

Weak definites and German preposition-determiner contractions*

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Preface

2

What has this talk got to do with Specificity?

It has been suggested (Quine 1960, Partee 1973) that specificity may be similar to, if not even the same, as referentiality.

It has also been proposed that specificity is not just the business of indefinites, but also of definites.

So perhaps I can contribute to the discussion on specificity by discussing some observations regarding definites and referentiality.

Carlson's Weak Definites

3

There is something of an ambiguity in the (a) sentences
that is missing in the (b) sentences

- (1) a. Mary went to the store.
b. Mary went to the desk.
- (2) a. I'll read the newspaper when I get home.
b. I'll read the book when I get home.
- (3) a. Open the window, will you please?
b. Open the cage, will you please?

Carlson et al. (2006)

Carlson's Weak Definites

4

VP anaphora as a test:

- (4) a'. Mary went to the store, and Alice did, too.
(not necessarily same store)
b'. Mary went to the desk, and Alice did, too.
(must be same desk)

The store has, next to its regular definite reading, a "weak
definite" reading,

while the desk has only the regular definite referential
reading.

Carlson's Weak Definites

5

Carlson et al. propose the following conditions for the availability of weak definite readings:

- (A) the NP is governed *by specific lexical items (verbs, prepositions)*
- (B) there is a lexical restriction as to the head noun
- (C) the noun must not be modified (exception: "affective" expressions)
- (D) semantic enrichment
- (E) truth-conditional similarity to indefinites

All of these characteristics are shared by bare singular NPs

Carlson's Weak Definites

6

Illustration of these characteristics:

- (A) the NP is governed *by specific lexical items (verbs, prepositions)*
 - (i) *Mary went to the store / went behind the store.*
 - (ii) *Mary closed the window / smashed the window.*
 - (iii) *Mary is in prison / *inside prison*
- (B) there is a lexical restriction as to the head noun
 - (i) *Mary listened to the radio / listened to the tape recorder.*
 - (ii) *Mary went to the doctor's / went to the health centre.*
 - (iii) *Mary is in prison / *in penitentiary*

Carlson's Weak Definites

Illustration of these characteristics:

7

- (C) the noun must not be modified
 - (i) *Mary listened to the new radio*
 - (ii) *Mary went to the doctor's on Elm Street.*
 - (iii) **Mary is in unpleasant prison*

- (E) semantic enrichment
 - (i) *Mary went to the store / desk.*
 - (ii) *Mary went to the cinema / building.*
 - (iii) *Mary went to prison.*

Carlson's Weak Definites

Illustration of these characteristics:

8

- (F) truth-conditional similarity to indefinites
 - (i) *Mary went to the / a store.*
 - (ii) *Mary went to the / a cinema.*
 - (iii) *Mary went to \emptyset / a prison.*

no enrichment for indefinites

Carlson's Weak Definites

9

A problem in understanding the behaviour of weak definites is that each definite NP in English that has a weak definite (WD) reading also has a regular definite (RD) reading.

The WD reading is generally blocked for formally definite NPs only when there is a parallel bare singular NP :

- (19) a. *Mary went to the prison.* (no WD reading)
b. *Mary went to prison.* (no RD reading)

Since there are heavy lexical restrictions on bare singulars, most definite NPs don't have a bare noun alternative though, and we generally have definite NPs that are ambiguous between an RD and a WD reading.

This makes it hard to check for the referential status of English WDs.

German Preposition-Article Contractions

10

German has, next to bare singulars, also a construction with a WD reading that is not nearly as restricted as bare singulars, and thus allows for additional observations.

Like English bare singulars German preposition-determiner contractions are limited to WD readings:

(21) *Maria ging {zu dem / zum} Supermarkt*
[Maria went to the supermarket]

(22) *Maria stand {an dem / am} Fenster*
[Maria was standing at the window]

(23) *Maria ging zu dem Supermarkt und Anna auch.*
(must be same supermarket)

(24) *Maria ging zum Supermarkt und Anna auch.*
(not necessarily same supermarket)

German Preposition-Article Contractions

11

In English the availability of bare singular forms blocks a WD reading for the corresponding regular definite NPs.

In German, the availability of contracted PPs (cPPs) blocks WD readings for the corresponding regular PPs (rPPs).

