



Specificity, Referentiality and Discourse Prominence: German Indefinite Demonstratives*

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Abstract. There are various notions of specificity, ranging from Fodor & Sag’s (1982) referentiality view to Givón’s (1983) discourse prominence view. Ionin (2006) discusses the relation between these two perspectives by analyzing the English indefinite *this*. She represents indefinite *this* as a referential operator in the sense of Fodor & Sag (1982), but also adds the felicity condition of “noteworthiness”. She notes that it is an open question how these two properties of indefinite *this* are linked to each other. Wright & Givón (1987) claim that the discourse prominence is primary and that referential properties are derived from it. I argue that the contrary holds: On the analysis of German indefinite demonstrative *dies* (‘this’) and *so’n* (‘such-a’) I demonstrate how we can derive discourse properties of indefinite demonstratives from their referential properties.

1 Introduction

Specificity is a semantic-pragmatic notion that distinguishes between different uses or interpretations of indefinite noun phrases. It is related to the communicative notion of “referential intention”. A speaker uses an indefinite noun phrase and intends to refer to a particular referent, the referent “the speaker has in mind”. This function of the indefinite has various consequences for sentence and discourse semantics. In this article I focus on two aspects of specificity: Fodor & Sag’s (1982) notion of referentiality and

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Givón's (1983) notion of discourse prominence as the central effect of specific indefinites. This two-sided behavior of specific indefinites was illustrated by the referential and discourse properties of indefinite *this* in English (Perlman 1969, Maclaran 1980, Prince 1981, Ionin 2006). The demonstrative *this* in English has an "indefinite" or "presentative" use, as in (1) and (2a). In (1) the noun phrase *this man* is clearly indefinite as it appears in an existential context. It is discourse- and speaker-new and Ionin (2006) argues that it is felicitously used if it introduces an interesting or "noteworthy" property into the discourse. The use of indefinite *this* in (2b) is not felicitous as the given information is not noteworthy, but rather expected (examples from Maclaran 1980 and Ionin 2006):

- (1) There is **this man** who lives upstairs from me who is driving me mad because he jumps rope at 2 a.m. every night.
- (2) a. I put a/*this* 1\$ stamp on the letter and realized too late that it was worth a fortune.
 b. I put a/***this 1\$ stamp** on the letter. I wanted to mail the letter to Europe.

Besides these discourse properties, Prince (1981) also discusses particular referential properties that are characteristic for specific or referential indefinites (Fodor & Sag 1982). Indefinite *this* always takes wide scope with respect to extensional operators, as illustrated in (3a). On the other hand, the indefinite noun phrase *a poem* in (3b) is ambiguous between a wide-scope reading and a narrow-scope reading, thus allowing for the inference that different students might have read different poems.

- (3) a. He gave an A to every student who recited **this poem** by Pindar.
 (→ Only one poem overall)
 b. He gave an A to every student who recited **a poem** by Pindar.
 (→ Possibly many poems)

Indefinite *this* in (4a) always allows an existential entailment or presupposition, while the ordinary indefinite article *a* does not. (5a) shows that it is a presupposition, since it allows an existential inference even under negation.

- (4) a. Alice wanted to kiss **this sailor boy**. (→ There was a sailor boy)
 b. Alice wanted to kiss **a sailor boy**. (-/-> There was a sailor boy)
- (5) a. Mary didn't buy **this pink truck**. (→ There was a pink truck)
 b. Mary didn't buy **a pink truck**. (-/-> There was a pink truck)

Fodor & Sag (1982) observe that the use of indefinite *this* is different from the use of the definite article in such contexts. The definite article presupposes familiarity of speaker and hearer with the associated referent, while the indefinite demonstrative only indicates familiarity of the speaker, but unfamiliarity of the hearer. It is the prototypical instance of a specific (or referential) indefinite noun phrase. Its definition (6) expresses that a specific or referential indefinite introduces a new discourse referent such that the speaker has a “unique individual in mind”. Heim (2011, ex. (56)) formulates Fodor & Sag’s (1982) original idea in a two-dimensional semantics with a context set c and an evaluation point i . The indexical or referential meaning of an indefinite only depends on the utterance context, as it is the case for regular indexical expressions. Ionin (2006) adds a felicity condition to this definition in order to motivate the use of such a referential indefinite, as in (7). The use of indefinite *this* is only felicitous if the speaker contributes a noteworthy property to the introduced referent.

