brugger assume not only ϕ -

²I adopt here the idea that definite nominals project as DPs rather than NPs as formulated in the DP-hypothesis by Abney (1987).

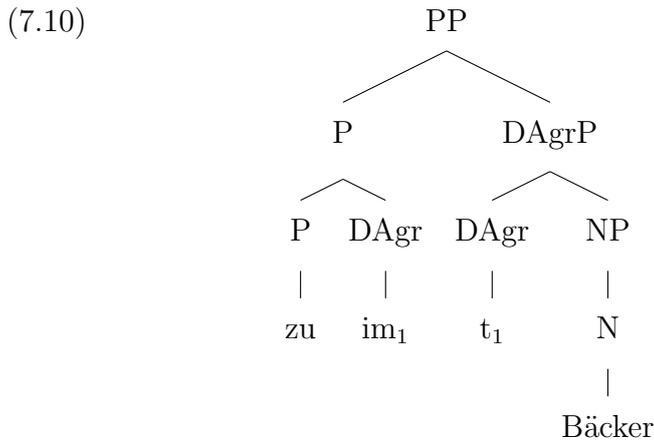
features in DAgrP but also a semantic constraint on uniqueness. I would rather claim, like Wiltschko, that AgrD (DAgrP) have only ϕ -features and, more, that singular number is sufficient to derive uniqueness effects.

The view of a reduced DP is not unproblematic for other reasons. For example, if contracted forms are in fact reduced definite articles, and adapting the analysis of Brugger and Prinzhorn (1996) for reduced definite articles, contracted forms would have the following syntactic structure:

(7.9)



This syntactic tree (7.9) is problematic since we find a trace governed by an empty category which should not yield a licit syntactic structure. Further, the reduced definite article has to be moved beyond a potential landing site, namely D. This latter move, one could prevent by assuming that reduced articles do not project DPs but only DAgrPs (Prinzhorn, p.c.), as in:



Still, if it is a reduced definite article that moves or adjoins to a preceding preposition, then the question arises why it is not the full form *im* determiner that adjoins but only its strong inflectional ending. Further, it predicts the existence of the ungrammatical form **zu im* (to the-DAT_{reduced}).³

To prevent these problems, I assume the less problematic solution for the syntactic representation of contracted forms as shown in the tree 7.8 and assume that “what you see is what you get” namely a preposition with ϕ -features which takes as complement a bare noun phrase.

7.4 The semantics of NPs in German

7.4.1 Properties of kinds or objects

Basically, I will assume that German bare nouns denote properties of individuals. For number marked nouns, I will assume that they have a number phrase which instantiates individuals with the NP property and which can be counted. Depending on the lexical semantics of nouns these properties

³We could, still, assume a post-syntactic rule which rules out these forms.

may either hold for semantically plural nouns (mass, abstract nouns) which are hence similar to plural count nouns. Or, the nouns may be used for semantically singular nouns (proper nouns) which are hence like singular count nouns.

(7.11) $[[Noun]_N]_{NP} = \lambda x[P(x)]$ P is the property of an individual.

(7.12) Mass and abstract nouns:

$P_{+PL}(x) \Rightarrow P(x) \wedge |Instance(x, P)| > 1$ P is a property that holds for substances and qualities or plural individuals.

(7.13) Proper nouns: $P_{-PL}(x) \Rightarrow P(x) \wedge |Instance(x, P)| = 1$ P is a property that holds for proper names and singular individuals.

For count nouns, I assume that they are semantically numberless and therefore can be either used with singular or plural number:

(7.14) Count nouns: P(x)

(7.15) Count nouns with Singular number:

$[[die[Kuh]_N]_{NP}]_{NumP}]_{DP} = \lambda x[Kuh(x) \wedge |Instance(x, Kuh)| = 1] \Rightarrow [Kuh(x_i) \wedge |Instance(x_i, Kuh)| = 1]$ where i is the index of a hearer-old or discourse-old entity.

(7.16) Count nouns with Plural number:

$[[Kühe]_N]_{NP}]_{NumP} = \lambda x[Kuh(x) \wedge |Instance(x, Kuh)| > 1]$

Count nouns are common nouns, like abstract and mass nouns, but they differ in that they are lexically unmarked for number. Hence, they may be pluralized, be combined with numerals, quantifiers, or the definite or indefinite article. However, in German we find also count nouns that can be used if they are lexically governed, e.g. by a verb as in *Auto fahren* (“car

drive – to drive a car”). It has been argued for these nouns, still, that these bare nouns are part of complex verb with an established meaning and function rather as event modifiers (cf. noun incorporation by the verb by Van Geenhoven (1996 (published in Stanford: CSLI Publications, 1998) or the Restrict function by Chung and Ladusaw (2004)).

Further, mass nouns are used bare and denote substances (*Wasser* - “water”). Abstract nouns are also used bare and denote qualities (*Liebe* - “love”). However, mass nouns can be used as count nouns if they are combined with an article and if a measurement unit can be inferred, which, in turn, enables reference to a distinguishable object. In contrast, abstract nouns with a definite article refer rather to their personifications than to objects but nevertheless their referents become concrete. I propose the same semantics for these noun classes since both differ from count nouns in that they cannot be pluralised or combined with number or quantifiers. Both are property-denoting expressions that hold of plural individuals and have indistinguishable reference:⁴

$$(7.17) \quad [[Wasser]_N]_{NP} = \lambda x[Wasser_{+PL}(x)]$$

(7.18) Mass nouns used as count:

$$\begin{aligned} & [[das[Wasser]_N]_{NP}]_{NumP}]_{DP} = \\ & \lambda x[Wasser(x) \wedge |Instance(x, Wasser)| = 1] \Rightarrow \\ & [Wasser(x_i) \wedge |Instance(x_i, Wasser)| = 1] \text{ where } i \text{ is the index of a} \\ & \text{hearer-old or discourse-old entity.} \end{aligned}$$

⁴Cf. the view of Dayal (1999) who takes singular kinds in natural language to be lexical primitives which are conceptually plural but grammatically singular. She argues that, in Hindi, singular kinds can be analysed in terms of noun incorporation and are grammatically singular terms with a plural interpretation.

Last, proper nouns in Standard German either need to be bare (“Anna/Barcelona”) or - if based on common nouns - require the definite article (e.g. *der Bodensee* – “the Lake-Constance”).⁵ I will mark this difference as follows: Bare proper nouns are *per se* object-referential and refer to hearer-old entities (cf. N-to-D raising with proper nouns, Longobardi (2005)). In contrast, proper nouns based on common nouns become object-referential and refer to hearer-old entities through the definite article. Consider:

(7.19) $[[Anna]_N]_{NP} = [Anna_{-PL}(x)] \Rightarrow [Anna_{-PL}(x_i)]$ where *i* is the index of a hearer-old entity.

(7.20) $[[Bodensee]_N]_{NP} = [Bodensee_{-PL}(x)]$
 $[[der[Bodensee]_N]_{NP}]_{NumP}]_{DP} =$
 $\lambda x[Bodensee_{-PL}(x) \wedge |Instance(x, Bodensee_{-PL})| = 1] =$
 $[Bodensee_{-PL}(x_i) \wedge |Instance(x_i, Bodensee_{-PL})| = 1]$ where *i* is the index of a hearer-old entity.

We have seen that in non-Standard German, proper nouns like *Anna* require the definite article, and to be more precise, the reduced form of the definite article (*di Anna*). Hence, I would propose that proper nouns in non-Standard German have only the second semantics for proper nouns.

7.4.2 Properties of events and implicit subjects

Nominalized infinitives are under the analysis presented property-denoting expressions which hold for events. In a sense, events are spatio-temporal

⁵Kripke (1980) takes proper names as rigid designators, i.e., as designators of objects independently of the world described. As such, proper names contrast with definite descriptions like “the president of Catalonia” which designate a particular person but whose designation varies with respect to time and world. Further, proper nouns do not allow restrictive modification and are capitalised.

entities and therefore objects with a location in space and time like regular individuals (cf. Davidson (1967)). But, they may differ in the way the event argument is referentially anchored. I will assume that this can occur by means of implicit subject-hood if PRO is controlled by a referential expression. A deverbal noun like *Laufen* (“running”) would then have either of the following semantics:

(7.21) $[[Laufen]_N]_{NP} = \lambda e[Laufen(e)]$ the property Laufen holds of an event

(7.22) $[PRO[Laufen]_N]_{NP} = \lambda e, x[Laufen(e, x)]$ the property Laufen holds of an event of which x is the agent

The nominalized infinitive can also be preceded by an adverb or may introduce a direct object, which is a signal that it is lexically a verb, though functionally a noun. For example:

(7.23) *Schnell laufen ist ungesund.* (“Running fast is unhealthy.”)

