Indefinite demonstrative *dieser* in German

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This work offers experimental support for the hypothesis that some indefinite noun phrases do not only introduce new referents but also equip them with a certain 'forward-looking potential' which informs the hearer about the 'importance' of the referent in the subsequent discourse. Developing means to empirically account for the intuitions that exist with respect to English *this*-indefinites, I show that German has an analog phenomenon, indefinite *dieser*, which, in contrast to the simple indefinite article *ein*, functions to mark referents which are 'more important' in that they show high values with respect to two parameters: referential persistence and topic shift potential.

1. Introduction

It is a well known fact that demonstrative determiners like English *this* mark given, definite information and refer either deictically to entities perceptible in the situation of utterance or anaphorically to referents in the previous discourse. Given these facts it seems quite surprising that we can use *this*, the prototypical definite demonstrative determiner as an indefinite determiner in sentences like *yesterday this stranger came over and talked to me*.

Theories accounting for this use are diverging, but there is a consensus in the literature that the referent introduced with indefinite *this* is of some greater importance for the following discourse. For English, this intuition has already been labeled as 'more information coming' (Perlman 1969), (Prince 1981) or 'noteworthiness' (Ionin 2006). In this paper I attempt to refine and enhance these approaches by employing two parameters suggested by Givón (1983), Arnold (1998) and Ariel (1988), which enable us to clearly define and to empirically test the discourse effects these indefinites seem to trigger.

Investigating the equivalent German construction of the indefinite use of the demonstrative determiner *dieser*, I apply quantifiable means to account for the intuitions presented above. In order to make them measurable, I adopted two clearly quantifiable parameters, which are features of the broader concept of discourse prominence (Givón 1983, Arnold 1998, Ariel 1988): (i) referential persistence and (ii) topic shift potential (compare studies of Chiriacescu & von Heusinger 2010 for *pe*-marking in Romanian). The results of a story continuation experiment show that indefinite *dieser* triggers the following discourse effects: (i) the referential persistence of the referents marked with *dieser* exceeds the referential persistence

of unmarked constructions with the indefinite article and (ii) the referents marked with *dieser* are more likely to become the topic in the subsequent text than their unmarked counterparts.

2. The phenomenon: indefinite dieser

We clearly have to distinguish standard demonstrative uses of *dieser* in (1) or (2) from the indefinite use in (3):

(1)   Ich möchte **diese/die/*eine Blume** da drüben.
         'I want **this/the/*a flower** over there.'   [deictic use]

(2)   Es war einmal ein König. **Dieser König** hatte eine Krone.
         'Once upon a time there was a king. **This king** had a crown.'   [anaphoric use]

(3)   Gestern in der Bar hat mich **dieser/ein/*der Mann** angesprochen.
         'Yesterday in the bar **this/a/*the man** was talking to me.'   [indefinite use]

In contrast to the deictic and anaphoric use, indefinite *dieser* can occur in existential-*there* constructions and is furthermore always interchangeable with the indefinite article *ein* (and not with the definite article). This shows that it is clearly indefinite. Indefinite *dieser* introduces a discourse and hearer new referent of the type individual. The referent is neither given in the previous discourse nor is it perceptible in the actual situation of utterance. It is completely new to the hearer. Often, indefinite *dieser* occurs in rather informal registers and in spoken language, however it can be found in written texts as well. On the other hand, it behaves like a (i) a truly referential expression, which always takes wide scope. Furthermore it is (ii) specific, which also rather reflects the behavior of definites. Relying on standard (in)definiteness tests (interchangeability with the indefinite article and occurrence in existential contexts) I claim that indefinite *dieser* is a truly indefinite determiner.

2.1 Scopal behavior

The referents of indefinite *dieser* always take wide scope with respect to any scope-taking operator:

(4)   a. Er gab jedem Student, der **das/dieses Gedicht** von Goethe zitierte, eine 1.
              'He gave an A to every student who recited **the/this poem** by Goethe.'
              [→ only one poem for all]
         b. Er gab jedem Student, der **ein Gedicht** von Goethe zitierte, eine 1.
              'He gave an A to every student who recited **a poem** by Goethe.'
              [→ different poems]

2.2 Specificity

Since indefinite *dieser*, unlike definite expressions, occurs in existential contexts (5) (Fodor & Sag 1982:361), we need to distinguish between the notions speaker known and hearer known

(or discourse known). One prominent type of specificity can be described best as speaker-dependent (or speaker anchored (von Heusinger 2011)): the speaker introduces a referent and intends to connect a certain object with the referent. As a test we can use the knowledge of the speaker with respect to the object. Unlike *ein* (6), indefinite *dieser* cannot be combined with the explicit denial of knowledge of the speaker.