- (6) Referential indefinites (Fodor & Sag 1982, Heim 2011, ex. (56))
 $\llbracket a_{ref} \alpha \rrbracket^{c,i}$ is defined only if there is a unique individual that the speaker of c has in mind in c , and this individual is in $\llbracket \alpha \rrbracket^{c,c}$; where defined, $\llbracket a_{ref} \alpha \rrbracket^{c,i} = \text{this individual}$.
- (7) Indefinite *this* (Ionin 2006: 187)
 A sentence of the form $[sp \alpha] \phi$ expresses a proposition only in those utterance contexts c where the following felicity condition is fulfilled: the speaker of c intends to refer to exactly one individual x_c in c , and there exists a property u which the speaker considers noteworthy in c , and x_c is both α and u in c . When this condition is fulfilled, $[sp \alpha] \phi$ expresses that proposition which is true at an index i if x_c is ϕ at i and false otherwise.

Ionin (2006) combines the two characteristics of indefinite *this* in her definition (7): (i) the “referential intention” of the speaker yielding the semantic property of high referential strength described above; and (ii) the noteworthiness property closely related to the pragmatic property of high prominence in the discourse. She discusses the relation between these two properties, but without conclusion. Wright & Givón (1987) focus on discourse prominence and compare the grammaticalization of indefinite *this* with the indefinite article *a*. They argue that such indefinite articles first acquire a pragmatic discourse function and only then the referential function. Generalizing the empirical data they found, Wright & Givón (1987, 29) maintain the claim (8) and argue that grammaticalization starts with

pragmatic discourse functions and then proceeds to semantic functions such as high referential strength.

- (8) Implicational relation between pragmatic and semantic reference
 “If a nominal is prag-referential, then it is most likely to also be SEM – referential (but not vice versa)”

With this short overview on indefinite *this* we are now in a position to formulate the research questions of this paper with respect to specificity: (i) Are discourse prominence and referentiality two instantiations of specificity, (ii) if so, are they related, and (iii) if they are related do they exhibit the implicational relation in (8) or the opposite. I argue that (8) does not correctly describe the situation with indefinite *this* in English and with its two German equivalents. While the analysis of indefinite *this* in English might not be conclusive (cf. Ionin 2006) the comparison with the two German specific indefinite articles *dies* and *so'n* (< *so+ 'n*, ‘such+enclitic indefinite article’) indicates that the semantic function is primary and the discourse prominence derived.

Section 2 summarizes different types of specificity and discusses the different ways to group these subtypes together. Section 3 presents the semantic analysis of specificity in terms of referential anchoring. Section 4 and 5 provide information about the different uses and functions of German indefinite *dies* and *so'n*. Section 6 discusses some of their discourse functions and section 7 focuses on their referential properties. Section 8 presents an analysis of the function of indefinite demonstratives and section 9 formulates a first hypothesis concerning the semantics of such demonstratives in terms of referential anchoring. Section 10 concludes with a brief summary and some new research questions.

2 Types of Specificity

The notion of specificity is associated with various types of data and accounted for in different theories (see Farkas 1994, Ionin 2006, Kamp & Bende-Farkas 2006, and von Heusinger 2011 for an overview). I suggest to classify the various notions of specificity in seven types: (i) Specificity in opaque contexts (*referential specificity*) expresses a contrast between a reading that allows existential entailment (9a) and a reading that does not (9b); (ii) *scopal specificity* (often also including type (i)) refers to the ability of certain indefinites to escape scope islands like the conditional in (10a), that a universal quantifier cannot escape (10b); (iii) *epistemic specificity* ex-

presses the contrast between speaker's knowledge (11a) and speaker's ignorance (or indifference) (11b) about the referent of the indefinite.

- (9) a. Paula believes that Bill talked to *an important politician*. (-> there is an important politician)
 b. Paula believes that Bill talked to an important politician. (but there is no important politician)
- (10) a. If *a friend of mine from Texas* had died in the fire, I would have inherited a fortune. (possible reading: there is a friend of mine and...)
 b. If *each friend of mine from Texas* had died in the fire, I would have inherited a fortune. (not possible: for each of my friends, if one of them...)
- (11) a. *A student in Syntax I* cheated in the exam. I know him: It is Jim Miller.
 b. *A student in Syntax I* cheated in the exam. But I do not know who it is.

(iv) **specificity** is sometimes associated with different types of **familiarity** such as d-linking, partitivity, and presuppositionality: the indefinite is part of an already introduced set, as in (12a), or not, as in (12b); (v) **specificity** is also related to **topicality** as in (13a), where the topical element can be understood as a specific expression, while (13b) only expresses an existential claim.

- (12) a. 50 students entered the room. I knew *two girls*.
 b. 50 students entered the room. They greeted *two girls* (already in the room).
- (13) a. *Some ghosts* live in the pantry; others live in the kitchen.
 b. There are *some ghosts* in this house.

