Oxford Handbooks Online

Abstract and Keywords

The semantic–pragmatic category 'specificity' is used to describe various semantic and pragmatic contrasts of indefinite noun phrases. This chapter will first provide a brief illustration of different linguistic means to express these contrasts in different languages. Second, it will categorize different types of specificity according to the semantic and pragmatic contexts in which they can be found. The standard tests for these different kinds of specificity are also discussed. In the third section a comparison is made between four families of theoretical approaches to specificity and the chapter concludes with the notion that specificity can be best understood by 'referential anchoring'.

Keywords: indefinite noun phrases, specificity, referential anchoring, semantic–pragmatic, partitivity

Klaus von Heusinger

9.1 Introduction

SPECIFICITY is a semantic–pragmatic notion for certain 'strong' readings or interpretations of indefinite noun phrases that can affect truth conditions or felicity conditions as well as morpho-syntactic phenomena such as movement or Differential Object Marking. The notion is broadly employed in recent work and it is associated with an open set of properties and various concepts, but there is no common definition. The generally shared intuition behind this category is that a speaker uses an indefinite noun phrase specifically if he or she intends to refer to a particular referent, the referent 'the speaker has in mind'. In the course of this chapter, we will discuss different approaches to model this rather informal characterization and I will conclude that the theory of 'referentially anchored indefinites' provides an appropriate account of this characterization and linguistic phenomena associated with specificity. At the same time

this theory also delimits the concept of specificity from other familiar concepts such as partitivity, noteworthiness, or discourse prominence.

The range of specificity related phenomena can be illustrated by examples (1)–(4) below:

(1)

Mary may want to marry a Swede.
(Karttunen 1969/1976, ex. (43))

Example (1) has two readings, one in which there is a particular Swede and Mary wants to marry him, and one in which Mary wants to marry one or another Swede. The first reading expresses an existential entailment that there is a Swede, but the second reading does not; thus the readings have different truth conditions. Therefore, Karttunen (1969/1976) and others model this contrast by the scope of the existential quantifier associated with the indefinite noun phrase *a Swede* with respect to the intensional verb *want*. The contrast was linked to Quine's (1956: 77) remark that indefinite noun (p. 147) phrases in opaque contexts have two readings, a 'relational' and a 'notional' one, which makes example (1) ambiguous, similarly to the *de re* versus *de dicto* readings of definite noun phrases.[1]

Example (2) has one reading according to which the speaker has a particular student in mind and one where the speaker just asserts that at least one student cheated without implying any particular one.

(2)

A student in the syntax class cheated on the final exam.
(Fodor and Sag 1982: 355, ex. (1))

There is no truth conditional difference between the two readings of (2), supporting the assumption that the contrast is pragmatic and not semantic. However, Fodor and Sag (1982: 355) argue that (2) [their (1), KvH] "is nevertheless ambiguous". Its indefinite noun phrase may be semantically interpreted in two distinct ways. One semantic interpretation is that of a quantified expression such as *each student* or *few students*; the other interpretation is that of a referring expression such as a proper name or demonstrative phrase. They further argue that this lexical ambiguity shows truth conditional effects.

Enç (1991) claims that specificity is closely related to partitivity, if not identical. She argues that the second sentence in (3) has two interpretations in English, which can be disambiguated in Turkish by accusative case marking on the indefinite *a girl*. A case marked indefinite direct object must be partitive, that is, part of the children introduced in the first sentence. An unmarked direct object signals that the referent of the girl is not

included in the set of children introduced before (English translation of Turkish examples (see also (20) in §9.3.4).

(3)

Some children entered the room. I knew a girl.

While Enç defines specificity in terms of d-linking or inferability, Ionin (2006) undertook another extension of the notion of specificity towards forward discourse properties. She proposed that the use of indefinite *this* in English, as in (4), not only behaves like a specific indefinite in the sense of Fodor and Sag (1982), but also (strongly) suggests that the speaker talks further about the discourse referent introduced by the *this*-indefinite. The example would be less coherent if we would continue after *this man* with an unrelated topic.

(4)

There is this man who lives upstairs from me who is driving me mad because he jumps rope at 2 a.m. every night.
(Ionin 2006: 176, ex. (11), quoted from MacLaran 1982: 85)

Ionin (2006: 187) connects the referential meaning of the indefinite *this* with its discourse function by the concept of noteworthiness; the use of indefinite *this* is only felicitous if there is a noteworthy property to be assigned to the indefinite.

(p. 148) As we can see from the examples, a specific interpretation of an indefinite has been described as, for instance, expressing a direct referential or rigid reading (cf. (1) and (4)), a wide scope reading (cf. (1)), an epistemic reading, i.e., the speaker can identify the referent (cf. (2), (4)), the indefinite being discourse linked and presuppositional (cf. (3)), or the indefinite signaling discourse prominence and noteworthiness of the introduced discourse referent (cf. (4)). This list is not comprehensive and could be extended, and there is no agreed set of characteristics of a specific reading. The semantic–pragmatic category 'specificity' is notoriously difficult to define or to demarcate from other semantic–pragmatic categories since we have three closely interacting parameters, which sometimes lead to circular argumentation: different linguistic means to mark specificity contrasts, types of specificity contrasts, and the theoretical models that describe and analyze specificity. These parameters are the topic of the following sections: §9.2 discusses some linguistic means to express specificity such as article systems or specific adjectives. In §9.3, I present different types or contexts of specificity contrasts. §9.4 presents a short overview of four families of models of specificity and §9.5 provides a short summary and outlook.

9.2 Linguistic means to express specificity

The English examples (1)–(3) do not show any formal or overt marking of the contrast between a specific and a non-specific reading. Still there is a broad variety of linguistic means to mark or signal specificity across languages, which range from universal means to language specific means. Fodor and Sag (1982: 358–65; based on Karttunen 1968; Fodor 1970 and others) provide a helpful list of (universal) linguistic characteristics that favor either specific or non-specific readings of indefinites, which I illustrate as modifications of (1) in (5b–f) below: (i) A main indicator is the content of the noun phrase: the more descriptive content a noun phrase has, the more likely it is to have a specific reading (cf. (5b)). However, even long descriptions can be read non-specifically (see below). (ii) Non-restrictive relative clauses obligatorily trigger specific interpretations (cf. (5c)). (iii) Topicalization and left dislocation favor a specific interpretation (cf. (5d)).[2] (iv) Indefinite or presentative *this* strongly favors a specific reading (cf. Prince 1981a) (cf. (5e)). (v) Imperatives only allow non-specific readings, such that even the long indefinite in (5f) cannot be understood specifically.