(7.24) *Auto fahren ist ungesund.* (“Car-driving is unhealthy.”)

Note that a nominalized infinitive with a definite article has a non-verbal meaning because it cannot be modified by an adverb and because the thematic object must be introduced externally by a PP.⁶

(7.25) *Das schnelle/*schnell Laufen ist ungesund.* (“The fast running is unhealthy.”)

(7.26) *??Das Auto fahren ist ungesund.* (“The car-driving is unhealthy.”)

⁶Note that I consider the adverb in *das Schnell-Laufen*, which is grammatical, to be part of a compound noun. This may be derived from a complex noun which is derived from a verb which has incorporated an adverb.

Another difference between nominalized infinitives and regular nouns is that the former have always neuter gender and do not admit plural marking (**Laufens*). In the vein of Vázquez (2002), I will assume that the null subject PRO receives a non-specific or generic interpretation if it is not controlled by another argument. Compare:

(7.27) PRO_i Laufen macht mir_i Spass. (“Running makes I-DAT fun - I like running.”)

(7.28) Das_j Laufen macht mir_i Spass. (“The Running makes I-DAT fun - I like the running.”)

The referential anchor of the pronoun enables a specific and referential interpretation of the agent of the event *Laufen*. In contrast, with the definite article the agent of running is interpreted as extrinsic.

7.4.3 Properties of relational nouns and implicit possessors

For relational nouns, I assume that they are common nouns with an implicit possession, syntactically represented as a PRO in the specifier of NP and semantically as a property of two individuals. Barker (1995) discusses nouns with a relational interpretation, and, more precisely:

[...] definite possessives for which the ability to serve as a first mention is utterly reliable, namely, those possessives headed by a semantically relational noun. The existence of a grammatically-defined class of expressions which behave in this way argues against a pragmatic approach based on accommodation. (ibid., p.4)

Semantically, he distinguishes between relational and non-relational nouns:

The basic idea is that non-relational nouns (in parallel with intransitive verbs) denote predicates which are simple properties of individuals, but relational nouns (in parallel with transitive verbs) denote (the sense of) relations over pairs of individuals. (ibid., p.9)

In this vein, I will take relational nouns like *Kopf* (“head”) to denote 2-place relations:

(7.29) $[PRO[Kopf]_N]_{NP} = \lambda x, y[Kopf_K(x, y)]$ where *Kopf* is a property that holds for a plural object x of which y is the possessor.

If PRO is controlled by an existential or referential expression, then y is defined. *Anna’s Kopf* (“Anna’s head”) would denote a relation between some head of Anna, and, if Anna happens to have only one head, this will yield a functional interpretation (but note that in a carnevalesque situation, the possessor might have more than one head).

7.5 The semantics/pragmatics of DPs in Standard German

For definite noun phrases, I assume that they denote properties of individuals which are co-indexed with hearer-old entities, or, in the case of anaphoric definite noun phrases, with discourse-old entities. These entities may either be abstract (kinds) or concrete (objects):

(7.30) Kind-referential reading:

$[das[Auto]_{NP}]_{DP} = \exists x[Auto(x_i) \wedge |Instance(x_i, Auto)|]$ where i is the index of a hearer-old or discourse-old entity and this entity is a kind.

(7.31) Object-referential reading:

$[das[Auto]_{NP}]_{DP} = \exists x[Auto(x_i) \wedge |Instance(x_i, Auto)|]$ where i is the index of a hearer-old or discourse-old entity and this entity is an object.

Note that kinds can be anaphorically referred to by a definite noun phrase as in:

(7.32) *Der_i Hase und das_j Kaninchen sind unterschiedliche*
 the hare and the coney are different
Arten. Die Ohren des_i Hasen sind länger.
 kinds the ears the-GEN hare are longer
 The hares and the coney belong to different kinds. The ears of the hare are longer.

7.5.1 DPs with discourse/hearer-old entities

For definite noun phrases, I will roughly adopt the semantics of Heim (1982) and take them as denoting open propositions with variables which instantiate individuals with the NP property. Under this view, definite nouns come with a familiarity condition and are co-indexed with familiar referents.

(7.33) $[die[Hand]_{NP}]_{DP} = [Hand(x_i)]$ where i is the index of a familiar referent in the discourse domain D .

However, this condition does not suffice to explain why bridging is good with non-contracted forms, and, in general, why first-mention uses of regular definite NPs are good. Roberts (2003) has argued, familiar referents can be either strongly or weakly familiar. Strongly familiar referents are, adopting Prince’s taxonomy, discourse-old (and as such hearer-old) entities, and weakly familiar referents are hearer-old entities. In detail, this means that definite noun phrase come with the following updated familiarity conditions (I will skip the semantics of the number phrase, for now):

(7.34) $[die[Hand]_{NP}]_{DP} = [Hand(x_i)]$ where i is the index of a discourse-old (i.e. hearer-old) referent in D .
= “Unique reference”

(7.35) $[die[Hand]_{NP}]_{DP} = [Hand(x_i)]$ where i is the index of a hearer-old referent in D .
= “Global uniqueness”

(7.36) • Proper names
• “Proper-like” nouns (in the sense of Longobardi (2005)) and/or “Situative Unika” (in the sense of Ebert (1970)), i.e. the NP property holds for exactly one individual in the speech situation.

As or event-denoting expressions, I have assumed that nominalized infinitives denote properties of events. As such, they can also refer to hearer-new and hearer-old events, or even discourse-old events (if they are used anaphorically, e.g., in order to contrast several events).

7.5.2 DPs with hearer-new entities

Crucially, DPs may also have hearer-new (and discourse-new) entities via inference from other given entities in bridging constructions like:

Das Auto _i [Der Motor]_j... (“the car ... the engine...”)

For bridging, I will assume presupposition accommodation of hearer-new entities via the relation to another entity:

- (7.37) [*Motor*(x_i)] where i is the index of a hearer-new entity which is associated to a discourse-old or hearer-old entity in D.
= Relative uniqueness

I will include here also definite nouns which have hearer-new referents but which are unique with respect to a given event. Consider the event modifying reading of *U-Bahn* in:

- (7.38) *Babo fährt (immer) mit der U-Bahn.*

“Babo drives (always) with the metro – Babo (always) goes by metro.”

We saw that both contracted and non-contracted forms are good with inferable referents, but I suggest that they differ in that non-contracted forms need discourse-old associate entities, while contracted forms do not, since they are not anaphoric. Consider a quantificational context like:

- (7.39) *Jedes Hotelzimmer hat eine Minibar. [Im/??In dem] Badezimmer gibt es Seife und Shampoo.*

“Every hotel room has a mini bar. [In-DAT, ??In the] bathroom, there is soap and shampoo.” (i.e. in the bathroom of each room)

The non-contracted form seems to require a unique bathroom with respect to an entity with "fixed" reference, ie. a discourse-old entity. The contracted form does not require this and is good. Compare the next examples:

(7.40) *Otto kauft Bcher nur, wenn [im/??in dem] Titel ein "O" vorkommt.*

"Otto buys books only if [in-DAT, ??in the] title there is an "O"."

(7.41) *Otto hat ein Buch gekauft, und [im/in dem] Titel kommt ein "O" vor.*

"Otto has bought a book, and [in-DAT, in the] title there is an "O"."

Schwarz (2008) also notes this difference and he therefore argues that bridging with contracted forms requires situational uniqueness, while bridging with non-contracted forms requires associative anaphora.

Consider the non-contracted form which creates an odd reading with *Reifen* ("tyre") since it instructs the hearer to look for a specific tyre of a car, which typically has more than one tyre.

(7.42) *Das Auto steht in der Werkstatt. [??An dem, Am]
the car stands in the garage on the on-DAT
Reifen war was kaputt.
tyre was what destroyed
The car is in the garage. The tyre was rotten.*

(7.43) *Das Auto steht in der Werkstatt. [An dem, Am]
the car stands in the garage on the on-DAT
Motor war was kaputt.
tyre was what destroyed
The car is in the garage. The engine was rotten.*

The contracted form, in contrast, refers to a non-specific tyre which was rotten.