There are two further notions of specificity that concern the forward referential potential of indefinites: (vi) **specificity as noteworthiness** assumes that the presentative *this* in (14) signals that the speaker intends to assert a noteworthy property of the referent, as in (14a), while (14b) is reported to be infelicitous since no such property is mentioned. (vii) **specificity as discourse prominence** refers to an aspect of discourse prominence, namely "referential persistence" or "topic shift", i.e. the potential of an indefinite to introduce a referent that will be mentioned again and may even become a topic in the subsequent discourse.

- (14) a. He put *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 *a/#this 31 cent stamp* on the envelope, so he must want it to go airmail.
- (15) a. There was a king and the king had a daughter and he loved his daughter ...
 b. There was a king and # the season was very short and hot ...

These different subtypes of specificity can be roughly categorized into larger groups as in Figure 1 with a referential notion, a familiarity notion and a discourse prominence notion of specificity.

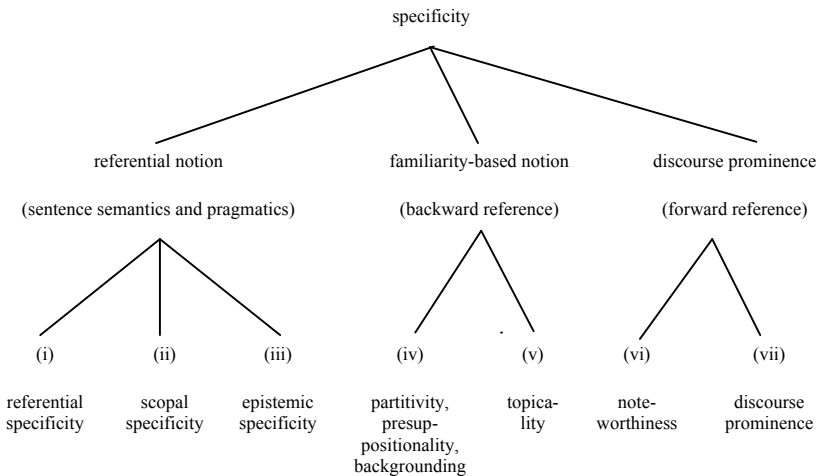


Figure 1: Family tree of specificity

Researchers on specificity differ in their assumptions on (a) which subtype qualifies for specificity proper and (b) how many representations are necessary to cover these types. Fodor & Sag (1982) take the subtypes (i)-(iii) as the central notion of specificity and assume the single representation (6) for them. Farkas (1994) argues that (i)-(iv) are independent subtypes but with similar effects. She suggests different representations, which are, however, similar in the effect that they reduce the restrictor set of the indefinite. Kamp & Bende-Farkas (2006, submitted) assume that epistemic specificity is the central notion which is basically the same as (i) and from which we can

derive effects described under (ii). Prince (1981) and Ionin (2006) analyze indefinite *this* and show that (vi) is related to (i)-(iii). Givón (1983) focuses on the discourse prominence aspect (vii) and assumes the implicational hierarchy of object domains in Figure 2, according to which a discourse prominent expression implicates that the associated referent is intended by the speaker, and what is intended also has a reference in the world. It is the general scheme from which Wright & Givón's (1987) more specialized implicational relation (8) above is derived.

discourse prominence > speaker's intentions > reference in the "world"
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Figure 2: Ranking of specificity types according to Givón (1984: 135)

3 Referential Anchoring

Different contrasts associated with different kinds of specificity can be best unified by the following generalization: In its prototypical use, the concept of specificity is associated with the communicative notion of referential intention. Grammatical contrasts, such as specific articles, indefinite pronouns or differential object marking associated with this function are also used to express relations between discourse entities which do not express "referential intentions" in the literal sense. Rather, it seems that specificity is a grammaticalized means to structure the relations among discourse items: A specific indefinite is *referentially anchored* to a salient discourse participant or another discourse referent, i.e. "the referent of the specific expression is linked by a contextually salient function to the referent of another expression" (von Heusinger 2002: 45). Under this account the context has to provide two parameters: the anchoring function and the anchor itself. The speaker has to be able to specify the anchoring function, while it must be unfamiliar for the hearer, the same way as the intended referent must be unfamiliar. Still the hearer has to represent the fact that there is an anchoring function. The anchor, however, must be familiar to both speaker and hearer, which allows speaker and hearer to share the scopal properties of the indefinite. This concept of specificity is a refinement of Fodor & Sag's (1982) original account in terms of referential (Kaplan-style) expressions. Below I present a sketch of the theory by stepwise modifying Fodor & Sag's (1982) original proposal. They assume two semantic representations for existential indefinites and referential indefinites, as in (16).