(21) *Maria ging {zu dem / zum} Supermarkt*
[Maria went to the supermarket]

(22) *Maria stand {an dem / am} Fenster*
[Maria was standing at the window]

The difference to English is that German cPPs are not lexically restricted by their nouns, but are generally available, at least for some prepositions and some cases.

German Preposition-Article Contractions - Lexical restrictions

12

In standard written German contractions of preposition and article are uncontroversially available for the dative singular in the masculine and neuter for the prepositions *an, bei, in, von, zu*:

am, beim, im, vom, zum

and for the dative singular feminine of *zu*:

zur.

Where contracted prepositional determiners are not available, German PPs do not differ from English PPs, neither in their syntax nor in their semantics.

German Preposition-Article Contractions - Lexical restrictions

13

In fast speech, and occasionally in writing, we find additional contractions, also in standard German (sometimes written with an apostrophe):

an's, auf's, durch's, für's, ins, über's, um's, vor's, hintern, übern, vorn, hintern, überm, vorm, ...

And there are many more contracted forms in non-standard varieties of German and in various German dialects.

In the following I will only look at *am, beim, im, vom, zum, zur*

Fast speech is a bit of a methodological problem, since intuitions about what sounds like a contracted form may be influenced by the perception of quickly spoken uncontracted forms.

German Preposition-Article Contractions - no anaphoric function

14

For German cPPs we can observe restrictions that do not show up for English definite NPs:

(31) *Am Ulmenweg ist ein neuer Supermarkt mit einer herrlichen Käsetheke. Warst du schon {bei dem / #beim / #einem} Supermarkt?*

(32) *There's a new supermarket on Elm Street with a great cheese counter. Have you already been to {the / #a} supermarket?*

Unlike the English or German rPP, the German WD cPP cannot function anaphorically, just like the indefinite NP can't. - This raises doubts as to the referential status of WDs, which did not come up with corresponding English observations.

German Preposition-Article Contractions

- hard to pick up by anaphors

15

If the cPP is not referential, it should not be able to establish discourse referents as easily as the rPP.

This seems to be true, certainly when we compare personal to demonstrative pronouns; the cPP behaves like the indefinite:

(33) *Ich wollte noch zu dem Supermarkt. {Der / Er} ist nur bis 7 geöffnet.*

(35) *I still wanted to go to the supermarket? It's only open till 7.*

(34) *Ich wollte noch {zum / einem} Supermarkt. {Der / ?#Er} ist nur bis 7 geöffnet.*

(36) *I still want to go to a supermarket? ?#It's only open till 7.*

No such restriction can be observed for English WDs, due to the WD/RD ambiguity of the English PP:

German Preposition-Article Contractions

- hard to modify

16

If WDs don't have the purpose of identifying referents, there is no reason why they should take modifiers whose purpose is to help identify referents.

Hence the oddity of (38) and (39):

(37) *Warst du zu dem Supermarkt, den ich empfohlen habe?*

(38) ??*Warst du zum Supermarkt, den ich empfohlen habe?*

(39) ??*Warst du zu einem Supermarkt, den ich empfohlen habe?*

(40) *Have you been to { the / ?a} supermarket that I suggested?*

There is no such problem visible in English – due to the ambiguity of the English PP.

German Preposition-Article Contractions

Hard to contrast

If WDs are not referential, then there should not be any referents¹⁷ that could be contrasted to alternative referents.

- (41) *Warst du schon zu dem Supermarkt? Der andere hat zu.*
(42) *Warst du schon zum Supermarkt? #Der andere hat zu.*
(43) *Warst du schon zu einem Supermarkt? #Der andere hat zu.*
- (44) *Have you already been to the supermarket? The other one is shut.*
(45) *Have you already been to a supermarket? #The other one is shut.*

The discourse in (41)/(44) is fine if a particular supermarket was previously introduced or can be accommodated, but the cPP in (42) does not seem to work well for the contrast, while the English definite behaves just like the definite in (41).

German Preposition-Article Contractions

Hard to contrast

For the German cPPs we have been able to make additional observations regarding WD readings that could not easily have been made just using English definites:¹⁸

- WDs don't function anaphorically
- WDs don't easily introduce referents
- WDs inhibit modification
- WDs inhibit contrasting their potential referents

Still, the WD/RD ambiguity of the definite determiner also plays a role in German, as we shall see immediately.