I conclude that non-contracted forms generally require discourse-old referents and, hence, bridging with non-contracted forms also requires discourse-old associate entities. Since contracted forms are not anaphoric expressions bridging can only occur with hearer-old associate referents.

7.6 The semantics of CFs

7.6.1 Uninflected prepositions

In Standard German, regular (i.e. uninflected) prepositions combine with bare singular nouns if these denote proper names, or names of concepts or substances (e.g. *bei Gefahr* – “at danger” or *von Wasser* – “from water”).⁷ In these cases, I will assume that the argument introduced by the noun phrase is saturated by means of semantic incorporation through the case-assigning and lexically governing preposition:

(7.44) *die chemische Struktur von Wasser* (“the chemical structure of water”)

(7.45) $[[Wasser]_N]_{NP} = \lambda x[Wasser_{+PL}(x)]$

(7.46) $[von[Wasser]_{NP}]_{PP} = \lambda y \exists x [Von(y, x) \wedge Wasser_{+PL}(x)]$

Note that noun incorporation can happen through a verb, as well:

(7.47) *Die Kuh trank Wasser.* (“The cow drinks water.”)

⁷I will ignore for now for whether the relations described by the prepositions are, e.g., locative or temporal (as in *bei Gewitter* – “at thunder”).

(7.48) [[Wasser

$$]_{NP}trinken]_{VP} = \lambda e, x \exists y [Trinken(e, x, y) \wedge Wasser_{+PL}(x)]$$

(7.49) [Die Kuh trank Wasser]_{CP} = $\exists e [Kuh(x_i) \wedge |R(x_i, Kuh)| =$

$1 \wedge Trinken(e, x, y) \exists y [\wedge Wasser_{+PL}(y)]]$ where i is the index of a hearer-old entity.

If a preposition combines with a bare plural noun (syntactially, a number phrase), I will assume that it describes a relation between an individual and a set of individuals:

(7.50) [von[[Autos]_{NP}]_{NumP}]_{PP} =

$$\lambda y \exists x [Von(y, x) \wedge Auto(x) \wedge |Instance(x, Auto)| > 1]$$

For contracted forms, I propose that they are versions of semantically incorporating prepositions and describe a relation between an individual (or event), on the one hand, and a singleton set of individuals (or events), on the other hand.

7.6.2 Inflected prepositions

In a similar vein to uninflected prepositions with bare plurals, I propose the following semantics for inflected prepositions with bare nouns:

(7.51) [vom[Auto]_{NP}]_{PP} =

$$\lambda y \exists x [Vom(y, x) \wedge Auto(x) \wedge |Instance(x, Auto)| = 1]$$

The singular number inflection on the contracted form imposes the constraint that the set described by the NP has exactly one individual. Contracted forms may describe relations between events and individuals, between two individuals, or between two events:

(7.52) $R(e,x)$: *Anna schwimmt im See.* (“Anna is swimming in the lake.”)

(7.53) $R(x,y)$: *Der Broccoli vom Chef ist grün.* (“The broccoli of-DAT boss is green.”)

(7.54) $R(e,e')$: *Babo schnarcht beim Schlafen.* (“Babo snores at-DAT sleeping.”)

The semantics of the contracted form says nothing about whether this individual has unique reference or not. Consider the meaning of:

(7.55) *Otto geht zum Arzt.* (“Otto goes to-DAT doctor.”)

i. Otto goes to some doctor, he does not necessarily know him.
(Event modifier)

ii. Otto goes to his or a situationally unique doctor.

(7.56) $[[zum[Arzt]_{NP}]_{PP}gehen]_{VP} =$
 $\lambda e, y \exists x [Zum(y, x) \wedge Arzt(x) \wedge |Instance(x, Arzt)| = 1]$

In a similar vein, individual modifiers with non-contracted forms cannot be interpreted as having narrow scope with respect to the individual because of the updated familiarity condition. Compare:

(7.57) *Otto kennt das Haus vom Arzt.* (“Otto knows the house of-DAT doctor.”)

(7.58) $[Haus[vom[Arzt]_{NP}]_{PP}]_{NP} =$
 $\lambda x [Haus(x) \wedge \exists y [Vom(x, y) \wedge Arzt(y) \wedge |Instance(y, Arzt)| = 1]]$

(7.59) *Otto kennt das Haus von dem Arzt.* (“Otto knows the house of the-DAT doctor.”)

$$(7.60) \quad [Haus[von[dem[Arzt]_{NP}]_{DP}]_{PP}]_{NP} = \\ \lambda x [Haus(x) \wedge [Von(x, y_i) \wedge Arzt(y_i) \wedge |Instance(y, Arzt_i)| = 1]]$$

where i is the index of a discourse-old entity.

In contrast to the non-contracted forms, the contracted form does not require the house to be specific, i.e. the doctor might have more than one house.

In sum, the semantics predicts that per default expressions with contracted forms have narrow scope with respect to the event argument. But, the semantics is also compatible with uniquely referring noun phrases, such as a situationally unique doctor. In this manner, we can account for why contracted forms have specific and non-specific readings. In the next chapter I will argue that the specific interpretation of referents with contracted forms is driven by its singular number constraint, on the one hand, and the inherently unique meaning of the noun phrase or the speech situation, on the other hand. Non-contracted forms, in contrast, are anaphoric expressions which require always a specific interpretation of their referents and co-indexation with discourse-old entities.

7.7 The pragmatics of CFs

7.7.1 Default: Hearer-new entities

The semantics of contracted forms predicts, under the analysis presented, that they combine with noun phrases which have hearer-new entities. However, these entities must be unique with respect to the event, or to the event and another individual. As event modifiers, the noun phrase must describe a singleton set with respect to the event described, since their indi-

vidual arguments are semantically incorporated before the event argument is saturated. Contracted forms with relational nouns also have hearer-new entities but stand in a unique possessee-relation with a hearer-old entity within a certain situation.

Contracted forms with nominalized infinitives are, under the analysis presented, also hearer-new entities (though eventive entities). These entities must be unique with respect to the eventive entity described by the main clause.⁸

Last, I take noun phrases with superlative modifiers (and modifiers with built-in- uniqueness, in general) to have hearer-new entities since they can be used without their referents being necessarily known by the hearer or speaker.

7.7.1.1 One individual per event

We find contracted forms as part of complex verb phrases which have a well-established meaning (i.e. they are not fully compositional). For example:

(7.61) *Anna geht zur Schule.* (“Anna goes to-DAT school. – Anna is an alumn.”)

(7.62) $[zur[Schule]_{NP}]_{PP}gehen]_{VP} = \lambda e, x[Gehen(e, x) \wedge \exists y[Zur(e, y) \wedge Schule(y) \wedge |Instance(y, Schule)| = 1]]$

⁸One could also argue that the two events must stand in a certain relation and as such the nominalized infinitive is hearer-new but linked to a hearer-old entity. However, note that the main clause event is usually part of the small clause event, not the reverse, and should hence be the associate expression. For simplicity, I will assume hence that eventive entities are hearer-new if they are not accompanied by a definite article.

The second individual argument is existentially bound via the incorporating preposition and, as a result, has narrow scope with respect to the event argument and the first individual argument (the latter will be decisive with relational nouns).⁹

Since non-contracted forms require discourse-old (rather than solely hearer-old) entities the sentence can only be about a specific school:

(7.63) *Anna geht zur Schule.* (“Anna goes to-DAT school.”)

(7.64) $[zu[der[Schule]_{NP}]_{DP}]_{PP}gehen]_{VP} = \lambda e, x[Gehen(e, x) \wedge [Zu(e, y_i) \wedge Schule(y_i) \wedge |Instance(y_i, Schule)| = 1]]$ where i is the index of a discourse-old entity.

Consequently, non-contracted forms lack the well-established meaning because semantic incorporation is generally not possible with referential expressions.

Bare abstract nouns have hearer-old entities since they refer to concepts. I have assumed that they are semantically plural expressions like mass nouns. Crucially, they become countable if combined with a contracted form since the latter requires singular number. In the next example, the prepositional phrase can have either an adverbial meaning or an idiomatic meaning:

(7.65) *im Dunklen sitzen* (“in-DAT darkness sit”)

e.g. to sit in in the dark; to sit in one’s darkness

⁹Alternatively, the contracted forms can be interpreted as describing a relation between the subject and a location, i.e. between two individuals. However, the resulting meaning does not differ significantly to the one of event modifiers since the second argument has narrow scope with respect to the event, as well.