(16) a. $\llbracket a_{quant} N \rrbracket = \lambda Q. \exists x. [N(x) \ \& \ Q(x)]$

- b. $\llbracket a_{ref} N \rrbracket =$ is defined only if there is a unique individual that the speaker of the sentence has in mind, and this individual is N

The definition (16b) might be adequate for English indefinite *this*, but it has been shown that it is not sufficient to account for various other types of specific indefinites. It needs additional modifications affecting the parameters listed in (17):

- (17) Modification of the original Fodor & Sag (1982) account (= (4b))
- (i) replacing the uniqueness condition by an explicit anchoring function
 - (ii) allowing for other anchors than the speaker
 - (iii) allowing for different content of the anchoring function

The uniqueness condition in definition (16b) is ‘built in’ by a function from the anchor to the referent: $f(anchor) = referent$. The second modification concerns potential anchors, which can be the speaker in (18), but also some other attitude holder in (19). But we can abstract even further, as the anchor can also be realized by a quantifier phrase, as in (20).

(18) Paula believes that Bill talked to an important politician.

- (19) a. George: “I met a certain student of mine today.”
 b. Jack: “George said that he met a certain student of his today.”

(20) Every husband had forgotten a certain date – his wife’s birthday.

The third modification affects the status of the content of the anchoring function. The anchor must in principle be familiar to both speaker and hearer, i.e. it must be contextually given or accessible. The content of the anchoring relation must be hearer-new in order to distinguish between specific indefinites and definites. (21) and (22) demonstrate that the exact definition of the function may even be unknown to the speaker (see Enç 1991: 20 for discussion):

(21) The teacher gave every child a certain task to work on during the afternoon.

(22) Each reporter was assigned to a certain politician by the editor of the paper.

We can summarize the modifications and give the informal definition of referential anchoring in (23):

(23) Informal definition of specificity in terms of referential anchoring

A specific indefinite a N is represented by an anchoring function f from an anchor to an individual and this individual is N. Both the anchor as well as the anchoring function must be given in the context

- a) anchor is speaker- and hearer-given
- b) content of anchoring function is hearer-new

Von Heusinger (2002 based on earlier work) cashes out the idea of referential anchoring in terms of parameterized or Skolemized choice functions, also known from Kratzer (1998) and Chierchia (2001, 2005). The idea is that the indefinite article can translate into the complex pronominal element f_x with x being a parameter that might be bound by some context agent or some quantifier phrase that has wider scope than the indefinite. The function f applied to the anchor yields a choice function that is applied to the set denoted by the descriptive content of the indefinite yielding the referent, as in (24) adapted from Roberts (2007) (for alternative treatments of this idea see Kamp & Bende-Farkas (to appear), Onea & Geist 2010).

(24) Referential anchoring with parameterized choice functions

- i) complex pronominal element f_x
- ii) x parameter (= anchor), the argument of f , binding is pragmatically given
 - a) might be bound by some context agent (speaker etc.)
 - b) might be bound by a wider scope QP to yield intermediate scope
- iii) $f(x)$: a choice function that takes a set denoted by DC as its argument and yields an element of that set

In summary, the concept of referential anchoring provides a consistent account of specificity. It links the notion of referential intention to a semantic representation with an anchoring function and an anchor. The anchor must be familiar to speaker and hearer, while the content of the function must not be familiar to the hearer (and is generally familiar to the speaker). Still the hearer has to establish a permanent representation for the specific indefinite, based on the assumption of the existence of such an anchoring function. Thus, this account ties in with the other concepts of specificity, including familiarity-based and discourse-based concepts, discussed in the next sections.

4 Indefinite *dies*

German has a proximal demonstrative *dieser, diese, dies(es)*, and a not very productive distal *jener, jene, jenes*. The proximal demonstrative has various functions, the most important of which are listed in Table 1:

a) deictic	discourse status	further characterization	ex.
b) anaphoric	speaker- and hearer-known	perceivable in situation	(25)
c) discourse deictic	speaker- and hearer-known	discourse-given	(26)
d) recognitional	speaker- and hearer-known	reference to discourse (items)	(27)
e) indefinite	speaker- and hearer-known, but discourse-new	shared (personal) knowledge	(28)
f) emotional	speaker-known hearer-new, discourse-new	unaccented	(29)
g) deictic	speaker-known	emotional / social distance	(30)

Table 1: usages of *dies* in German

- (25) Nimm diesen Apfel.
Take this apple.
- (26) Es war einmal ein König. **Dieser König** hatte eine Krone.
Once upon a time there was a king. This king had a crown.
- (27) Er sagte: „Ich liebe Dich“, und mit **diesen Worten** ging er.
He said „I love you“, and with these words he left.
- (28) Weißt du was mit diesem Telefon passiert ist, das immer in deinem Zimmer war?
Do you know what happened to that (dieses) phone that used to be in your room?
- (29) Gestern kam ich in eine Bar und da war **dieser Fremde**, der mich die ganze Zeit anstarrte.
Yesterday I walked into a bar and there was this stranger who stared at me all the time.’
- (30) Und dann traf ich **diesen Nachbarn** von dir.
And then I met this neighbour of yours.