(p. 149)

(5)

a. Mary wants to marry a Swede.
b. Mary wants to marry a very talkative Swede from the small village of Lärbro.
c. Mary wants to marry a Swede, who lives in the small village of Lärbro.
d. A Swede from Lärbro, Mary wants to marry him.
e. Mary wants to marry this Swede.
f. Mary, marry a very talkative Swede from the small village of Lärbro!

Besides this set of universal grammatical indicators, there is a long list of language particular linguistic indicators of specificity such as mood in relative clauses (Rivero 1975), articles (Chung and Ladusaw 2004) or the complex system of indefinite pronouns (see Haspelmath 1997 for an overview). Spanish, like other Romance languages, marks the contrast between a specific versus a non-specific reading of an indefinite (and the referential versus attributive reading of a definite) noun phrase by the mood in the relative clause that modifies that noun. Subjunctive marks or determines a non-specific (or an attributive) reading, and indicative marks a specific (or a referential) reading (Rivero 1975: 40 ex. (11)):

(6)

a. Quiere casarse con {la, una} muchacha que sea (SUBJ) rubia y con pecas.
   'He wants to marry {the, a} girl who may be blonde and with freckles.'
   (NON-SPECIFIC only)

b. Quiere casarse con {la, una} muchacha que es (IND) rubia y con pecas.
   'He wants to marry {the, a} girl who is blonde and with freckles.' (SPECIFIC only)

Ionin (2006) argues that if a language has an article system with two semantically different articles, the contrast expressed is either definiteness or specificity. While most European languages that have articles mark definiteness, various other languages mark specificity, like Maori, which distinguishes between the specific *têtahi* and the non-specific *he* indefinite article (Chung and Ladusaw 2004: 40–1, ex. (27a); (28a), T for tense):

(7)

a. Kâore têtahi tangata i waiata mai.
T.not a person T sing to.here
'A particular person didn't sing (= There was a person who didn't sing).'

b. Kâore he tangata i waiata mai.
T.not a person T sing to.here
'No one at all sang.' But: '*A particular person didn't sing.'

English (like many other languages) can express specificity contrasts by means of certain determiners, adjectives, quantifiers, or bare nouns (see Farkas 1981):

(8)

a. Every student recited a poem of Pindar.
b. Every student recited this$_{indef}$ poem of Pindar.
c. Every student recited SOME poem of Pindar.
d. Every student recited a certain poem of Pindar.
e. Every student recited at least one poem of Pindar.
f. Every student recited poems of Pindar.
g. Every student recited sm poem of Pindar.

(p. 150) (8a) is the unmarked form with the indefinite article, which is ambiguous between a specific and non-specific interpretation; the indefinite or presentative *this* in (8b) forces a specific (or referential) reading, the focused *some* in (8c) allows a wide scope reading more easily than the form with the indefinite article in (8a); the specificity marker *a certain* in (8d) forces a specific (i.e., wide scope) reading. The expression *at least one* in (8e) has a quantificational (i.e., non-specific (quantificational)) reading (still it shows a scopal behavior similar to (8a)). The bare noun in (8f) only allows for a narrow scope (i.e., non-specific) reading, and likewise the form in (8g) with the phonologically reduced *sm*. There are many more ways of marking (non-)specificity by lexical items, functional markers, or other constructions. Most of these means are restricted to certain contexts or to certain specificity contrasts. We therefore assume as reliable tests for specificity in the list of Fodor and Sag (1982): (i) non-restrictive relative clauses, (ii) *this*-indefinites (if a language allows for it), (iii) the use of *a certain* or *a particular* (in languages with similar

expressions). Tests for non-specificity are (iv) imperatives, and (v) the replacement by bare nouns, if a language allows for it.

9.3 Types of specificity contrasts

The broad variety of data associated with specificity, the different types of specificity, and the many theoretical approaches to specificity make a comprehensive overview and a straightforward classification very difficult (but see Karttunen 1968, 1969/1976; Fodor 1970; Abbott 1976; Fodor and Sag 1982; Abusch 1994; Farkas 1994, 2002; Yeom 1998; Ruys 2006; Kamp and Bende-Farkas 2006; Ionin 2006; Endriss 2009; Ebert and Hinterwimmer 2012). In the following I present a classification of seven kinds of contexts for specificity related phenomena, extending Farkas's (1994) division into scopal, epistemic, and partitive specificity by the following four additional categories of indefinites (see von Heusinger 2011): referential specific, topical, noteworthy, and discourse prominent indefinites.

9.3.1 Referential contrasts

Indefinites show an ambiguous interpretation in opaque contexts, which is comparable to the *de re* versus *de dicto* readings of definites (see Keshet and Schwarz, Chapter 10 of this volume).

> (9)
>
> a. Mary wants to marry a Swede.
> b. Mary wants to marry the richest man in Sweden.

Thus, both sentences in (9) allow a reading where the speaker intends to refer to the particular person Mary wants to marry and where the indefinite noun phrase in (9a) (p. 151) and the definite noun phrase in (9b) serve to identify this person to the hearer or addressee. But there is also a reading where the speaker simply intends the hearer to attribute to Mary the wishing attitude to marry a Swede or the richest man in Sweden (whoever this might be). As a test to distinguish the two readings, we use existential inferences: the specific reading of (9a) allows for the inference that there is a Swede, while the non-specific does not. Analogously, the specific reading allows for anaphoric linkage (as in a continuation *He lives in Göteborg*), and the non-specific reading is preferred with the continuation *But she hasn't found one yet*.

9.3.2 Scopal contrasts

Scopal specificity (often also including referential specificity) concerns the interpretation of the indefinite if there are other semantic operators in the sentence. I present three types of contexts with growing complexity: simple scope interaction ('local configuration'), scope island escaping properties ('global configuration', 'long distance indefinites'), and intermediate readings. First, Karttunen (1969/1976) discussed examples

such as (10) where the indefinite can take wide scope over the universal quantifier *every day*, as in (10a). The indefinite can also take narrow scope with respect to the universal quantifier, as in (10b). We can model these two readings if we represent the indefinite as an existential quantifier that scopally interacts with the universal quantifier representing *every day*.

(10)

Peter visited a museum every day.
a. There is a particular museum (say the Louvre), such that Peter visited it every day.
b. For each day, there was a different museum that Peter visited.