The proposed semantics predicts that darkness needs to be unique with respect to the event described.¹⁰ The translation would thus be:

(7.66) *Attila sitzt im Dunklen.* (“Attila sits in-DAT darkness – Attila is sitting in the dark.”)

(7.67) $[Dunkles]_{NP} = \lambda x[Dunkles_{+PL}(x)]$

(7.68) $[im[Dunklen]_{NP}]_{PPSitzten}]_{VP} = \lambda e, x[Sitzen(e, x) \wedge \exists y[Im(e, y) \wedge Dunkles(y) \wedge |Instance(y, Dunkles)| = 1]]$

A non-contracted form with an abstract noun, i.e. a nominalized adjective, can nevertheless be required, if the definite noun phrase refers to a discourse-old entity.¹¹ For example, in the next sentence several referents for darkness are contrasted:

(7.70) *Anna sitzt in dem_i Dunkeln (nicht in dem_j Dunkeln).* (“Anna sits in the-DAT darkness not in the darkness – Anna is sitting in this darkness (not in that darkness).”)

(7.71) $[[in[dem[Dunklen]_{NP}]_{DP}]_{PPSitzten}]_{VP} = \lambda e, x[Sitzen(e, x) \wedge [In(e, y_i) \wedge Dunkles(y_i) \wedge |Instance(y_i, Dunkles)| = 1]]$ where *i* is the index of a discourse-old entity in D.

¹⁰Note that the darkness could also be interpreted relationally with the idiomatic reading. Then it would be unique with respect to the subject.

¹¹Note that there is a structural difference between adjectives written with small or capitalised letters:

(7.69) *in dem allgemeinen* (“in the general one”):

$[in[dem[allgemeinen]_{AP}[e]_{NP}]_{DP}]_{PP}$

Note that the idiomatic reading is out, though. We will see that mass nouns require an inferable measurement unit which is usually situationally dependent. Hence, I will treat such examples when discussing hearer-old entities that are situationally unique.

In sum, we have seen examples with contracted forms and hearer-new entities where the latter must be unique with respect to the main clause event.

7.7.1.2 One individual per possessor (and event)

Assuming that relational nouns denote properties of individuals and describe a relation with another possessor individual, they are good candidates to appear with hearer-new entities which are inferable from relations to hearer-old entities. Syntactically, I have assumed that relational nouns have an implicit possessors (PRO) in the specifier of NP. The referential interpretation of these nouns results from control of PRO by another referential expression. With contracted forms PRO can be controlled, e.g., by the reflexive pronoun *sich* in:

- (7.72) *Anna_i hat sich_i PRO_i am Knie angehaut.*
 Anna has REFL at-DAT knee banged
 Anna hurt her knee.

The resulting reading is about one of Anna's knees. The semantic translation for relational nouns is exemplified below:

- (7.73) *Otto berührt Anna am Knie.* (“Otto touches Anna on-DAT knee – Otto touches Anna's knee.”)

- (7.74) $[am[PRO[Knie]_N]_{NP}]_{PP} =$
 $\lambda e, x \exists y [Am(e, y) \wedge Knie(y, x) \wedge |Instance(y, Knie)| = 1]$

$$(7.75) [Anna_i[am[PRO_i[Knie]_N]_{NP}]_{PP}berühren]_{vP} =$$

$$\lambda e, x[Anna_{-PL}(z_i) \wedge Berühren(e, x, z_i) \wedge \exists y[Am(e, y) \wedge Knie(y, z_i) \wedge$$

$$|Instance(y, Knie)| = 1] \text{ where } i \text{ is the index of a hearer-old entity.}$$

Non-contracted forms, in contrast, require unique reference and discourse-old entities which yields a an extrinsic interpretation of the possessor of the inalienable noun. Still, a non-contracted form with relational nouns can be interpreted in a contrastive manner, e.g. if several heads of one possessor are being compared. In the latter case, I assume that PRO is

$$(7.76) ??Otto berührt Anna an dem Knie. (“Otto touches Anna on$$

$$\text{the-DAT knee – Otto touches Anna on the knee.”)}$$

$$(7.77) [an[dem_i[PRO_i[Knie]_N]_{NP}]_{DP}]_{PP} =$$

$$\lambda e[An(e, y_i) \wedge Knie(y_i, z_i) \wedge |Instance(y_i, Knie)| = 1] \text{ where } i \text{ is the}$$

$$\text{index of a discourse-old referent in D (and } y \text{ is part of } z).$$

$$(7.78) [Anna_j[an[dem_i[PRO_i[Knie]_N]_{NP}]_{DP}]_{PP}]_{VP} =$$

$$\lambda e, x[Anna_{-PL}(z_j) \wedge Berühren(e, x, z_j) \wedge [An(e, y_i) \wedge Knie(y_i, z_i) \wedge$$

$$|Instance(y_i, Knie)| = 1] \text{ where } i \text{ is the index of a hearer-old entity.}$$

Since Anna cannot be co-indexed with PRO the inalienable reading is not available with the non-contracted form.

Abstract nouns have hearer-old entities because they refer to concepts which are globally known. If they occur with contracted forms, though, they also need to be unique with respect to a related individual:

$$(7.79) \text{ zur Verantwortung ziehen (“to-DAT responsibility draw”)}$$

$$\text{i.e. to cause someone to have her/his responsibility.}$$

In sum, we have seen examples with contracted forms and hearer-new entities where the latter must be unique with respect to another individual and the event.

7.7.1.3 Nominalized infinitives

For nominalized infinitives I propose that they denote properties of events and that contracted forms describe a temporal (or causal) relation between two events. The second event argument of the relation described by the contracted form is semantically incorporated by the preposition. For example:

(7.80) *Babo schnarcht beim Schlafen.* (“Babo snores at-DAT sleeping. – Babo snores while sleeping.”)

(7.81) $[beim[Schlafen]_{NP}]_{PP} := \lambda e \exists e' [Beim(e, e') \wedge Schlafen(e') \wedge |Instance(e', Schlafen)| = 1]$

(7.82) $[[beim[Schlafen]_{NP}]_{PP} schnarchen]_{VP} = \lambda e, x [Schnarchen(e, x) \wedge \exists e' [Beim(e, e') \wedge Schnarchen(e') \wedge |Instance(e', Schnarchen)| = 1]]$
where $[e \subseteq e']$

In addition, the felicitous use of *beim* requires temporal simultaneity of the event denoted by the main clause e and some event e' such that $\exists e \exists e' [P(e) \subseteq Q(e')]$. For example:

(7.83) *Babo schnarcht beim Schlafen* (“Babo snores at-DAT sleeping”):
Is true if “Babo snores” is an event e and e is part of the event e' “Babo sleeps”.

In a similar vein, Engelberg (2003) argues while discussing the difference between *am/beim*-PPs that both “contribute to the aspectual and

temporal structure of the overall proposition” (ibid., p.1), and in this sense, predicate over events. He discusses mainly the question whether these PPs are syntactical arguments or adjuncts. While *am* (“on-DAT”) with nominalized infinitives behaves like a PP argument, *beim* (at-DAT) appears with PP adjuncts. Engelberg assumes that both PP constructions allow the incorporation of a non-referential object into the verb, the agent of the event:

“ the identification of the agent of the NI in predicative or object-internal position is a matter of context. That it is predominantly the subject of the matrix sentence that is interpreted as the agent of the *beim*-phrase is primarily due to the fact that it is a particularly salient candidate for the agent role of the NI. (ibid., p.10)”

The fact that the implicit subject need is not referential but requires a referential anchor explains why we find ambiguities of agent-hood as in:

(7.84) $Anna_i$ sieht $Otto_j$ beim $PRO_{i/j}$ Schwimmen. (“Anna sees Otto at-DAT swim”)

Reading: Anna sees Otto while he is swimming.

Reading: Anna sees Otto while she is swimming.

In contrast, we don’t find this form of ambiguity with non-contracted forms and nominalized infinitives:

(7.85) $Anna_i$ sieht $Otto_j$ bei dem_k $PRO_{k/*i/*j}$ Schwimmen. (“Anna sees Otto at the-DAT swim”)

Reading: Anna sees Otto during this swimming event.