The deictic use (25), the anaphoric one (26) and the discourse deictic one (27) are expected from the general function of demonstratives. They are clearly definite and discourse-given. The recognitional (or “anamnestic”) function (27) is discourse-new, but speaker- and hearer-given, i.e. definite. The indefinite (or presentative) use in (29) is speaker-given, but discourse-new and hearer-new. Lakoff (1974) describes an emotional use of the demonstrative in (30) and subsumes the indefinite use under it. However, I maintain that the indefinite use is independent as it is the case for the English indefinite *this*. The recognitional and indefinite uses are somewhat informal, but still to be found in written texts.

5 Indefinite *so'n*

German provides another indefinite demonstrative, namely the form *so'n*, which derives from the demonstratives for properties *so* ‘such’ and the reduced and enclitic indefinite article ‘*n*. It can substitute most, if not all, instances of indefinite *dies* in German. This form is rarely found in formal language, but quite frequent in informal registers. The spelling varies between *so'n* and *son*. Both forms can be found in the literature as well as in written versions of informal registers. It is controversial whether it constitutes an independent determiner with its own semantics, or is a merged form with a compositional semantics of demonstrative and indefinite article plus some pragmatic rules (as in the case of German prepositions with weak definite articles). Henn-Mennesheimer (1986) and Lernerz & Lohnstein (2004) assume that it consists of two underlying forms, while Hole & Klumpp (2004) maintain that it constitutes one form. They argue that *so'n* shows a plural paradigm in (31), which cannot be explained by a merged form since the indefinite article in German has no plural form (See also Chiriacescu 2011, von Heusinger (to appear) for more examples and a detailed discussion. Note that we could not find examples for the genitive):

(31) Paradigm of *so'n*

Sg.		Pl.	
Nom.	<i>so'n Pullover</i>	Nom.	<i>so'ne Pullover</i>
Gen.	<i>so'nes Pullovers</i>	Gen.	<i>so'ner Pullovers</i>
Dat.	<i>so'nem Pullover</i>	Dat.	<i>so'nen Pullover</i>
Akk.	<i>so'nen Pullover</i>	Akk.	<i>so'ne Pullover</i>

German has a second demonstrative for properties, namely *solcher*, *solche*, *solch(es)*, which behaves in function and distribution like English *such*. *So* is

more flexible as it does not take nominal inflection. It has various functions, but we focus on usages with adjectives and unmodified nouns as in Table 2:

notion	discourse status	further characterization	ex.
a) gradable + deictic	speaker- and hearer-known	refers to a grade	(32)
b) gradable + anaphoric	speaker- and hearer-known	refers to a grade	(33)
c) deictic	speaker- and hearer-known	refers a to a property or to a type (kind)	(34)
d) anaphoric	speaker- and hearer-known	refers a to a property or to a type (kind)	(35)
e) intensifier	speaker-known	shifts the standard upwards (only with gradable nouns)	(36)
f) „hedging“	noun for exact description is unknown	denotation is extended	(37)
g) indefinite	speaker-known, hearer-new, discourse-new	unaccented	(38)
h) emotional	speaker-known	emotional / social distance	(39)

Table 2: usages of *so* in German
(Ehlich 1986, Eisenberg 1994, Umbach & Ebert (to appear))

(32) Ana ist *so groß*.
Ana is so tall.

(33) Ana ist 1,80m groß. Maria ist auch **so groß**.
Ana is 1.80m tall. Mary is also so tall.

(34) Er hat **so ein Auto**.
He has such-a car.

(35) Maria hat ein Auto mit Heckklappe. **So ein Auto** hat er auch.
Mary has a car with a hatchback. Such-a car does he also have.

(36) Er ist *so ein Kind* / *so ein Pedant*.
He is such a child/ pedant.