Second, Fodor and Sag (1982) present an observation that shows that indefinites have readings that cannot be modeled by regular quantifier scope interaction. They note that specific indefinites, or what they call referential indefinites, are able to escape 'scope islands', while other quantifiers are not. Scope islands are structural configurations that do not allow quantifiers to take scope over them. Scope islands are created for instance by *that*-complements (with lexical heads) as in (11) and (12) or by conditionals as in (13) and (14). Example (11) can have a reading such that there is a rumor that a student of mine had been called before the dean, as in (11a). This reading does not entail that there is a student of mine. The example has a second reading according to which there is a student such that there is a rumor that the student had been called before the dean, as in (11b). This reading entails that there is a student. Interestingly, the universal quantifier *each* cannot get the wide scope reading (12b). This is explained by the assumption that the *that*-clause is a scope island for quantifiers. (13) and (14) show that conditionals are also scope islands, but allow indefinites to take wide scope.

(p. 152)

(11)

John overheard the rumor that *a student of mine* had been called before the dean.
a. the rumor that there is one student (but there might be no student of mine)
b. there is a student of mine such that there is a rumor . . .

(12)

John overheard the rumor that *each of my students* had been called before the dean.
a. the rumor that each of my students . . .
b. *for each of my students there is a rumor that the student . . .

(13)

If *a friend of mine from Texas* had died in the fire, I would have inherited a fortune.

    a. if any friend of mine from Texas . . .

    b. there is a friend of mine and if he . . .

(14)

If *each friend of mine from Texas* had died in the fire, I would have inherited a fortune.

    a. if all of my friends from Texas had died in the fire, . . .

    b. *for each of my friends, if one of them . . .

Fodor and Sag (1982) assume that the indefinite is (lexically) ambiguous between a referential expression (similar to proper names or *this*-indefinites), and an existential expression (similar to existential quantifiers). They assume that the referential indefinite is scopeless and therefore gives the appearance of escaping the island, while the existential behaves like other quantifiers and therefore cannot escape the island. Thus they can explain the behavior in scope islands by assuming a lexical ambiguity. Third, based on their ambiguity theory they make a prediction for the reading of indefinites in scope islands with two quantifiers, namely that there is no intermediate reading. This prediction was refuted and different accounts proposed (see for discussion §9.4 below; Farkas 1981; Abusch 1994; Schwarz 2001; von Heusinger 2011: §4)

9.3.3 Epistemic contrasts

Epistemic specificity comes closest to the notion of the 'referential intentions' of the speaker, paraphrased as "the speaker has a particular individual in mind" (Karttunen 1968: 20). Farkas (1994) uses the term 'epistemic specificity' to describe the contrasts related to referential intentions and that we can best discuss in sentences without other operators, as illustrated in (15) from Karttunen (1968: 14).

(15)

    a. I talked with a logician.

    b. I talked with Rudolf.

    c. I talked with a famous philosopher.

    d. I talked with the author of *Meaning and Necessity*.

    e. . . . , and not with a linguist.

    f. . . . , therefore I now understand the first and second syllogism.

(p. 153) The speaker could use (15b–d) instead of (15a) if the speaker has talked with Rudolf Carnap, a famous philosopher and the author of *Meaning and Necessity*, and the speaker has this referent in mind. Thus (15a) in its epistemic specific reading is an answer to the question 'Who did you talk with this morning?'. The non-specific reading of

the indefinite is an answer to 'What *kind* of person did you talk with this morning?' This reading is favored by the continuations in (15e–f) and contrastive accent on *logician*. Fodor and Sag (1982: 355, ex. (1)) argue based on example (2), repeated in (16), that epistemic specificity behaves very similarly to referential and scopal specificity and is therefore one instance of the same category.

(16)

a. A student in the syntax class cheated on the final exam. It was the guy who sits in the very back.

b. A student in the syntax class cheated on the final exam. I wonder which student it was.

In the specific interpretation (16a) the speaker 'has a referent in mind' and makes an assertion about this referent. In the non-specific reading (16b), the speaker just makes an assertion that the set of students in the syntax class who cheated on the final exam is not empty. The contrast between epistemic specific and non-specific indefinites seems intuitively clear and for many quite obvious, but it is often difficult to operationalize the contrast. First of all, there is no contrast in truth conditions. Second, in the absence of semantic operators we can use the indefinite in either interpretation as an antecedent for an anaphoric expression. Third, additional factors may play a role and overwrite epistemic specificity. For example, the indefinite in (16) is in subject (and thus preferred topic) position and therefore more likely to be interpreted as specific. Fourth, past tense promotes an epistemic specific reading, in particular in sentences with a first person singular subject, as in (17). Still we can use a kind of ignorance test, which generally works much better with subjects in the third person, as in (18). And we can also use imperatives to clearly select non-specific interpretations of indefinites:

(17)

a. I talked to a student of mathematics. (And I do know her).

b. I talked to a student of mathematics. (#And I do not know her).

(18)

a. Peter talked to a student of mathematics. (And I do know her).

b. Peter talked to a student of mathematics. (And I do not know her).

(19)

a. #Talk to a (specific) student of mathematics.

b. Talk to a student of mathematics.

The contrast between epistemic specific readings and epistemic non-specific readings is often aligned to Donnellan's (1966) contrast between a referential reading and an attributive reading of definites (see Partee 1970 for discussion). Neale (1990) and Heim

(1991) provide overviews of the controversial discussion on the semantic or pragmatic status of this distinction.

(p. 154) 9.3.4 Partitive contrasts

Partitive specificity has been related to other types of specificity since Enç (1991), who discusses direct object marking in Turkish. Indefinites generally introduce new discourse referents together with a description. Partitive indefinites pick out one (unmentioned) referent from a discourse-familiar group. Obviously, such indefinites presuppose existence and behave like strong quantifiers. Enç (1991) relates partitive indefinites to Pesetsky's (1987: 107) notion of d(iscourse)-linking that accounts for the different presuppositions of 'which' versus 'who'.

(20)

a. Oda-m-a   birkaç   çocuk   gir-di.
   room-1.sg.-Dat.   several   child   enter-Past
   'Several children entered my room.' (Enç 1991: ex. (16))

b. Iki   kız-ı   tanı-yor-du-m.
   two   girl-Acc.   know-Prog.-Past-1.sg.
   'I knew two [of the] girls.' (Enç 1991: ex. (17))

c. Iki   kız   tanı-yor-du-m.
   two   girl   know-Prog.-Past-1.sg.
   'I knew two girls.' (Enç 1991: ex. (18))

(20a) introduces a set of children, and the accusative case in (20b) indicates that the two girls are part of that set. The expression *iki kızı* 'two girls-acc' presupposes existence, while the unmarked *iki kız* 'two girl' refers to girls not included in the set of children. Enç takes this observation as a strong indicator that the accusative expression is specific and proposes that specificity can be derived from partitivity, or more exactly from familiarity of the superset involved. Diesing (1992) and de Hoop (1995) take partitivity as an instance of Milsark's (1974) contrast between a weak (cardinal, non-specific) and a strong (presuppositional, specific) interpretation. However, partitive specificity is orthogonal to referential (or scopal) specificity, as in (21a) and to epistemic specificity, as in (21b) (see Abbott 1995; Farkas 1994; van Geenhoven 1998 for discussion).