(5)   *German:*
        Es gibt **dieses Mädchen** in meiner Klasse, das hat im Examen betrogen.
        a)   Sie heisst Maria und ist schon öfter negativ aufgefallen.
        b) *Keine Ahnung wer das ist, da war nur ein Spickzettel auf dem Boden.
    English:
        There's **this girl** in my class who cheated on the exam.
        a)   Her name is Mary and it's not the first time she causes trouble.
        b) *I have no idea who that is, I just found a cheat sheet on the floor.

(6)   *German:*
        Es gibt **ein Mädchen** in meiner Klasse, das hat im Examen betrogen.
        a)   Sie heisst Maria und ist schon öfter negativ aufgefallen.
        b) [OK]Keine Ahnung wer das ist, da war nur ein Spickzettel auf dem Boden.
    English:
        There's **a girl** in my class who cheated on the exam.
        a)   Her name is Mary and it's not the first time she causes trouble.
        b) [OK]I have no idea who that is, I just found a cheat sheet on the floor.'

3. Why this/dieser?

On the first glance, it might appear surprising that German, English and probably other languages make use of a prototypical definite demonstrative article in order to express indefiniteness. However, the reasons that *dieser/this* (and other demonstrative determiners in other languages) have gained the function to express indefinite reference, referentiality, specificity and the correlating discourse effects are by no means coincidental. Several differing accounts try to explain the origin of English indefinite *this*. Most of them share the idea that demonstratives can be expected to gain the respective functions, because they share their core demonstrative semantics with true demonstratives. Fodor & Sag (1982:360) claim that 'normal demonstrative *this* is as referential as anything can be, and so we're not too surprised to find it pressed into service to mark the referential understanding of an indefinite.' Himmelmann (1996:222) traces indefinite *this* back to definite demonstrative *this* as well. He claims it to be a sub-phenomenon of *Deixis am Phantasma* (Bühler 1934:140), which itself he considers a sub-phenomenon of the standard deictic use of demonstratives. Stating that 'the inability of new-*this* to introduce a nonspecific referent […] reflects the continuity of its character as a demonstrative', Wald (1983:97) explicitly rejects the idea of linking the indefinite use of *this* to situational uses of *this*. Instead, he proposes an account in which he derives this use from the anaphoric use of *this*.

There are more accounts in the literature which try to point out similarities between the two determiners as indicators for a common historic root of indefinite *this* and the so-called standard uses of demonstratives (Maclaran 1982). Even if the accounts may vary with respect to the claimed 'origin' of indefinite demonstratives – there is an agreement in the literature

that they still share essential features with standard demonstratives and that exactly these features make them apt for gaining the discussed function.

4. Previous accounts of discourse properties of indefinite this

Perlman (1969:78) already claims that indefinite *this* serves as a signal for additional upcoming information. However he does not offer a definition or means how one could empirically prove or measure this.

Prince (1981:235) has the same intuition and claims that indefinite *this* 'introduces something that is going to be talked about' and presents a small corpus study where she counts the implicit and explicit re-mentions of the referent introduced by indefinite *this*. However, she does not compare the findings with the unmarked counterpart (the indefinite article) and does not make clear what she means with implicit reference.

Ionin (2006:180), following Prince (1981) and Maclaran (1982:90), states that the use of indefinite *this* draws attention to the fact that 'the speaker has a particular referent in mind about which further information may be given'. This is shown in Maclaran's example in (7). The use of indefinite *this* in (7b) is infelicitous, where the identity of the 31-cent stamp is completely irrelevant, and where nothing further is said about the stamp. On the other hand, indefinite *this* is felicitous in (7a), where the identity of the stamp is important, and where the stamp is talked about in the subsequent discourse.

(7)   a. He put on **a/this 31-cent stamp** on the envelope, and only realized later that it was worth a fortune because it was unperforated.
       b. He put on **a/*this 31-cent stamp** on the envelope so he must want it to go airmail.
                                                                                      (Maclaran 1982:88)

Ionin (2006:184) labels this property of *this*-indefinites noteworthiness, defined as follows: 'the use of a *this*-indefinite requires the statement of something noteworthy about the individual denoted.' Ionin vaguely explains where noteworthiness can come from. She claims that noteworthiness has several sources, i.e. that it can come from the predicate, adjective modification, from a previous statement of the noteworthy property or from the subsequent referential pick-up of the referent. It does not seem clear how it could be distinguished from other notions of information structure like discourse topic, for example, and how it could be properly measured empirically.