The deictic and anaphoric uses of demonstrative *so* are illustrated with adjectives and nouns in (32) – (35). *So* refers to a grade if applied to adjectives and to a situationally or anaphorically given property if applied to nouns. It can trigger an intensified reading if applied to (unmodified) nouns that are inherently gradable, as in (36). *So* can trigger different kinds of hedging processes, as in (37), where it signals that the client can identify the referent, but does not have the correct lexical item at hand. With semantically bleached nouns like *type*, *man*, *guy* or with nouns in their typical environment, as in (38), neither an intensified nor a hedging function seems appropriate. Rather the form signals that a speaker-known, but hearer- and discourse-new referent is introduced. *So'n* also shows an “emotional” use, as in (39). In the following we focus on the indefinite function of *so'n*.

(37) Kunde im Geschäft: „Haben Sie **so eine Klammer**?“

Client in shop: Do you have such a clip?

(38) Da gibt's **so'n**en Lehrer in meiner Schule in den ich verliebt bin.

There is such -a teacher in my school whom I'm in love with.

(39) Peter hat **so'n Hund** gekauft.

Peter bought such-a dog.

6 Discourse Properties

Prince (1981) and Ionin (2006) report that indefinite *this* in English is only felicitous if the referent is taken up in the discourse and a noteworthy property is asserted with respect to it. Givón (1983) presents a quantitative study on the referential persistence of referents introduced by indefinite *this*. Here I can only report a first impression from corpus searches and the results from a pilot study on discourse prominence. A referent introduced by indefinite *dies* or indefinite *so'n* is typically picked up in the subsequent discourse, as in (40) and (41). Please note that the two indefinite determiners can replace each other and can also be replaced by the indefinite article (for more examples see Chiriacescu 2011, von Heusinger (to appear)).

(40) Da war **dieser Typ** aus Deutschland, den ich in einem Hostel auf der neuseeländischen Insel Waiheke kennen lernte. Vielleicht hieß **er** Wolfgang, vielleicht Volker - nicht so wichtig. Ich erinnere mich nur, dass **er** nett, ... (Cosmas)

‘There was **this guy** from Germany who I got to know in a hostel on the New Zealand island Waiheke. May be **he** was called Wolfgang, maybe Volker – not that important. I just remember that **he** was nice...

- (41) In unsrer Stadt gibts **so'n Mann** er ist nicht irgendeiner, nein, **er** ist unser neuer Bürgermeister, **er** sieht aus wie ein Vogelstrauß. (Google)
 'In our city there is **such-a man**, **he** is not anyone, no, **he** is our new mayor, he looks like an ostrich.'

I distinguish three different types of discourse prominence that can be measured. (cf. Givón 1983, Chiriacescu & von Heusinger 2010): (i) *referential persistence* or the number of anaphoric expressions referring back to the discourse referent; (ii) *topic shift potential* or the distance between the discourse referent and its use as topic in the subsequent discourse, and (iii) *discourse activation* or the level of activation that determines the DP-type of the next anaphoric expression (according to the Givenness Hierarchy of Gundel et. al. 1993). Sofiana Chiriacescu and Annika Deichsel performed a pilot sentence continuation test. 10 subjects read the small fragment in (42) and were asked to continue it with five sentences. We then analyzed the five continuation sentences according to the three discussed parameters. I present the results from referential persistence (see Chiriacescu 2011 and Deichsel 2011 for more results). We counted the absolute number of all referential items that were anaphorically linked to the expression *ein / so'n / dieser Mann* in Figure 3.

- (42) Das Essen in dem Restaurant war wirklich total lecker, aber ziemlich teuer. Als **ich** nach fünf Gängen beim Dessert war, hab' **ich** gesehen, wie **ein / so'n / dieser** Mann Sekt bestellte.
 'The meal in the restaurant was really excellent, but quite expensive. When I got to dessert after five courses, I saw that *a / such-a / this* man ordered champagne.'

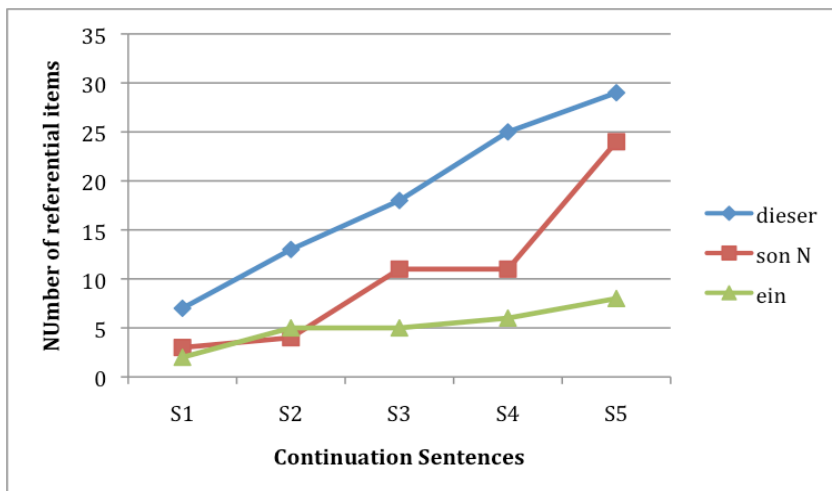


Figure 3: Referential persistence of *ein* / *so'n* / *dieser* Mann in (42)