(21)

a. John wants to marry one of Steve's sisters. (He doesn't care which one.)
b. One of Steve's sisters cheated on the exam. (We have to find out which one.)

Partitives and specific indefinites show similar behavior: they restrict the set of possible referents, they show wide scope behavior and can introduce discourse referents even in the scope of semantic operators. Therefore, Farkas (1994) takes them as one kind of specific indefinites. However, I assume that partitives are specificity related phenomena, rather than specific.

9.3.5 Topical contrasts

Topicality has also been closely related to specificity. Portner and Yabushita (2001) assume that the restrictor set of the indefinite is topical, either explicitly as in the case of (p. 155) partitives, or implicitly via other information. Portner and Yabushita (2001) argue on the basis of Japanese and Portner (2002) of Chinese data that a topical and very narrow restrictor set triggers specificity effects. This perspective on specificity is very similar to Schwarzschild's (2002) extreme domain restriction approach, where the restrictor set is a singleton ('singleton indefinites') and the indefinite shows specificity effects. A different approach assumes that the whole indefinite is topical in the sense of a sentence or 'aboutness' topic (see Cresti 1995; Endriss 2009). The intuitive idea is that the speaker introduces the topic by a separate speech act. Thus the topic is identified independently of the assertion in the sentence, giving rise to the typical specificity contrasts.

9.3.6 Contrasts in noteworthiness

English has an indefinite use of the proximal demonstrative *this* that introduces an indefinite that does not interact with other operators, much like a deictically used demonstrative. The use of indefinite *this* is licensed if it introduces a discourse referent that becomes the theme of the subsequent discourse (Prince 1981a) or that is 'noteworthy', that is, it has an unexpected and interesting property (McLaran 1982; Ionin 2006), as illustrated by the contrast below (MacLaran 1982: 88).

(22)

a. He put √a/#this 31 cent stamp on the envelope, so he must want it to go airmail.

b. He put √a/√this 31 cent stamp on the envelope, and only realized later that it was worth a fortune because it was unperforated.

The indefinites in both sentences introduce a discourse referent, and there is no other operator and no referential versus attributive contrast. Nothing prevents either indefinite from introducing a discourse referent. Still there is an important difference: the marked indefinite in (22b) introduces a significant theme for the subsequent discourse. Indefinite *this* signals particular, interesting, new information, while unmarked indefinites just signal that they introduce a discourse referent with more or less important properties. Noteworthiness does not necessarily force frequent anaphoric links, as Ionin (2006: 194, based on an example of Prince 1981a: 247) illustrated with the following example, where

indefinite *this* refers to a noteworthy property, while the regular indefinite article does not.

(23)

A: Why do you like him?
B: Oh, he has this/#a nose . . .

9.3.7 Contrasts in discourse prominence

Gernsbacher and Shroyer (1989: 537) reported a minor contrast between *this*-indefinites and indefinite noun phrases with the indefinite article with respect to anaphoric expressions that continue referents introduced by the two forms: expressions anaphoric to *this*-indefinites are more often realized as zero or pronouns than anaphors to indefinite noun (p. 156) phrases with the indefinite article, while definite descriptions are more often used to link to regular indefinites than to *this*-indefinites. Chiriacescu and von Heusinger (2010) reported similar effects between case-marked indefinite direct objects and their non-case-marked versions in Romanian. A second discourse property is characterized by the parameters 'referential persistence' and 'topic shift potential'. Chiriacescu (2014) showed that informants use a higher frequency of anaphoric expressions or a higher referential persistence as well as a higher rate of topic shifts if the indefinite has special marking, such as indefinite-*this* in English, indefinite *so'n* in German or differential object marking in Romanian.

The forward referential properties in the last two subsections were illustrated by the contrast between *this*-indefinites (or other specially marked indefinites) and indefinite noun phrases headed by the indefinite article, which may be ambiguous between a specific and a non-specific reading. Alternatively, the indefinite article could also be characterized as underspecified for specificity or referentiality, while indefinite *this* is specified for referentiality (see Gundel et al. 1993). In a paragraph continuation experiment, Deichsel (2013) gave short contexts to participants and asked them to continue the fragment with five naturally sounding sentences. One kind of context is (24a), where the indefinite *dies* noun phrase *diesen Kommillitonen* ('this fellow student') is picked up by the pronoun *ihn* in the next sentence. In the second context, the indefinite noun phrase *einen Kommillitonen* ('a fellow student') is also picked up by a pronoun thus enforcing a specific reading.
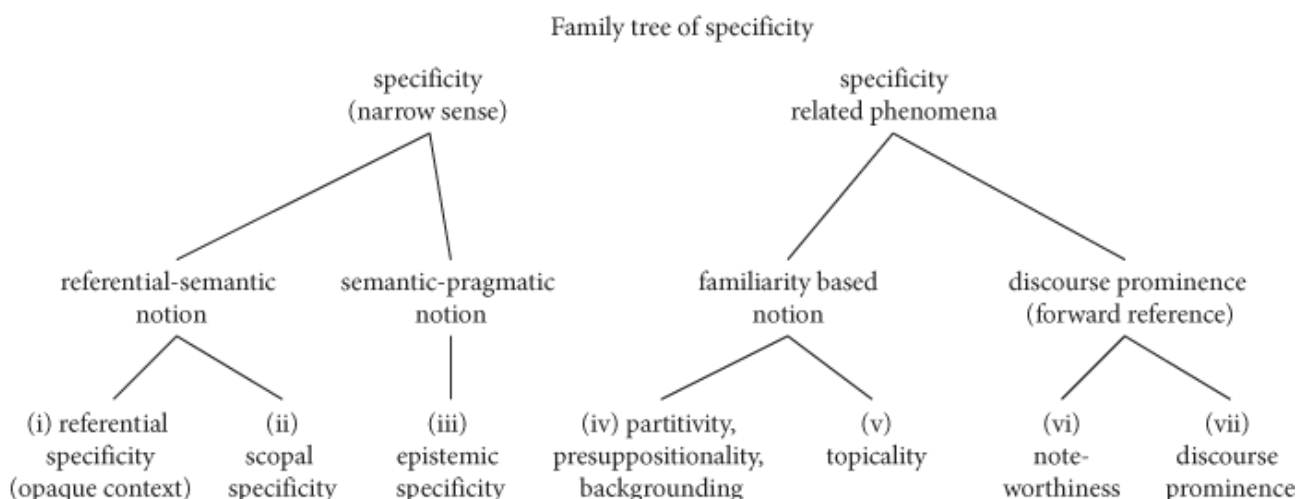
(24)

a. Laura will diesen Kommilitonen mit auf die Party bringen. Sie hat ihn im Englischkurs kennen gelernt.
   'Laura wants to bring this fellow student to the party. She met him in the English class.'