5. Discourse Properties: referential persistence and topic shift potential

I employed two parameters of the greater concept of discourse prominence (Givón 1983, Gundel et. al 1993, Ariel 1988, etc.) as a means to empirically account for the intuitions of 'more information forthcoming' or 'noteworthiness' offered in the literature. Discourse-based studies dealing with accessibility and discourse prominence already introduced several factors that make a referent more accessible or prominent. However, these accounts were mainly concerned with the licensing of anaphora resolution. In turn, I will use two of their parameters in order to account for the forward-looking-property of indefinite *dieser*. (Compare studies of Chiriacescu & von Heusinger 2010 for *pe*-marking in Romanian.)

Two discourse properties will be investigated:

(i) *Referential persistence* (Givón 1983, Arnold 1998, Ariel 1988)
     Looks at how often a referent is mentioned again in the subsequent discourse.

(ii) *Topic shift potential* (Givón 1983)
      Calculates whether a given referent has the potential to become a topic in the subsequent discourse. Topics are defined as aboutness topics in the sense of Reinhart (1981) and Roberts (2011). For reasons of simplicity and traceability in this study I equalized topics with grammatical subjects, since topics preferably occur in syntactic subject position in German. This general preference was confirmed by the data of the experiment in which I found a very strong correlation between aboutness topics and subjects. For the follow-up experiments professional topic annotation is planned.

The following predictions with respect to the discourse effects of German indefinite *dieser* in terms of discourse prominence are made:

Prediction 1 (referential persistence):
The referential persistence of the *dieser*-marked referents will exceed the referential persistence of their counterparts marked with the indefinite article *ein.*

Prediction 2 (topic shift potential):
In comparison to their *ein*-marked counterparts, *dieser*-marked referents will be more likely to become a subject in the subsequent discourse.

6. Pilot study

6.1. Method

A sentence continuation task based on two- to four-sentence stories was constructed, including two target stories and 2 filler stories. The first one or two sentences in each test item set the context for the story and contained reference to the first person speaker *I* 'ich'. The next sentence contained the target referent realized as an indefinite NP. The character introduced first by *I* 'ich' is the clearly established topic constituent of the story (mentioned at least once in subject position).

I manipulated the realization form of the indefinite target referents in the target sentences. (*dieser*-marked referents in experiment A and *ein*-marked in experiment B.)

(8) **Example stimulus item for experiment A/B:** *dieser vs. ein / this vs. a:*

Das Essen in dem Restaurant war wirklich total lecker, aber ziemlich teuer. Als ich nach fünf Gängen beim Dessert war, hab' ich$_1$ gesehen, wie **dieser/ein Mann$_2$** Sekt bestellte. 'The food in the restaurant was really delicious, but pretty expensive. When I had dessert, after five courses, I$_1$ saw how **this/a man$_2$** ordered champagne.'

6.2. Participants

20 native speakers of German, 10 participants in experiment A (each 4 stories including 2 filler stories), 10 participants in experiment B (each 4 stories including 2 filler stories).

6.3 Procedure and data analysis

The participants were asked to read the given stimulus items and to write down five natural-sounding, logical continuation sentences. The respective five continuation sentences were coded with respect to the two parameters introduced in section 5. In (9) you find an example response to test item (8) suggested by one participant and the coding methods from the sentence continuation experiment (table 1).

(9)   **Example response to item (8)**

S1: **Er₂** hatte eine riesige Nase. / **He₂** had a huge nose.
S2: Deshalb starrte **ich₁ ihn₂** immer wieder an. / That's why **I₁** stared at **him₂** all the time.
S3: Als **er₂** den Sekt trank, verschüttete **er₂** etwas. / When **he₂** drank the champagne, **he₂** spilled a bit.
S4: Die Krawatte war bekleckert. / The tie had stains.
S5: Dann musste **ich₁** grinsen. / Then **I₁** had to grin.

	Referential Persistence		Topic shift potential
	Target referent: number of anaph. references item/ sentence	Target referent: number of anaph. references in sum	Does the referent become subject/topic in any sub-sequent clause?
S1	1	1	Topic₂
S2	1	2	
S3	2	4	
S4	-	-	
S5	-	4	

Table 1. Example of coding methods

The referential persistence was measured by counting the anaphoric references per sentence (item/S) and also as the sum of all referential items up to S5 (cumulative values).

In order to account for the topic shift potential I checked if the *dieser-* or *ein-*marked referents became a topic in one of the subsequent 5 sentences. Whether this change was maintained in the subsequent discourse was of no relevance.