*Reading: Anna sees Otto while he is swimming.

*Reading: Anna sees Otto while she is swimming.

What follows is that with contracted forms we have a relation between two events with possibly two different subjects. With non-contracted forms only an extrinsic interpretation of the subject is possible since the definite noun phrase introduced its own index to a discourse-old “eventive” referent.

7.7.1.4 Superlative modifiers

Superlative adjectives can be used with hearer-new entities, as in:

(7.86) *Anna will den teuersten Plattenspieler.*

“Anna wants to have the most expensive turntable.”

Contracted forms occur obligatorily with superlative modifiers and ordinals. I propose that this comes from the built-in uniqueness of these expressions which is compatible with the singular number requirement of the contracted form. Consider:

$$(7.87) \text{ [zur[besten]}_{AP}[\text{Mutter}]_{NP}]_{PP} = \\ \lambda z \exists y [Zur(z, y) \wedge Beste(y) \wedge MutteInstance(y) \wedge \\ |Instance(y, Mutter)| = 1 \wedge \forall x [x \ni \\ [Beste(y) \cap MutteInstance(y)]](w) \rightarrow x \leq y]]$$

The semantics for the superlative adjective has been adapted from the semantics proposed by McNally (2007) for the English DP-internal modifier “only”, i.e.:

$$(7.88) [[only(NP)(w)]] = x | x \in [[NP]](w) \wedge \forall x' [x' \ni [[NP]](w) \rightarrow x' \leq x]$$

McNally points out that “only” presupposes uniqueness of the NP rather than familiarity:

“The effect of *only* is to guarantee the uniqueness of the extension of the NP in the relevant possible world, much as the definite article does, but without the familiarity presupposition typically manifest in definites.[...] Unlike the definite article, *only* is blocked when the uniqueness of the extension of the NP could never be at issue in any possible world, presumably because *only* would never be able to contribute anything in such cases.” McNally (2007, p.5)

Phrases like “the only mother”, “the only largest number”, or “the only even prime number” have an odd reading because they “imply that it is at issue whether there exist two or more mothers [...], indicating that in at least one (counterfactual) possible world, the extensions of the relevant NPs are not singleton sets” (ibid.). This is also true for phrases with superlative adjectives.

In this vein, we observe that non-contracted forms get an odd reading with alternative-excluding modifiers:

(7.89) ??*zu der besten Mutter der Welt* (“to the-DAT best mother the-GEN world – to this best mother of the world”)

(7.90) $[zu[der[besten]_{AP}[Mutter]_{NP}]_{DP}]_{PP} =$
 $\lambda z[Zu(z, y_i) \wedge Beste(y_i) \wedge MutteInstance(y_i) \wedge$
 $|Instance(y_i, Mutter)| = 1 \wedge \forall x[x \ni$
 $[Beste(y_i) \wedge MutteInstance(y_i)]](w) \rightarrow x \leq y_i]]$ and i is the index of a discourse-old referent in D .

However, whenever reference to a discourse-old entity is intended, e.g. in order to contrast several instances of best mothers, the non-contracted form becomes obligatory.

7.7.2 Hearer-old entities

Contracted forms are obligatory with hearer-old entities like proper nouns and nouns that refer to situationally unique individuals. I propose, and similarly to superlative modifiers, that this stems from the inherent uniqueness of such noun phrases. Since proper nouns denote properties of singular objects they are compatible with contracted forms which instantiate a singular individual.

7.7.2.1 Proper nouns

Assuming that proper nouns refer to particular individuals independently of the situation, I have assumed that denote properties of singular objects. In Standard German, only proper nouns that require a definite article with singular number occur with contracted forms. For example:

(7.91) *Otto fährt zum Bodensee.* (“Otto drives to-DAT
Lake-Constance.”)

(7.92) $[[Bodensee]_N]_{NP} = [Bodensee_{-PL}(x)]$

(7.93) $[zum[Bodensee]_{NP}]_{PP} = \lambda e \exists x [Zum(e, x) \wedge Bodensee_{-PL}(x) \wedge$
 $|Instance(x, Bodensee_{-PL})| = 1]$

However, with a non-contracted form the same sentence is contradictory although the proper noun applies only to singular objects and has unique reference. However, since discourse-old entities require anaphoricity, and since anaphoricity is necessary whenever a unique referent cannot be retrieved easily, the non-contracted form yields a contradictory meaning:

(7.94) *?*Otto fährt zu dem Bodensee.* (“Otto drives to the-DAT Lake-Constance.”)

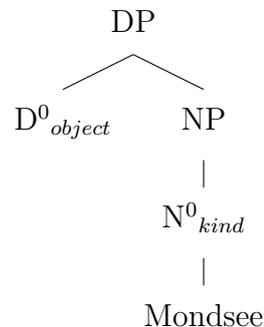
(7.95) $[Bodensee]_{NP} = \lambda x[Bodensee_{-PL}(x)]$

(7.96) $[zu[dem[Bodensee]_{NP}]_{DP}]_{PP} =$
 $\lambda e[Zum(e, x_i) \wedge Bodensee_{-PL}(x_i) \wedge |Instance(x_i, Bodensee_{-PL})| = 1]$
 where i is the index of a discourse-old referent in D .

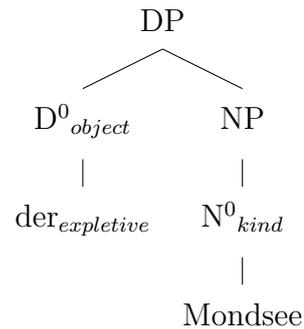
Since co-indexation with discourse-old referents implies that there are other objects at issue for which the NP property *Bodensee* holds, its uniqueness is not implicated anymore.

Longobardi (2005) has proposed that definite noun phrases and proper names always establish object reference, while bare nominals have kind reference (cf. also Longobardi (1994), and Longobardi (2001)). Basically, Longobardi assumes two types of individuals, namely kinds and objects, in the same vein as Carlson (1977) did. Longobardi proposes that kind-reference is established at the NP level and object-reference at the DP level. The question arises then why some proper nouns require definite articles and others do not. Longobardi assumes that the definite article of proper-like nouns is in fact expletive. For German definite and bare proper nouns, this would yield the following syntax and readings:

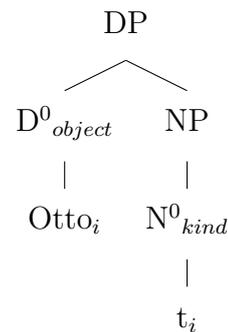
(7.97) *Kind/*Object-referential reading:



(7.98) *Kind/Object-referential reading:



(7.99) *Kind/Object-referential reading:



Definite proper nouns are, under this view, common nouns which have object reference and an expletive definite determiner. Bare proper nouns, in contrast, have to move into DP in order to have object reference (N-to-D raising).

Longobardi (2005) suggests that “at least one subcase of what we identify as the expletive article introducing proper names surfaces as morphologically distinct from the regular definite article” (ibid., p.30). The distinction between kind- and object-naming items could be mirrored in the distribution of two distinct definite articles, e.g., in the Frisian dialect (cf. Ebert (1970)). While the weak definite or A-article is some sort of dummy or expletive, the strong or D-article is not. However, the A-article is not only used with proper names but has a wider distribution, which is why I will not further discuss Longobardi’s account.¹²

¹²Similarly, Longobardi mentions the Catalan article “en/na” which differ from the regular definite articles “el/la”. Note that “en/na” are only used before proper nouns

7.7.2.2 Proper-like nouns (*Situative Unika*)

Common nouns can be used as proper-like nouns, as has been noted by Longobardi (2005). They may be used to refer to situationally unique individuals like “house”, “mother”, and “bakery” are unique in a “small” situation. Other proper-like nouns are “president” and “pope” which are unique in a “big” situation. What matters is that the hearer knows that the NP property holds for exactly one individual in a situation. In a sense, these nouns denote properties with -PL marking in a given domain. Crucially, these nouns usually yield ambiguous readings and can only be desambiguated by the speech situation or from knowledge about well-established meanings. For example, *zur Schule gehen* (“to-DAT school go – to go to school”) has a well-established meaning in which *Schule* does not refer to a specific nor situationally unique school and is hence hearer-new.