b. Laura will einen Kommilitonen mit auf die Party bringen. Sie hat ihn im Englischkurs kennen gelernt.
   'Laura wants to bring a fellow student to the party. She met him in the English class.'

If the specific interpretation of the indefinite noun phrase with the indefinite article has the same discourse properties as the indefinite *dies* noun phrase, we predict that the referential structure of the continuation stories would be the same. However, *dies*-indefinites were significantly more discourse prominent than noun phrases with the indefinite article; they showed four times more anaphoric expressions and they were used ten times more as a topic (Deichsel 2013: 269). This result on the discourse properties suggests that *dies*-indefinites have different discourse properties than specific indefinites with an indefinite article, even though their referential properties in sentences seems to be very similar if not identical.

9.3.8 A family resemblance notion of specificity

This short survey shows that specificity is a linguistic notion covering different contrasts that are related to each other in some way or other. But not all notions can closely be linked (p. 157) to the original intuition that the speaker has the referent of a specific indefinite 'in mind'. We therefore distinguish between specificity in a narrow sense and specificity related notions, which show similar features, but can be orthogonal to specificity in the narrow sense.

Family tree of specificity

```
        specificity                              specificity
       (narrow sense)                         related phenomena
       /          \                            /              \
referential-semantic   semantic-pragmatic   familiarity based   discourse prominence
     notion                notion              notion           (forward reference)
     /     \                  |                /      \            /        \
(i) referential  (ii)      (iii)        (iv) partitivity,   (v)      (vi)        (vii)
 specificity    scopal    epistemic    presuppositionality, topicality  note-     discourse
(opaque context) specificity specificity   backgrounding             worthiness   prominence
```

There are different ways to group these types of specificity together: Fodor and Sag (1982) assume that type (i) to (iii) are one and the same phenomenon. Farkas (1994) argues that epistemic specificity, scopal specificity—which includes referential specificity in her view—, and partitive specificity are independent of each other and can cross-

classify. Still they show the common effect of reducing the restrictor set of the indefinite, that is, the set of potential referents is restricted to few or possibly to only one element. This concept of 'referential stability' (Farkas and von Heusinger 2003) can generalize over various types of specificity and motivate why languages use the same encodings for these types. Kamp and Bende-Farkas (2006) argue that the core notion is epistemic specificity and an appropriate analysis can also explain referential and scopal effects. Von Heusinger (2002) modifies this picture into an analysis of specific indefinites as 'referentially anchored' indefinites covering (i)–(iii) and relating it to (vi) and (vii). Enç (1991) derives specificity contrasts from her core notion of partitive specificity, while Prince (1981a) and Ionin (2006) have focused on the discourse properties of the 'referential intention'. Wright and Givón (1987) argue that the semantic contrasts of (i)–(iii) can be derived from a discourse pragmatic notion of specificity. Many other groupings and categorizations of these contrasts are found in the literature.

9.4 Theories of specificity

As illustrated in the last sections, specificity is a semantic–pragmatic notion with various instances that are related by familiarity resemblance. There is no agreement in the literature on what counts as core data for specificity and what only as related phenomena (this has partly to do with the fact that most European languages have no clear overt marking for specificity). Theories also differ with respect to the semantic–pragmatic level they take as the essential contribution of linguistic forms. (p. 158) I illustrate the great variety of theoretical approaches with four families of theories on specificity: (i) Exceptional scope theories, (ii) Referential theories, (iii) Familiarity theories, and (iv) Discourse prominence theories. This division into four families of approaches follows the different semantic–pragmatic perspectives on indefinite reference, discussed in §§9.3.1–9.3.4, and it is partly orthogonal to one classic distinction into structural ambiguity theories (scopal theories) and lexical ambiguity theories. The lexical ambiguity approach assumes two indefinite articles in the lexicon, a referential indefinite article and an existential indefinite article, which happen to be homophonous in English (Karttunen 1968; Fodor and Sag 1982; Kratzer 1998, among others), but may be overtly expressed in other languages, such as in Maori or many other languages (see §9.2). The scopal theories are discussed in the next section.

9.4.1 Exceptional scope theories

In early approaches, (referential) specificity was associated with the different readings of indefinite noun phrases in opaque contexts (Quine 1960; Karttunen 1968, 1969/1976; Fodor 1970; Abbott 1976). Sentence (1), repeated as (25a), from Karttunen (1969/1976, ex. (43)), is ambiguous in three ways (25b–c):

(25)

a. Mary may want to marry a Swede.

b. There is some Swede whom Mary may want to marry.

c. It may be the case that there is some Swede whom Mary wants to marry.

d. It may be the case that Mary wants her future husband to be a Swede.

The readings of indefinites in opaque contexts, as in (25), show a contrast similar to the contrast of the *de re* versus *de dicto* readings of definite noun phrases (Quine 1956, 1960; Partee 1970). Karttunen (1969/1976) argues on examples like (25) that there could not be a categorical distinction between a specific reading of an indefinite and a non-specific reading, since that would not account for the three readings. He rather suggests a scopal analysis of specificity: the indefinite is represented as an existential quantifier that can be Q(uantifier) R(aised) and therefore freely take scope over the other two operators yielding the correct truth conditions for the three readings. An alternative to the QR-theory is the type-shifting approach (Zimmermann 1993; van Geenhoven and McNally 2005) which is based on the observation that indefinites, like definites, can either behave as regular arguments of type *e*, as properties of type *<e,t>*, or as quantifiers of a higher type (see Partee 1987). Intensional verbs like *to want, to seek, to hunt, to owe*, etc. can take the indefinites in any of their forms. In the property type *<e,t>* the indefinite is semantically incorporated into the predicate and does not introduce a discourse referent or allow for existential entailments. A more recent variant of the type-shifting approach is Chung and Ladusaw's (2004) distinction between two compositional operations, Saturation and Restriction: the indefinite can be of type *e* and then saturate an argument of the verb, or it can be of type *<e,t>* and modify or restrict the event expressed by the verb.