The sum of all items referring back to the indefinite in the five sentences provided by the 10 subjects is 29 for indefinite *dies*, 24 for indefinite *so'n*, but only 8 for the indefinite article *ein*. This clearly indicates a difference between indefinite *dies* and the indefinite article *ein*, with indefinite *so'n* taking an intermediate position. We can safely conclude that both indefinite demonstratives signal discourse prominence.

7 Referential Properties

The two indefinite demonstratives also show particular referential properties. I can only provide a few test sentences concerning referential specificity in (43) and (44), scopal specificity in (45) and epistemic specificity in (46). Table 4 summarizes the results of my own judgments and of the judgments of some informants (we also did a pilot questionnaire which confirmed the first intuitions – see Chiriacescu 2011 for *so'n* and Deichsel 2011 for *dies*).

The indefinite article in (43) and (44) allows a referential and a non-referential reading, with a preference for the latter. The use of indefinite *dies* is only compatible with the referential reading, while *so'n* has a preference for a referential reading, but is compatible with a non-referential reading, which is particularly obvious in (44).

(43) Eva will einen / *so'n* / *diesen* Film über Eliade sehen.

Eva wants to watch a / such-a / this movie about Eliade.

- (44) Maria will einen / so'nen / ?diesen Prinz auf einen weißen Ross heiraten.

Mary wants to marry a / such-a / this prince on a white horse.

The indefinite article *ein* in (45) signals a preference for narrow scope, the indefinite *dies* always indicates wide scope, and the indefinite *so'n* either allows a wide-scope reading or a narrow-scope reading of the referent (covariation with the universal quantifier), but then with a wide-scope reading of a property that is characteristic for all referents. We find similar intuitions for the epistemic reading in (46): The indefinite article allows both readings (with a preference for a non-specific reading), the indefinite *dies* only the (epistemic) specific reading, and the indefinite *so'n* clearly signals the specific reading, but may also be compatible with the non-specific reading, however, intuitions are unclear and blurred by other functions of *so+n*.

- (45) Jeder meiner Kollegen hat ein / dies / so'n Buch von Eliade gelesen.

Each of my colleagues read a / this / so-a book by Eliade.

- (46) Ein / so'n / dieser Student in der Einführung hat beim Examen geschummelt.

A / this / such a student in the introduction has cheated in the exam.

	Referential specificity (43) + (44)	Scopal specificity (45)	Epistemic specificity (46)
<i>ein</i>	non-ref > ref	narrow > wide	non-spec > spec
<i>so'n</i>	ref > (non-ref)	wide > narrow (with wide scope for a property)	spec (*non-spec)
<i>dieser</i>	ref (*non-ref)	wide (*narrow)	spec (*non-spec)

Table 4: Referential properties of *ein*, *so'n*, *dieser*

This brief overview of the referential properties of the two indefinite demonstratives clearly indicates a high referential strength in contrast with the indefinite article *ein*, but also some differences between *dies* and *so'n*. *Dies* is more like the English indefinite *this*, always referential, scopal and epistemic specific, whereas *so'n* shows more variation which has to be investigated in more detail.

8 Demonstration and Topic Shift

I assume a Kaplan- (1977/1989) style semantics for demonstratives according to which a demonstrative expression refers directly to its referent. The expression needs an accompanying demonstration (ostension), which raises the attention of the hearer to the intended referent. This semantics can be applied to demonstrative *dies* referring to entities, and to demonstrative *so*, referring to properties, as in (47) (see also Roberts 2002).

(47) Deictic readings of demonstratives

- a. $\llbracket \textit{dies} \text{ N} \rrbracket$ = is defined only if there is a demonstration *d* focussing on (raising the attention to) a unique referent such that the referent is *N* (some additional conditions that the referent must be close to speaker etc.)
- b. $\llbracket \textit{so 'n} \text{ N} \rrbracket$ = is defined only if there is a demonstration *d* focussing on (raising the attention to) a unique property *P* and there is a referent *x* such that *x* is *N* and *P*. (some additional conditions that the referent must be close to speaker etc.)