German Preposition-Article Contractions vs regular PPs

The semantic difference that we observed between

19

(46) a. Peter wollte zu dem Supermarkt.

a'. Peter wollte zum Supermarkt.

[Peter wanted to go to the supermarket.]

is also found for rPPs when no contracted forms are available – as in English: (47a) is as ambiguous as is its English translation:

(47) a. Peter saß auf dem Fahrrad.

[Peter was sitting on the bike.]

a'. *Peter saß auf'm Fahrrad (only dialectal, not standard)

The VP test shows that (48a), as (48b), may be true in case Peter and Karl were sitting on the same or on different bikes.

(48) a. Peter saß auf dem Fahrrad und Karl auch.

b. Peter was sitting on the bike and Karl too.

WD and RD readings for PPs

Intermediate summary:

20

Both English and German allow for regular and weak definite interpretations of the definite article

with the exception for English

that the definite *cannot* be weakly interpreted in cases with a bare noun alternative:

(49) *Peter went to the prison and so did Fred.*

cannot normally mean that each went to a different prison.

In the latter case, the bare noun would be obligatory (implying, however, that both got incarcerated in the same or different prisons):

(50) *Peter went to prison and so did Fred.*

WD and RD readings for PPs

Intermediate summary:

21

Both English and German allow for regular and weak definite interpretations of the definite article

with the exception for German

that the definite *cannot* be weakly interpreted in PPs where there is a contraction alternative:

(51) *Peter ging zu dem Bahnhof und Fred auch.*

cannot normally mean that they went to different railway stations.

In the latter case, the contraction would be obligatory (implying that both went to the same or a different railway station):

(52) *Peter ging zum Bahnhof und Fred auch.*

WD and RD readings for PPs

Intermediate summary:

22

Both English and German allow for regular and weak definite interpretations of the definite article

Third limitation, for both English and German

There must be a suitable concept available as a VP denotation, abstracting from the referential identity of the denotation of the object NP:

(53) a. Fred *went to the store*, and Alice did, too. (same or diff. store)
requires a concept of going to the store (which is available)

b. Fred *went to the desk*, and Alice did, too. (same desk only)
requires a concept of going to the desk (which is not easily available)

(54) a. Fred *las die Zeitung* und Anna auch. (same or diff. paper)
requires a concept of reading the newspaper (which is available)

b. Fred *las das Buch* und Anna auch. (same book only)
requires a concept of reading the book (which is not easily available)

Intermediate Summary: WD and RD readings for PPs

Intermediate Summary:

23

Both English and German allow for regular and weakly definite interpretations of the definite article, provided

- there is no alternative expression for the weak interpretation
- there is a suitable denotation for the constituent containing the NP

		interpretation	
		regular definite	weak definite
English	bare noun excluded	definite article definite article ambiguous	definite article
	bare noun possible	definite article	bare noun
German	contraction excluded	definite article definite article ambiguous	definite article
	contraction possible	definite article	contraction

German Preposition-Article Contractions - blocked WD readings & unacceptability

24

Two more observations regarding German cPPs that are based not on discourse coherence but on acceptability of the form for certain lexical items:

German Preposition-Article Contractions - blocked WD readings & unacceptability

25

Since cPPs are only available for WD readings and not for RD readings,
and WD readings are blocked for rPPs when cPP forms are in principle available,

rPPs are odd when a referential reading is not plausible:

- (55) {Am / *an dem} Meer regnet es öfter als im Landesinneren
[At the sea it rains more frequently than inland]
- (56) Nächste Woche ist Peter {im / *in dem} Urlaub.
[Next week Peter is on holiday]
- (57) {Beim / *Bei dem} Schlafen werde ich nicht gern gestört.
[During sleeping I don't like to be disturbed]
- (58) {Am / *An dem} besten nimmst Du das Fahrrad.
[The best is you take the bike]

German Preposition-Article Contractions - blocked WD readings & unacceptability

26

Since cPPs are only available for WD readings and not for RD readings,
and WD readings are blocked for rPPs when cPP forms are in principle available,

cPPs are odd when a definite referential interpretation is plausibly required (bec. of referent modification):

- (59) Peter sitzt {in dem / *im} Auto, das dort geparkt ist.
[Peter is sitting in the car that is parked over there]
- (60) {Bei dem / *Beim} schön geputzten Bike steht ein Polizist.
[Next to the nicely polished bike stands a policeman.]