(p. 159) Fodor and Sag (1982) raise a critical argument against the QR analysis. They show on indefinites in scope islands, as in (11)–(14) in §9.3.2 that the indefinite does not behave like a quantifier, since it can escape scope islands, which is not possible for regular quantifiers. There are various analyses of this 'exceptional scope behavior', or 'long distance indefinites'. I briefly discuss three prominent approaches: (i) The *long-distance scope shift* approach ascribes fewer restrictions on movement to the existential quantifier (Abusch 1994; von Stechow 2000; Schwarz 2001). The other approaches all assume that the indefinite is not moved but stays in situ. (ii) In the *existentially closed choice function* approach, scope is derived by assuming that the indefinite article introduces a choice function variable that can be bound freely at different scope sites (Reinhart 1997; Winter 1997); (iii) Under the *singleton indefinite* or *implicit domain restriction* approach the indefinite is enriched by descriptive material until it expresses a singleton and therefore gives the illusion of wide scope, similarly to other domain restriction approaches (Portner 2002; Schwarzschild 2002).

First, the *long-distance scope shift* approaches assume that indefinites along with other weak quantifiers can escape scope islands, they scope freely (upwards), as in (26c) (Abusch 1994). This approach has the advantage of accounting for the data without introducing new concepts into the analysis, just by loosening some restriction. However, the disadvantages are that there is no uniform behavior of quantifiers and that the theory

overgenerates in predicting intermediate scope readings, even if they are not acceptable. However, von Stechow (2000), Schwarz (2001), and Heim (2011) opt for the *long-distance scope shift* or *flexible scope* theory of indefinites.

Second, existentially closed *choice function approaches* assume that the indefinite article introduces a choice function *f*. A choice function *f* is a function that selects one element out of a non-empty set or, more generally, assigns to a set one of its elements (Reinhart 1997; Winter 1997). This choice function can be bound by existential quantifiers at different levels, that is, inside the relative clause yielding the narrow scope reading, or outside the relative clause but still in the scope of the universal quantifier, as in (26d). The advantage of the choice function approach is that we can derive all available readings without QR and therefore without scope island violations. (As we will see in the next section, choice functions can be used to substitute an existential quantifier elaborating a scope theory, or they can be used for substituting a referential expression, modeling a referential approach.) The choice function approach has not only created an original formal tool for indefinites but has also instigated much controversy on the adequacy of this tool. There are problems with empty sets and with readings in downward entailing contexts (see Schwarz 2001 and Chierchia 2005 for an exhaustive discussion).

(26)

a. Every professor rewarded every student who read a book on the semantics–pragmatics interface.

b. intermediate scope: every professor > a book on the s-p-i > every student
For every professor there is a certain (possibly different) book on the s-p-i, such that the professor rewarded every student who read that book.

c. $\forall x$ [professor(x) $\rightarrow$ $\exists y$ [book-on-s-p-i(y) & x rewarded every student who read y]]

d. $\forall x$ [professor(x) $\rightarrow$ $\exists f$ [ch(f) & x rewarded every student who read f(book-on-s-p-i)]]

e. $\forall x$ [professor(x) $\rightarrow$ [x rewarded every student who read a book on the s-p-i x that x had liked most.]]

(p. 160) Third, Schwarzschild (2002) proposes an alternative view on the exceptional scope behavior of indefinites. He applies the domain restriction approach adopted with other quantifiers and shows that enriching the descriptive material of the indefinite leads to truth-conditional effects that are equivalent to Kratzer's approach. The wide-scope reading is entailed by an indefinite that is restricted to a singleton set ('singleton indefinite'), while the intermediate-scope reading is derived by a restriction resulting in a function that depends on the highest quantifier, as in (26e), expressing a functional reading. Even though domain restriction is necessary for other quantifiers, it is not clear

whether the restriction to a singleton set is always justified, as examples with partitives show (see Endriss 2009: 136).

9.4.2 Referentiality or indexicality theories

The central intuition underlying a specific reading is the 'referential intention' of the speaker, who introduces a discourse referent that he or she can identify, but not the hearer (Dekker 2004).[3] Focusing on this aspect, several analyses have developed. We discuss in the following (i) Fodor and Sag's (1982) indexicality theory, (ii) Kratzer's (1998) contextually bound choice function approach, (iii) Kamp's 'entity representation' approach, (iv) von Heusinger's (2002) referential anchoring approach, and (v) the application of referential anchoring in Sæbø's (2013) reported speech contexts.

(i)

Someone got up on the wrong side of the bed this morning.

(i) Indexicality theory

Fodor and Sag (1982: 388) give a purely indexical interpretation of specific (their 'referential') indefinites, which refer to the intended referent. They propose a Kaplan style semantics of specific indefinites, but do not give an explicit definition. Heim (2011: ex (56)) formulates the original idea in a two dimensional semantics with a context set c and an evaluation point i. The indexical or direct referential meaning of an indefinite only depends on the utterance context, as it is the case for regular indexical expressions.

(27)

a. $[[a_{\text{quant}} \, \alpha]]^{c,i} = \lambda Q. \, \exists x[[[\alpha]]^{c,i}(x) \, \& \, Q(x)]$

b. $[[a_{\text{ref}} \, \alpha]]^{c,i}$ is defined only if there is a unique individual that the speaker of c has in mind in c, and this individual is in $[[\alpha]]^{c,c}$; where defined, $[[a_{\text{ref}}]]^{c,i}$ = this individual.

(p. 161) (27a) is the representation for the existential meaning and allows for the scopal mobility, as with other quantifiers. (27b) is the representation for the specific indefinite, which introduces a referent that only depends on the context of utterance like other indexical or demonstrative expressions (see also the modification by Ionin 2006 below). The indexical semantics (27b) seems to be adequate for the direct referential meaning of indefinite *this* in English (and other languages), but not for the specific reading of an indefinite with the indefinite article, as shown by the existence of the intermediate scope reading, which is neither a direct referential nor a quantificational reading that obeys scope islands.