Note that mass nouns also occur with contracted forms but are then interpreted as count nouns. The next sentence illustrates how a mass noun like *Wasser* (“water”) can be used as referring to a situationally unique individual with contracted forms:

(7.100) *Otto und Anna sind am Mondsee. Otto liegt am Strand, Anna schwimmt im Wasser.*

(“Otto and Anna are at-DAT Mondsee Otto lies on-DAT beach
Anna swims in-DAT water”)

“Otto and Anna are on the lake Mondsee. Otto is lying on the
beach, Anna is swimming in the water.”

(7.101) $[Wasser]_{NP} = \lambda x[Wasser_{+PL}(x)]$

of persons and that they derived from the honorific titles “don/doña”.

(7.102) $[im[Wasser]_{NP}]_{PP} =$
 $\lambda e \exists x [Im(e, x) \wedge Wasser_K(x) \wedge |Instance(x, Wasser_{+PL})| = 1]$ Add
 inferable measure unit from context so that $Wasser_{+PL}$ becomes
 $Wasser$

(7.103) $[Anna[im[Wasser]_{NP}]_{PP}schwimmen]_{VP} =$
 $\lambda e, y [Anna_O(y) \wedge Schwimmen(e, y) \wedge \exists x [Im(e, x) \wedge Wasser(x) \wedge$
 $|Instance(x, Wasser)| = 1]$

The mass noun *Wasser* requires a non-mass reading since the inflected preposition requires that its nominal complement is marked for singular number. The measure unit of the substance must be inferable from the situation described. Therefore they pattern with proper-like nouns and situationally unique individuals.

7.8 Summary

In this proposal, contracted forms are treated as inflected prepositions which semantically incorporate an event or individual argument and whose inflection requires that the description of the NP holds for a singleton set, i.e. for a singular event or individual.

Chapter 8

Conclusions

In this work, I have discussed the distribution and interpretative differences between contracted and non-contracted forms found in German. We have seen that non-contracted forms, which are prepositions followed by a definite article, are more restricted in their distribution than “regular” definite articles. and mainly used for anaphoric and endophoric uses, and to some extent to inferable referents if these are associated to discourse-old referents. Contracted form are obligatory in contexts in which the descriptive content of the noun fits only one individual, which holds commonly for “alternative-excluding” expressions, but also for individuals that can be uniquely inferred from a particular situation or from the relation with another individual. However, contraction is also obligatory with small clause events expressed by nominalized infinitives and in general for non-specific expressions.

This complementary distribution has been related to the existence of two morphologically distinct definite articles found in non-Standard German, which pattern with semantically unique definite nouns, on the one hand, and pragmatically familiar definite nouns, on the other hand.

We have seen that most accounts that have dealt with contracted forms assume an underlying definite article which has amalgamated with a preposition. In the proposal I have argued that non-contracted forms are anaphoric expressions that require a discourse-old referent and as such contrast with non-anaphoric contracted forms. I have analysed contracted forms as semantically incorporating prepositions, which are inflected for singular number, gender, and case, and which combine with bare noun phrases. In a sense, there is also an analogy to reduced forms of the definite article found in non-Standard German: While with reduced definite articles the inflectional ending attaches to the immediately preceding func-

tional head of a determiner phrase, the inflectional ending of contracted forms adjoin to the functional head of a prepositional phrase. Uniqueness effects with contracted forms are, under the analyses presented, derived from the singular inflection found on the preposition and from contextual entailments. Hence, the non-specific interpretation of referents with contracted forms can directly be accounted for since the semantics predicts narrow scope of the nominal argument with respect to the event argument.

Bibliography

- Barbara Abbott. Definiteness and identification in english. In Nemeth T. Eniko, editor, *Pragmatics in 2000: Selected papers from the 7th International Pragmatics Conference*, volume 2, pages 1–15, Antwerpen, 2000a. International Pragmatics Association.
- Barbara Abbott. Attributive, referential, de dicto and de re. [semantic-sarchive.net], December 2000b.
- Barbara Abbott. Definiteness and indefiniteness. In Laurence R. Horn and Gregory Ward, editors, *Handbook of Pragmatics*, pages 122–149. Oxford, 2003.
- Barbara Abbott. Support for a unique theory of definite descriptions. In *Proceedings from Semantics and Linguistic Theory, SALT IX*, pages 1–15, Ithaka, NY, 1999. CLC Publications.
- Steven Abney. *The Noun Phrase in Its Sentential Aspect*. PhD thesis, MIT, Cambridge, MA, 1987.
- Mira Ariel. Referring and accessibility. *Journal of Linguistics*, 24:65–87, 1988.
- Emmon Bach. *Introduction to Transformational Grammar*. Holt, Rinehart and Winston, New York [e.a.], 1974.

- Chris Barker. Possessive weak definites. In Ji Yung Kim, Yury Lander, and Barbara Partee, editors, *Possessives and Beyond: Semantics and Syntax*. GLSA Publications, in press.
- Chris Barker. *Possessive Descriptions*. CSLI, Stanford, 1995.
- Otto Behagel. *Deutsche Syntax*. Heidelberg, 1923.
- Franco Benucci. Prepositional particles and the portuguese personal infinitive. In *University of Venice Working Papers in Linguistic, CLI*, volume I:8, 1992.
- Betty Birner and Gregory Ward. Uniqueness, familiarity, and the definite article in english. In *Proceedings of the 20th annual meeting of the Berkeley Linguistics Society (BLS 20)*, pages 93–102, Berkeley, CA, 1994. Berkeley Linguistics Society.
- Wilhelm Braune. *Althochdeutsche Grammatik*. Max Niemeyer, Tübingen, 13 edition, 1975.
- M. Brown. On denoting' updated. *Acta Analytica*, 8:7–32, 1992.
- Gerhard Brugger and Martin Prinzhorn. Some properties of German determiners. ms., 1996.
- Richard Campbell. Specificity operators in SpecDP. *Studia Linguistica*, 50(2):162–188, 1996.
- G. Carlson, R. Sussman, N. Klein, and M. Tanenhaus. Weak definite noun phrases. In Christopher Davis, Amy Rose Deal, and Youri Zabbal, editors, *NELS-36, Proceedings of the 36th Annual Meeting of the North East Linguistic Society*, Amherst, MA., 2006. GLSA.

- Greg Carlson and Rachel Sussman. Seemingly indefinite definites. In S. Kespap and M. Reis, editors, *Empirical, Theoretical, and Computational perspectives*. Mouton de Gruyter, 2004.
- Gregory Carlson. Reference to kinds in english. *Ph.D. Dissertation, University of Massachusetts, Amherst*, 1977.
- Noam Chomsky. *Barriers*, volume 13 of *Linguistic Inquiry Monograph*. MIT Press, Cambridge, MA, 1986.
- Paul Christophersen. *The Articles: A Study of Their Theory and Use in English*. Oxford University Press. Munksgaard, Copenhagen, 1939.
- Sandra Chung and William Ladusaw. *Restriction and Saturation*. MIT Press, Cambridge, MA, 2004.
- Maria Cieschinger. Constraints on the contraction of preposition and definite article in German. Master's thesis, Institute of Cognitive Science, Universität Osnabrück, 2006.
- H.H. Clark. Bridging. In Johnson-Laird and Wason, editors, *Thinking: Readings in Cognitive Science*. Cambridge University Press, Cambridge, 1977.
- Donald Davidson. The logical form of action sentences. *The Logic of Decision and Action, Nicholas Rescher, ed., Pittsburgh, PA: The University of Pittsburgh Press*, pages 81–95, 1967.
- Veneeta Dayal. Bare NPs, reference to kinds and incorporation. In *Proceedings of SALT IX*, 1999.