Summing up observations on German WDs

27

- cPPs don't function anaphorically
- cPPs don't easily introduce referents
- cPPs inhibit modification
- cPPs inhibit contrasting their potential referents

- WD reading of cPP and rPP requires suitable concept.
- RD reading of rPP requires plausible referent.

WDs and incorporation

28

These observations are all in agreement and lend support to Carlson's suggestion of an *incorporation account* for WDs:

Weak definite NPs would not have the status of arguments but of modifiers that form a complex predication together with a governing preposition or verb.

The German data show that the difference between WD readings and RD readings correlates with a difference in referential status.

A sketch for the semantics of rPPs

Suppose we take something like the following as an analysis for the PP *an dem Fenster* [at the window]:²⁹

$$\llbracket \text{an dem Fenster} \rrbracket = \lambda P. [\text{AT}(\iota y. \text{WINDOW } y)] P$$

built up from

the preposition: $\llbracket \text{an} \rrbracket = \lambda x \lambda P. [\text{AT } x] P$

and the definite NP: $\llbracket \text{dem Fenster} \rrbracket = \iota y. \text{WINDOW } y$

which again is built from

the noun: $\llbracket \text{Fenster} \rrbracket = \lambda x. \text{WINDOW } x$

and the determiner: $\llbracket \text{dem} \rrbracket = \lambda Q. \iota y(Qy)$

A preliminary sketch for the semantics of cPPs

Now, what are we to do with the cPP?

30

am Fenster

The noun wants a determiner – but *am* is no determiner – and since the whole thing is a PP, it wants a preposition as its head – but *am* is not a preposition. If it were, it would govern an NP, but *Fenster* is just a bare noun.

The probably simplest solution* is to assume the new syntactic category of prepositional determiner, which would contain, in standard German, the following lexical items:

am, beim, im, vom, zum, zur

This idea would be analogous to an equally plausible treatment of English prepositions that govern bare singulars.

(*suggested by Dan Flickinger, p.c.)

A preliminary sketch for the semantics of cPPs

31

A *prepositional determiner* then governs a bare noun and turns it into a PP, with a denotation like this:

$$\llbracket \text{am Fenster} \rrbracket = \lambda P. (\text{AT } \iota y (\text{WINDOW } y))P$$

built up from

the prepositional determiner:

$$\llbracket \text{am} \rrbracket = \lambda Q \lambda P. [\text{AT } \iota y (Qy)] P$$

and the noun:

$$\llbracket \text{Fenster} \rrbracket = \lambda x. \text{WINDOW } x$$

One difference between the WD and RD readings that our preliminary sketch does not yet account for is a difference in the noun denotation; we shall return to this point.

Incorporation permits meaning enrichment and explains lexical restrictions

32

Under an incorporation account the observations regarding meaning enrichments and lexical restrictions could be explained via “constructions” (if I understand Carlson correctly):

"both the bare singulars and the weak definites are used in constructions which designate typical or habitual activities" (Carlson et al. 2006)

being in prison (unlike being in the garden shed) is not just being in the location, but being incarcerated.

going to the supermarket (unlike going to *the desk*) on the WD reading means not just going there, but going there with the usual shopping-related intentions.

Remaining issues

33

A disadvantage of the reliance on constructions is, however, that we would be stuck with in principle idiosyncratic lexical restrictions and non-compositional “construction meaning”.

Another question that we have not addressed yet is why WD readings in both English and German are expressed by definite forms: Why there is a semantic difference between WDs and indefinites.

In the following we will attempt to address both of these issues.

Abstract situations and types

34

Let's first go back to

closing the window, going to the supermarket, reading the newspaper, going to the cinema, ...

On their WD reading these expressions denote properties or types of situations.

These (abstract) situations contain exactly one window, newspaper, etc. - i.o.w., the situation abstracts from all differences between particular windows, newspapers, etc.

The identity that is at the roots of the weak definiteness of “the window”, “the newspaper” etc. is the identity of abstract objects, or types, which is fixed only for the specific situation type, and only in relation to other elements in the same (abstract) situation.

Abstract situations and types

You can't *read the newspaper* unless there is a particular newspaper, but you can assert that

35

(71) *The doctor is reading the newspaper.*

without knowing what newspaper the doctor is reading, i.e., without referring to a particular newspaper – not though, without referring to a particular doctor, i.e., knowing what doctor.