7. Results

7.1 Referential persistence – number of anaphoric references

The numbers in table 2 show that prediction 1 is confirmed in the pilot study. The referential persistence of the *dieser*-marked objects is higher than the referential persistence of the *ein*-marked objects. That is, referents introduced by *dieser* were mentioned more often in the subsequent discourse. Compare the total numbers of 29 for *dieser* vs. 8 for *ein*-marked referents. The mean values per person are given in parentheses. On an average, indefinite *dieser* was re-mentioned in the subsequent 5 sentences 2,9 times, compared to 0,8 times for *ein*. These numbers are illustrated in figure 1 below.

	S1	S2	S3	S4	S5	total
dieser	7(0,7)	6(0,6)	5(0,5)	7(0,7)	4(0,4)	**29(2,9)**
ein	2(0,2)	3(0,3)	0(0)	1(0,1)	2(0,2)	**8(0,8)**

Table 2. Referential persistence of dieser/ein Mann (this/a man), total numbers per sentence and mean values
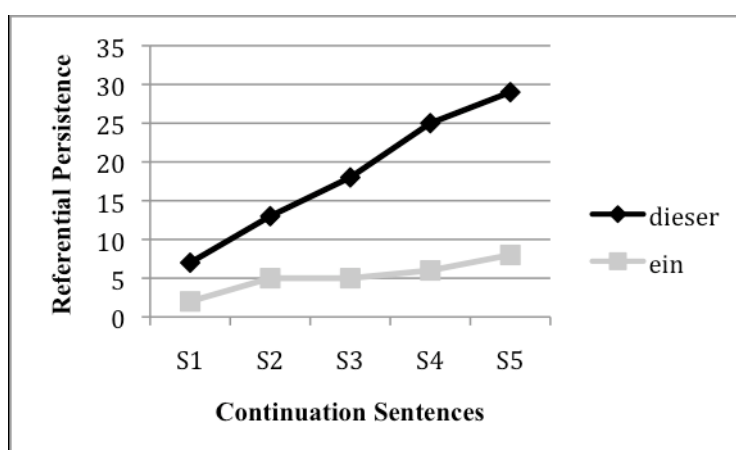

Figure 1. Referential persistence of dieser/ein Mann (this/a man) cumulated by sentence

7.2 Topic shift potential

Prediction 2 is confirmed as well: *dieser*-marked objects display an overall stronger preference to become a topic in the continuation sentences S1-S5, in comparison to their *ein*-marked counterparts. For *dieser*, in 60% of the cases the referents became topics in the first continuation sentence already. Looking at the whole discourse, in 80% of the test items the *dieser*-marked referent became a topic at some point in the discourse. For *ein*, this happened only in 40% of the cases (see figure 2).
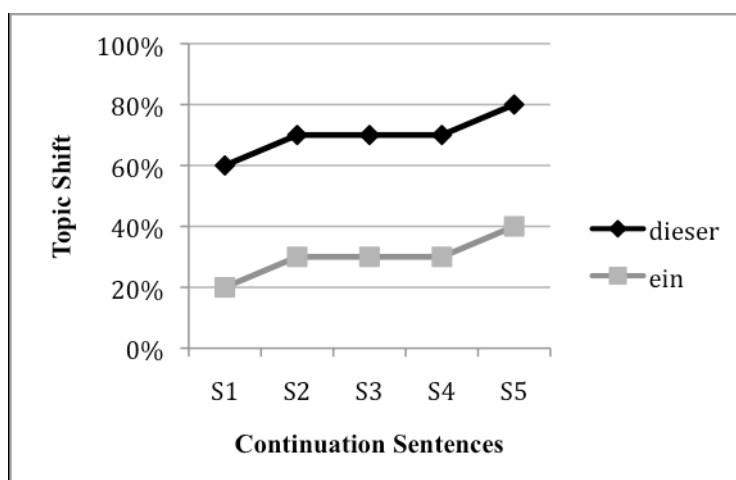
Figure 2. Topic Shift potential for dieser/ein Mann (this/a man)

8. Conclusions and future work

By enhancing previous accounts, which analyzed the discourse effects of indefinite *this*, I offer means to empirically test and measure its discourse behavior. The findings in section 7 strongly suggest that indefinite *dieser* is a marker of discourse prominence, since the results of the experiment show that there is a strong tendency of indefinite *dieser* to trigger two features of discourse prominence, i.e. referential persistence and topic shift. Further investigations, that (among others) also take into account the activation level of a referent (Gundel et al. 1993, Grosz et al. 1995, Ariel 1988), expressed by the type of referring expression, are planned in order to fully approach the greater notion of discourse prominence.

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