(ii) Kratzer's (1998) contextually bound choice function approach

Kratzer (1998) combines the indexical approach of Fodor and Sag (1982) with the choice function approach and assumes contextually bound choice functions, that is, the choice function variable is contextually determined, entailing a wide-scope reading (similar to the original Fodor and Sag approach). The intermediate reading, however, can be forced by a bound variable in the descriptive content, for example, *book on the s(emantics)– p(ragmatics) i(nterface) she has recommended*. Thus the set of books depends on the professor and the selected element co-varies with the values for professors, as in (28a), yielding an 'apparent intermediate' or 'pseudoscope' reading (Kratzer 1998). The representation (28a) leads to a new problem: if two professors have recommended the same books, the choice function *f* would select the same book for both professors, since the sets are extensionally identical. This is too strong a restriction for the intermediate reading, which intuitively allows for different choices of books depending on professors, even if they recommend the same set of books. Therefore, Kratzer (1998) introduces a 'Skolemized' choice function in (28b), that is, a contextually given Skolem function *g* that takes one individual argument (or parameter) and a set argument and yields one element of the set.

(28)

a. $\forall x$ [professor(x) $\rightarrow$ [x rewarded every student who read f(book-on-s-p-i *x recommended*)]]

b. $\forall x$ [professor(x) $\rightarrow$ [x rewarded every student who read *g*(x)(book on the s-p-i x has recommended)]] with *g* assigning choice functions to professors such that the choice function selects a book on the s-p-i that the professor has recommended.

Using choice functions allows dissociating the scope of the indefinite from its descriptive content. While the descriptive content stays in situ, the choice function variable can be bound at different places in the sentence resulting in different scopal properties of the indefinite. Choice functions also capture the intuitive idea that a specific indefinite can be understood as selecting an element out of a set according to a certain method. In a very general sense, choice functions are term-creating operations corresponding to type shifting from a set to an individual, which seems necessary for independent reasons. On the other hand, choice function approaches are controversial, as the representation of indefinites with choice functions seems to be too flexible: Choice functions do not allow for existential entailments, since they are not defined for (p. 162) the empty set (see above). It is an open issue whether this is a welcome result for fictional objects (see Ruys 2006) or whether this has to be repaired (see Winter 1997). Existentially bound choice functions predict wrong readings in downward entailing contexts (see Schwarz 2001; Chierchia 2001 for discussion and additional restrictions on choice function construals). This problem, however, does not arise with contextually bound choice functions (see Kratzer 2003, but Chierchia 2001). A final criticism is that once we are forced to use Skolemized choice functions (i.e., functions with one individual argument and a set argument) we may as well take Skolem functions with n-individual arguments and do

without the problematic choice functions altogether (see Hintikka 1986; Steedman 2011; Kamp and Bende-Farkas 2006; Onea and Geist 2011, among others).

(iii) Kamp's 'entity representation' approach

Kamp (1990) and Kamp and Bende-Farkas (2006, based on a manuscript from 2001) develop a version of Discourse Representation Theory that allows for the representation of direct referential expressions like proper names and demonstratives. They distinguish between external anchors, that is, functions that relate a discourse referent to an object in the world (like proper names to their bearers) and internal anchors, that is, functions that relate the representation to other discourse referents. Kamp (2014, 2015) elaborates this approach and models external anchors as 'Entity Representations', that is, a representation that directly links the discourse representation to the intended referent. While the Entity Representation is part of the speaker representation, the recipient has to establish the same Entity Representation for proper names and demonstratives via principles of communication, that is, principles that allow building the common ground from speaker and recipients' representations. Epistemic specific indefinites are similar to proper names and demonstratives in that they both require Entity Representations, that is, direct reference to their objects, just as in the analysis of Fodor and Sag (1982). However, they are different from proper names and demonstratives in that the communicative principles do not force the recipient to establish such a stable discourse referent—therefore, the properties of specific indefinites vary between direct referential expressions and existential expressions.

(iv) von Heusinger's (2002) referential anchoring approach

Von Heusinger (2002) extends the Kaplan style semantics of Fodor and Sag (1982) in a different direction. While other approaches assume that (epistemic) specific indefinites have referents that can or must be identified by the speaker, von Heusinger also allows for other potential agents in the linguistic context, which are able to establish reference. He starts from the semantics in (29) and allows referential anchoring not only to the speaker, but also to 'a context agent'. The example (30) from Higginbotham (1987) illustrates such a case: the indefinite 'a (certain) student from Austin' is in both (30a–b) specific, but in (30b) not speaker known or identifiable. The specificity can rather be modeled by 'referential anchoring' to the subject *George*.

(p. 163)

(29)

$[[a_{ref} \alpha]]^{c,i}$ is defined only if there is a unique individual that the speaker in c has in mind in c, and this individual is in $[[\alpha]]^{c,c}$; where defined, $[[a_{ref} \alpha]]^{c,i}$ = this individual.

(30)

a. George (to Lisa): I met a certain student from Austin today.

b. Lisa: George said that he met a (certain) student from Austin today.

Von Heusinger (2002 based on Egli and von Heusinger 1995; von Heusinger 1997) cashes out the idea of referential anchoring in terms of 'indexed epsilon terms', which are equivalent to parameterized choice functions discussed above. The idea is that the indefinite article can translate into the complex pronominal element f_x (originally ε_i) with x being a parameter that must be bound by a context agent. 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.

Additional evidence for variation in what can act as the anchor comes from the analysis of German specificity adjectives *ein gewisser* and *ein bestimmter* ('a particular', 'a certain'). Ebert, Ebert, and Hinterwimmer (2013: 38) observe that the specificity adjective *ein bestimmter* in (31a) can establish a referential link to the speaker or the subject Peter, as indicated by explicit information about the ignorance of the speaker. The adjective *ein gewisser*, however, must be linked to the speaker.

(31)

a. Peter sucht schon seit Stunden nach einer bestimmten
   Peter searches already since hours after a *bestimmt*
   CD – keine Ahnung, welche genau er sucht.
   CD – no idea which.one exactly he searches

b. Peter Sucht schon seit Stunden nach einer gewissen
   Peter searches already since hours after a *gewiss*
   CD – # keine Ahnung, welche Genau er sucht.
   CD – no idea which.one exactly he searches

'Peter has been looking for a certain CD for hours now—I have no idea which one exactly he is looking for.'

We can summarize the characterization of referential anchoring as follows: in the prototypical case the anchoring function takes the speaker as its argument, and its value is the referent of the specific indefinite. However, other arguments are possible (see von Heusinger 2011 for an extensive discussion).