The speaker of (71) cannot coherently answer the question *What doctor?* by saying *I have no idea.*

The same answer to the question *What newspaper?* would however be fine. It is whatever newspaper is being read, i.e., the identity of the newspaper is fixed only with respect to the abstract newspaper reading situation.

Abstract situations and types

However, when someone says:

(75) *The doctor is reading the book.*

36

the speaker not only needs to be able to answer the question *What doctor?* but also the question *What book?*

Why?

Because there is an abstract situation denoted by the expression *read the newspaper*

and there is no abstract situation denoted by *read the book.*

Abstract situations and types

37

And why does one abstract situation exist, and not the other?
Read the newspaper and not read the book ?

Because we can make sense of newspaper reading situations in which the identity of the newspaper is irrelevant, while we find it apparently harder to make sense of book reading situations where the identity of the book is irrelevant.

The question is, I believe, one of the availability of concepts. But concepts that are not just available or not – they may be made available ad hoc when they are needed and are motivated by a particular context.

Abstract situations and types

38

Let's try to make the physical identity of the book irrelevant:

Suppose there is a group of people, a lawyer, an engineer, a doctor, and perhaps more, trying to educate themselves about history, who have subscribed to a book lending service that provides them with a new history book every month, a different book for each of them, and near the end of the month they usually meet for an evening to talk about what they read.

Asking one day what the doctor is doing that afternoon I hear that

(76) *The doctor is reading the book.*

meaning that he is reading whatever book he is due to read. – The identity of the book is fixed by our artificial abstract book reading situation and we get a straightforward WD reading for

(77) *The doctor is reading the book, and the lawyer too.*

Abstract situations and types

If you can go along with the book lending story, we can probably³⁹ agree that abstract situations, as conceptual entities, are not given once and for all, but can be set up in suitable contexts, where certain differences don't matter that do matter in other contexts.

And if abstract situations are in this sense dynamic, then the restrictions on weak definites that come from their head nouns are not lexical, but conceptual restrictions, and weak definite uses are clearly productive.

Abstract situations and types

The denotation of a definite determiner, and also of a weak definite determiner and the German prepositional determiner requires as its argument a property that is unique in the current domain. 40

For regular referential phrases the uniqueness is a uniqueness of instantiation, i.e., a unique discourse referent.

Abstract situations and types

For WDs and prepositional determiners it is uniqueness of type:⁴¹

If a unique type SUPERMARKET can be construed for the discourse context

- that fits in with the requirements of the denotations of the governing categories and
- that abstracts from all differences between concrete supermarkets

a WD reading for “the supermarket” is available,

if not, the presupposition fails and the interpretation

- defaults to an RD reading, if formally permissible, or
- fails, as may happen for German prepositional determiners

Abstract situations and types

This sketch of an account also shows where the meaning enrichment for WDs comes from.

42

When a unique interpretation for the property SUPERMARKET or BOOK is required, this requirement can be satisfied in either of two ways:

- by anaphoric or demonstrative uniqueness or
- by abstracting from all differences between contextually available instances and establishing a contextual type: e.g., the supermarket as a place to go to for your shopping or the book assigned for monthly reading.

The latter mechanism explains the meaning enrichment observed: The identity of the type includes the enriching properties.

Abstract situations and types

Indefinites, as we saw, are without meaning enrichment. *Going*⁴³ to a supermarket has no implications as to shopping intentions as *going to the supermarket* on its WD reading has.

The reason is that any arbitrary instance of a supermarket satisfies the truth conditions of *Peter went to a supermarket*.

But on their WD reading both

Peter went to the supermarket. and *Peter ging zum Supermarkt.*

require a unique type that is independent of discourse referents and whose identity rests exactly on the enriching properties.

The enriched meaning of the VP can thus be derived compositionally from the verb denotation, modified by the type denotation of the PP.

Summing up

- Weak definites 44
 - do not introduce discourse referents,
 - nor do they pick up referents anaphorically.
- A speaker using a weak definite is under no obligation to identify a (discourse) referent
- nor would the listener need to identify a (discourse) referent in order to understand the utterance.
- The relevant identity for weak definites is type identity, and the unique reference is to types, not to discourse referents.

Open questions (among many others):

- How does reference to contextual types relate to (generic) reference to kinds?
- What is the exact relation between discourse reference and type reference?