- Helga H. Delisle. Communicative function of contracted prepositional forms in German. *The Modern Language Journal*, 72:277–282, Autumn 1988.
- U. Demske. *Merkmale und Relationen. Diachrone Studien zur Nominalphrase des Deutschen*. de Gruyter, Berlin, New York, 2001.
- Keith Donnellan. Reference and definite descriptions. *Philosophical Review* [Reprinted in *Semantics*, Cambridge University Press, 1971], 75:281–304, 1966.
- John W. Du Bois. Beyond definiteness: The trace of identity in discourse. In L. Chafe Wallace, editor, *The pear stories: Cognitive, cultural, and linguistic aspects of narrative production*, pages 203–274. Ablex, Norwood, NJ, 1980.
- Karen H. Ebert. *Referenz, Sprechsituation und die bestimmten Artikel in einem nordfriesischen Dialekt: Fering*. Number 4 in *Studien und Materialien*. Nordfrisk institut, Brist/Bredstedt, 1970.
- Murvet Enc. The semantics of specificity. *Linguistic Inquiry* 22, 1–25, 1991.
- Stefan Engelberg. The structural ambiguity of pps containing nominalized infinitives. In *Proceedings of the 2003 Conference of the Australian Linguistic Society*, 2003.
- Richard Epstein. The definite article, accessibility, and the construction of discourse referents. *Cognitive Linguistics*, 12(4):333–378, 2002.
- Richard Epstein. Roles and non-unique definites. In *Proceedings of the 25th*

- annual meeting of the Berkeley Linguistics Society (BLS 20)*, Berkeley, CA, 1999. Berkeley Linguistics Society, 25.
- M. Teresa Espinal and Jaume Mateu. Argument structure and compositionality in idiomatic constructions. *The Linguistic Review*, 24(1):33–59, 2007.
- Donka F. Farkas and Henriette de Swart. The semantics of incorporation. from argument structure to discourse transparency. *Stanford Monographs in Linguistics*, 2003.
- Robert Fiengo and J. Higginbotham. Opacity in np. *Linguistic Analysis*, 7:347–373, 1981.
- Veerle Van Geenhoven. Raised possessors and noun incorporation in west greenlandic. *Natural Language and Linguistic Theory*, 2002.
- Talmy Givon. *Syntax: A Functional Typological Introduction*, volume I. John Benjamins, Amsterdam, Philadelphia, 1984.
- Joseph H. Greenberg, C. A. Ferguson, and E. A. Moravcsik, editors. *Universals of Human Language*, volume 3. Stanford University Press, Stanford, CA, 1978.
- H. Paul Grice. Logic and conversation. In Peter Cole and Jerry L. Morgan, editors, *Syntax and Semantics*, volume 3 of *Speech acts*, pages 41–58, New York, 1975. Academic Press.
- Jeanette K. Gundel, Nancy Hedberg, and Ron Zacharski. Cognitive status and the form of referring expressions in discourse. *Language*, 69(2):274–307, June 1993.

Hartmut Haberland. Zum Problem der Verschmelzung von Präposition und bestimmtem Artikel im Deutschen. *Osnabrücker Beiträge zur Sprachtheorie*, 30:82–106, 1985.

Dietrich Hartmann. Verschmelzungen als Varianten des bestimmten Artikels? Zur Semantik von Äusserungen mit präpositionalen Gefügen im Deutschen. In Dietrich Hartmann, Hansjürgen Linke, and Otto Ludwig, editors, *Sprache in Gegenwart und Geschichte: Festschrift für Heinrich Matthias Heinrichs zum 65. Geburtstag*, pages 68–81. Böhlau, Köln/Wien, 1978.

Dietrich Hartmann. Über verschmelzungen von präposition und bestimmtem artikel: Untersuchungen zu ihrer form und funktion in gesprochenen und geschriebenen Varietäten des heutigen Deutschtion in gesprochenen und geschriebenen varietäten des heutigen deutsch. *Zeitschrift für Dialektologie und Linguistik*, 47:160–183, 1980.

Dietrich Hartmann. Deixis and anaphora in German dialects. In Jürgen Weissenborn and Wolfgang Klein, editors, *Here and There. Cross-Linguistic Studies on Deixis and Demonstration*, volume 3:2-3 of *Pragmatics and Beyond*, pages 187–207. John Benjamins Publishing Company, Amsterdam, 1982.

Susan E. Haviland and Herbert H. Clark. What's new? acquiring new information as a process in comprehension. *Journal of Verbal Learning and Verbal Behavior*, 13:5:512–521, 1974.

John A. Hawkins. *Definiteness and Indefiniteness*. Croom Helm, London, 1978.

- John A. Hawkins. On (in)definite articles: Implicatures and (un)grammaticality prediction. *Journal of Linguistics*, 27:405–442, 1991.
- Irene Heim. The semantics of definite and indefinite noun phrases. *Ph.D. thesis, University of Massachusetts, Amherst.*, 1982.
- Heinrich Matthias Heinrichs. *Studien zum bestimmten Artikel in den germanischen Sprachen*. Wilhelm Schmitz Verlag, Giessen, 1954.
- Erhard Hinrichs. Verschmelzungsformen in German: a GPSG analysis. *Linguistics*, 24(5):939–955, 1986.
- Erhard W. Hinrichs. Attachment of articles and prepositions in German: Simple cliticization or inflected prepositions. *Papers on Morphology. The Ohio State University Working Papers in Linguistics*, 29:127–138, 1984.
- Roland Hinterhölzl. The role of information structure in word order variation and word order change. In R. Hinterhölzl and S. Petrova, editors, *New Approaches to Word Order Variation and Word Order Change*. de Gruyter, Berlin, to appear.
- Anders Holmberg. On the structure of predicate NP. *Studia Linguistica*, 47(2):126–138, 1993.
- Ray S. Jackendoff. *X' syntax: A study of phrase structure*. Cambridge, Mass.: MIT Press, 1977.
- Gundel K. Jeanette. Relevance theory meets the givenness hierarchy. In Thorstein Fretheim and Jeanette K. Gundel, editors, *Reference and Referent Accessibility*. John Benjamins, 1996.

- Paivi Juvonen. *Grammaticalizing the definite article. A study of definite adnominal determiners in a genre of spoken Finnish*. PhD thesis, Department of Linguistics, Stockholm university, 2000.
- Barics Kabak and René Schiering. The phonology and morphology of function word contractions in German. *Journal of Comparative Germanic Linguistics*, 9:53–99, 2006.
- Nirit Kadmon. *On unique and non-unique reference and asymmetric quantification*. PhD thesis, University of Massachusetts, Amherst, MA, 1987.
- Nirit Kadmon. Uniqueness. *Linguistics and Philosophy*, 13:273–324, 1990.
- Hans Kamp. A theory of truth and semantic representation. *J. Groenendijk, T. Janssen, and M. Stokhof, editors, Formal Methods in the Study of Language: Part 1*, pages 277–322, 1981.
- David Kaplan. Dthat. In Peter Cole, editor, *Syntax and Semantics*, volume 9 [Pragmatics], pages 221–243. Academic Press, New York, 1978.
- Manfred Krifka. Focus, Topik, syntaktische Struktur und semantische Interpretation. Ms., München, 1984.
- Saul Kripke. Speaker’s reference and semantic reference. In Peter A. French, Theodore E. Uehling, and Howard K. Wettstein, editors, *Midwest Studies in Philosophy*, volume II: Studies in the philosophy of language, pages 255–276. University of Minnesota, Morris, MN, 1977.
- Saul Kripke. Naming and necessity. In D. Davidson and G. Harman, editors, *Semantics of Natural Language*. Reidel, Dordrecht, Boston, 1980.

- Ritva Laury. *The emergence of a definite article in Finnish*. Number 7 in *Studies in discourse and grammar*. John Benjamins, Amsterdam, Philadelphia, 1997.
- Christian Lehmann. *Thoughts on grammaticalization*. Number 9 in *Arbeitspapiere des Seminars für Sprachwissenschaft der Universität Erfurt*. Seminar für Sprachwissenschaft, Erfurt, 2 edition, July 2002.
- Dmitry Levinson. Definiteness of noun phrases with body part terms. qualifying paper, 2005.
- Dmitry Levinson. Gradual uniqueness effect in non-unique definite noun phrases. In *LSA Annual meeting*, 2006.
- Godehard Link. The logical analysis of plural and mass nouns: A lattice theoretic approach. in *R. Bauerle, C. Schwarze and A. von Stechow (eds.), Meaning, Use and Interpretation of Language, Berlin: de Gruyter*, pages 302–323, 1983.
- Sebastian Löbner. Definites. *Journal of Semantics*, 4:279–326, 1985.
- Giuseppe Longobardi. How comparative is semantics? A unified parametric theory of bare nouns and proper names. *Natural Language Semantics*, 9:335–369, 2001.
- Giuseppe Longobardi. Toward a unified grammar of reference. *Zeitschrift für Sprachwissenschaft*, 24(544):5–44, 2005.
- Giuseppe Longobardi. Reference and proper names: A theory of N-movement in syntax and logical form. *Linguistic Inquiry*, 25:609–665, 1994.