Demonstratives are used without demonstration in their anaphoric use. They even introduce new discourse items as discussed in this article. It seems that the act of demonstration to a visible or perceivable object is shifted to the intention of the speaker towards a referent, which is unknown to the addressee. We can formulate a preliminary hypothesis that demonstrative nouns raise the attention of the hearer towards a new discourse item in (i) the (visible) situation, (ii) in the previous text, or (iii) in the subsequent text. We modify (47) to an informal definition of indefinite readings of demonstratives in (48):

(48) Indefinite readings of demonstratives

- a. $\llbracket \textit{dies}_{indef} \text{ N} \rrbracket$ = is defined only if there is an intention of the speaker to focus on (to raise the attention to) a unique referent such that the referent is *N*.
- b. $\llbracket \textit{so 'n}_{indef} \text{ N} \rrbracket$ = is defined only if there is an intention of the speaker to focus on (to raise the attention to) a unique property *P* and there is a referent *x* such that *x* is *N* and *P*.

If the hearer recognizes the referential intention of the speaker, the hearer will establish a permanent discourse representation for the introduced referent: (i) indefinite *dies*: for an individual discourse referent; (ii) *so 'n*: for the intended property and therefore also for the individual that falls under that property.

This provides the link between a noteworthy property (see Ionin 2006) and the prominence of the discourse referent (Givón 1983).

9 Referentiality and Discourse Prominence

In the last section we have sketched the shift from a deictic or anaphoric use of a demonstrative to an indefinite use. The idea is that one of the fundamental functions of demonstratives is to raise the attention towards a new referent. In this section I want to propose the link to the semantics of specific indefinites spelling out the relation between the referential properties and the discourse properties of the indefinite demonstratives in German (and English). Definition (48) for the indefinite reading of demonstratives includes as one of its central conditions the speaker's intention. We have seen earlier that definition (23), repeated as (49), for specificity semantically represents this intention as an anchoring function between an attitude holder (or some other discourse referent) and the intended referent. This anchor is speaker- and hearer-given, but the content of the anchoring function is hearer-new, and therefore the intended referent is new, too.

(49) Informal definition of specificity in terms of referential anchoring

A specific indefinite a N is represented by an anchoring function f from an anchor to an individual and this individual is N. Both the anchor as well as the anchoring function must be given in the context

- a) anchor is speaker- and hearer-given
- b) content of anchoring function is hearer-new

If we use this definition for representing the informal concept of “referential intention” in (48) we can formulate (50) for a semantics of indefinite demonstratives. For both the anchor must be the speaker (thus reflecting the “demonstrative” or indexical nature). For *dies* the anchoring function yields the intended referent, while for *so 'n* the anchoring function yields a property with which we uniquely identify the referent (reflecting the original nature of *so* as a demonstrative of properties). Thus indefinite *so 'n* only indirectly promotes a referent to high referential strength and high discourse prominence.

(50) Indefinite readings of demonstratives

- a. $\llbracket dies_{indef} N \rrbracket =$ is defined only if there is an **anchoring function from the speaker** to an object such that the object is N.
- b. $\llbracket so 'n_{indef} N \rrbracket =$ is defined only if there an **anchoring function from the speaker to a property P** such that the referent is N and that there is a referent x such that x is N and P.

We can conclude that the referential property of “referential intention” is the core meaning of indefinite demonstratives. It is best represented by referential anchoring. We can then derive from this core-meaning the discourse function of “raising attention” as illustrated in section 8. We can also account for the differences between the two indefinite demonstratives – they are of different semantic types, they are represented by different semantic representations (giving rise to different semantic properties) and thus they also trigger different kinds of discourse prominence as reported above.

10 Summary

I have shown that German has two additional indefinite articles, indefinite *dies* and (informal) *so'n* corresponding to English indefinite *this*. Both articles have grammaticalized from deictic expressions. They are different: indefinite *this* derives from the demonstrative for objects, while *so'n* derives from the demonstratives for properties. They are used to signal discourse prominence and they show a strong tendency for a referential meaning (wide scope with respect to other operators, rigid reference etc.). Indefinite *dies* has a higher discourse prominence and a higher referential strength than indefinite *so'n*, which only indirectly promotes the referent to high referential strength and high discourse prominence. I have argued that the shift from the deictic or anaphoric use of a demonstrative to an indefinite use can be best explained by a semantics of “referential anchoring”. This semantics makes it possible to represent the “referential intention” of the speaker in an adequate way, qualifying for a specific interpretation of these demonstratives. The specific semantics then allows for discourse prominence, e.g. for referential persistence. In this view the referential properties are primary and the discourse properties are derived, contradicting Wright & Givón's (1987) claim. This picture needs more empirical coverage and a carefully worked out semantic representation, which are two challenging research issues.

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