- Christopher Lyons. *Definiteness*. Cambridge University Press, 1999.
- Louise McNally. DP-internal only, amount relatives, and relatives out of existentials. *Linguistic Inquiry*, 39:161–169, 2007. squib.
- Donna Jo Napoli and Joel Nevis. Inflected prepositions in Italian. *Phonology Yearbook*, 4:195–209, 1987.
- Stephen Neale. *Descriptions*. MIT Press, Cambridge, MA, 1990.
- Damaris Nübling. *Historische Sprachwissenschaft des Deutschen*. Narr, Tübingen, 2006.
- Damaris Nübling. *Klitika im Deutschen*. Narr, Tübingen, 1992.
- Damaris Nübling. Wann werden die deutschen Präpositionen flektieren? grammatisierungswege zur Flexion. In Ray Fabri, Albert Ortman, and Teresa Parodi, editors, *Models of Inflection*, pages 266–289. Niemeyer, Tübingen, 1998.
- Massimo Poesio. Weak definites. In Mandy Harvey and Lynn Santelmann, editors, *Proceedings from Semantics and Linguistic Theory*, volume IV, pages 282–299, Ithaca, NY, 1994. Cornell University.
- Massimo Poesio and Renata Vieira. A corpus-based investigation of definite description use. *Computational Linguistics*, 24(2):183–216, June 1998.
- Ellen Prince. The ZPG letter: subjects, definiteness, and information-status. In S. Thompson and W. Mann, editors, *Discourse description: diverse analyses of a fund raising text*, pages 295–325. John Benjamins, Philadelphia, Amsterdam, 1992.

- Ellen F. Prince. Toward a taxonomy of given-new information. In Peter Cole, editor, *Radical pragmatics*, pages 233–255. Academic Press, New York, 1981.
- Ellen F. Prince. On kind-sentences, resumptive pronouns, and relative clauses. In G. Guy, J. Baugh, and D. Schiffrin, editors, *Towards a social science of language - a festschrift for William Labov*, pages 223–235. Cambridge University Press, 1995.
- Michael Prinz. *Klitisierung im Deutschen und Neugriechischen: Eine lexikalisch-phonologische Studie*. Niemeyer, Tübingen, 1991.
- Craig Roberts. Uniqueness in definite noun phrases. *Linguistics and Philosophy*, 26:287–350, 2003.
- Craig Roberts. Demonstratives as definites. In *presented at Mapping the Semantics-Pragmatics Boundary: Context- Dependence*, at Cornell University, March 1999.
- Bertrand Russell. On denoting. *Mind*, 14:479–493, 1905.
- Sybille Schaub. Verschmelzungsformen von Präpositionen und Formen des bestimmten Artikels. In Heinz Vater, editor, *Phonologische Probleme des Deutschen*, pages 63–96. Narr, Tübingen, 1979.
- Hannes Scheutz. Determinantien und Definitheitsarten im Bairischen und Standarddeutschen. *Festschrift fuer Ingo Reifenstein*, 1988.
- Josef Schiepek. Der Satzbau der Egerländer Mundart. (1. part: 1899), Prag, 1908.

- René Schiering. Klitisierung von Pronomina und Artikelformen: Eine empirische Untersuchung am Beispiel des Ruhrdeutschen. Arbeitspapier 44, Institut für Sprachwissenschaft, Universität zu Köln, 2002.
- René Schiering. Von der Dokumentation zur grammatischen beschreibung: Ruhrdeutsche Präpositionalphrasen. In *Beschreibung und Modellierung grammatischer Variation, 24.02.2006, Universität Bielefeld (DGfS 2006, AG7)*, 2006a.
- Rene Schiering. *Cliticization and the Evolution of Morphology: A Cross-linguistic Study on Phonology in Grammaticalization*. PhD thesis, Universität Konstanz, Fachbereich Sprachwissenschaft, 2006b.
- Viola Schmitt. *Hessische Relativsätze*. PhD thesis, Universität Wien, 2007.
- Beate Scholten. *Standard und städtischer Substandard bei Heranwachsenden im Ruhrgebiet*. PhD thesis, Tübingen, 1988.
- Mauriz Schuster and Hans Schikola. *Sprachlehre der Wiener Mundart*. Österreichischer Bundesverlag, Wien, 1984.
- Magdalena Schwager. (Non-)functional concepts: Definite articles in Bavarian. Talk presented at the 8th Szklarska Poreba Workshop, Feb 23-25, February 2007.
- Florian Schwarz. A morphological distinction between bound and free definites. In *Poster presented at the OSU workshop on Presupposition Accommodation*, 2006.
- Florian Schwarz. Bridging with two types of definites in German - relational anaphora and situational uniqueness. UCSC, January 9th 2008.

- Adam Sennet. An ambiguity test for definite descriptions. *Philosophical Studies*, 111:81–95, 2002.
- Richard Sharvy. A more general theory of definite descriptions. *Philosophical Review*, 89:607–624, 1980.
- Dan Sperber and Deirdre Wilson. *Relevance: Communication and cognition*. Blackwell, Oxford, 1995.
- Dominique Sportiche. Sketch of a reductionist approach to syntactic variation and dependencies. In H. Campos and P. Kempchinsky, editors, *Evolution and Revolution in Linguistic Theory: Essays in Honor of Carlos Otero*, pages 356–398. Georgetown University Press, Washington, 1995.
- J. Stanley and T. Williamson. Quantifiers and context-dependence. *Analysis*, 55:291–5, 1995.
- Thomas Stolz. Flexion und Adpositionen, flektierte Adpositionen, adpositionelle Flexion. *Zeitschrift für Phonetik, Sprachwissenschaft, und Kommunikationsforschung*, 3:334–354, 1990.
- Peter F. Strawson. On referring. *Mind*, 59:320–344, 1950.
- Rebekka Studler. Zur Syntax und Semantik der DP im Schweizerdeutschen. Master's thesis, Universität Zürich, Deutsches Seminar, 2001.
- Laurel Smith Stvan. *The Semantics and Pragmatics of Bare Singular Noun Phrases*. PhD thesis, Northwestern University, Evanston, Illinois, December 1998.
- Zoltán Gendler Szabó. Descriptions and uniqueness. *Philosophical Studies*, pages 29–57, 2000.

- Ianthi-Maria Tsimpli. Determiners and clitics in Greek. *Working Papers in Theoretical and Applied Linguistics*, 6:189–208, 1999.
- Jeroen van Craenenbroeck and Marjo van Koppen. Merge versus long distance agree: the case of complementizer agreement. Talk presented at the 25th GLOW in Amsterdam and Utrecht, April 2002.
- Veerle Van Geenhoven. *Semantic Incorporation and Indefinite Descriptions. Semantic and Syntactic Aspects of Noun Incorporation in West Greenlandic*. PhD thesis, Universitat Tübingen, 1996 (published in Stanford: CSLI Publications, 1998).
- Henk van Riemsdijk. Head movement and adjacency. *Natural Language and Linguistic Theory*, 16:633–678, 1998.
- Heinz Vater. *Das System der Artikelformen im gegenwärtigen Deutsch*. Niemeyer, Tübingen, 1963.
- Heinz Vater. Determinantien und Quantoren im Deutschen. *Zeitschrift für Sprachwissenschaft*, 3:19–42, 1984.
- Enriqueta Pérez Vázquez. A mixed extended projection: The nominalized infinitive in Spanish and Italian. Revised version of published paper, 1999, 2002.
- Martin Volk. German prepositions and their kin. a survey with respect to the resolution of PP attachment ambiguities. Ms, 2003.
- Klaus von Stechow. Saliency and definiteness. *Prague Bulletin of Mathematical Linguistics*, 67, 1996.

- Chafe L. Wallace. Givenness, contrastiveness, definiteness, subjects and topics. In Charles N. Li, editor, *Subject and Topic*. Academic, New York, 1976.
- Gregory Ward and Betty Birner. Definiteness and the English existential. *Language*, 71(4):722–742, December 1995.
- Gregory Ward and Betty J. Birner. Response to Abbott. *Language*, 73: 109–112, 1997.
- Martina Wiltschko. On the internal and external syntax and semantics of (relative) pronouns. *Journal of Comparative Germanic Linguistics*, 2: 143–181, 1998.
- Arnold M. Zwicky and Geoffrey K. Pullum. Cliticization vs. inflection: English n't. *Language*, 59(3):502–513, September 1983.