(v) Sæbø's (2013) on specific indefinites in speech reports

I present a final observation that shows that specific indefinites not only carry a referential intention but also show referential effects in a discourse: Sæbø (2013) analyses specific indefinites that serve as antecedents for direct referential terms in speech reports. Sæbø (2013: 267) provides the following example (32a) and (32b): Suppose that Sæbø says (32a) to his wife and that his wife has no idea about the identity of the 'someone else'. Still, the 'someone else' can later utter (32b).

(32)

a. I have met someone else.

b. He has told his wife he has met me.

Sæbø observes that the use of the direct referential pronoun *me* in the speech report (32b) is conspicuous, as it is more specific than its antecedent *someone else* in (32a). This is surprising since the content of a reported speech is equal or less informative than its original utterance. However, the pronoun *me* in (32b) is more informative than the indefinite *someone* in (32a). Sæbø argues that this is only possible if the indefinite in (32a) has a referential intention such that in the reported speech that referential intention can be spelled out by a pronoun (see for details Sæbø 2013).

9.4.3 Familiarity theories

The main distinction between definite and indefinite expressions in a discourse model is that definites introduce familiar discourse referents and indefinites novel ones (Kamp 1981; Heim 1982). In section 9.3.4 we discussed instances of partitive indefinites as in (33), where in the partitive reading the indefinite introduces a discourse referent that is part or a subset of an already introduced discourse referent (here: children), see Enç (1991).

(33)

Several children entered my room. I knew a girl.

Partitives, or more correctly implicit partitives, are an instance of inferrable expressions, expressions that have a more complex referential structure than simple definites or indefinites. Inferrable definites as well as inferrable indefinites introduce (i) a novel discourse referent, by (ii) linking it via a hearer given relation to (iii) a discourse given anchor (or antecedent). The difference between definite inferrables and indefinite inferrables is the uniqueness (or exhaustiveness) condition (Prince 1981b, see §9.3.3). Enç (1991: 7 ex. (22)) models this complex structure by introducing a second index for the existence of an anchor for the expression (she assumes for partitivity a subset relation for plural and an element relation for singular). Each noun phrase comes with two indices: the index i for the familiarity status of the introduced referent and an index j for the familiarity status of the anchor. A specific indefinite has a novel i, but a familiar j.

(34)

Every [NP α]$<i,j>$ is interpreted as α(x_i) and

$x_i \subseteq x_j$ if NP$<i,j>$ is plural

$\{x_i\} \subseteq x_j$ if NP$<i,j>$ is singular

There are various ways to modify this model: Roberts (2003: 304) introduces the term 'weak familiarity' by focusing on the linking relation, rather than the availability of the anchor. All such familiarity approaches have in common the fact that they account for the presuppositionality of partitive indefinites as a way to link the indefinite to the previous discourse. Familiarity theories are extensions of theories that distinguish between definite and indefinite noun phrases based on their discourse properties. So they are hearer oriented and cannot model the speaker oriented perspective of 'having a (p. 165) referent in mind'. Therefore, partitives easily cross-classify with referential, epistemic, and scopal specificity (see §9.3.4, ex. (21)).

9.4.4 Discourse prominence theories

There are various extensions of models of specificity trying to account for the function of indefinites in the subsequent discourse. Givón's (1983) work on 'topic continuity' and Wright and Givón's (1987) analysis of the pragmatics of indefinite reference assume that special indefinites such as *this*-indefinites or article forms in their early grammaticalization stages (such as *xad* 'one' in Hebrew) signal discourse prominence of the referent. This discourse prominence is expressed by early topic shifts, high referential persistence, etc. Givón assumes that the pragmatic function triggers the semantic properties of specific indefinites. But we can also take the reverse perspective: it is the sentence semantic properties of indefinites that govern their discourse pragmatic ones. The two approaches we discussed in §9.4.1 and §9.4.2 differed in the assumption of whether or not epistemic specificity is part of the semantic representation. But even in an approach that does not assume an immediate sentence semantic effect, some authors assume a discourse effect, as illustrated by the position of Stalnaker (1998: 16), who holds that the difference between specific and non-specific indefinites is crucial for discourse structure: "The account I am sketching suggests that this difference matters, not to the interpretation of the indefinite expression itself, but only to the evaluation of subsequent statements made with pronouns anaphoric to the indefinite expression." A similar position is taken by Kamp (2014), who assumes that the specific use of an indefinite strongly signals that the speaker intends to say more about the referent and thus that the indefinite serves as the antecedent for a referential chain. There is a small, but growing corpus of evidence that this link exists (see Givón 1983; Gernsbacher and Shroyer 1989; Chiriacescu and von Heusinger 2010; Deichsel and von Heusinger 2011, among others), but there is no fleshed out theory that bridges the semantic properties with the discourse pragmatic properties of indefinites. A pragmatic account may go like this: the use of a specific indefinite forces the hearer to establish a permanent discourse referent. By coherence principles and Gricean maxims, the speaker would only force the hearer to do that if she intends to say more about that referent. On the other hand, a semantic account may assume the following relation between referential properties of specific indefinites and their discourse properties: if the speaker has a referent in 'mind', then he or she generally plans to provide more information about this specific referent— thus there is an implicature from a specific indefinite to a discourse prominent indefinite. Jeanette Gundel (pc) informs me about another variant of the accounting for the relation

between semantics and discourse pragmatics: a specific indefinite is referential in the sense that it introduces a referent while processing the sentence. This referent is then available for further predication. A non-specific indefinite just introduces an attribute (p. 166) or concept, in terms of Gundel et al. (1993) 'type identifiable', which does not suggest itself for continuation, but does not block referential continuation either. Now, we have to explain why a referent once introduced in the discourse model 'creates a pressure' to re-use it.

9.4.5 Evaluation of the theories

I illustrate the differences between the four families of approaches on the following selected issues: (i) are the referential theories too strong? (ii) who can act as holder of the referential intention? (iii) what is the status of the familiarity theories? and (iv) what is the relation between the sentence semantics of specific indefinites and their discourse pragmatics?

The main controversy between existential theories of specificity and referential theories (cf. §9.4.1 and §9.4.2) is that referential theories correctly represent the referential intention, but are too strong with respect to the truth conditions of a sentence, as illustrated in (35): even if the speaker has a particular poem of Pindar in mind, the utterance of (35a) only contributes an existential statement, as in (35d). Since the hearer cannot know which poem the speaker has in mind, the speaker commits himself or herself only to the existential statement, which would be true even if Ann would read a different poem from what the speaker has in mind (see for discussion King 1988; Ludlow and Neale 1991; but Kratzer 1998).

(35)

a. Ann read a poem of Pindar.
b. Ann read $this_{indef}$ poem of Pindar.
c. Ann read a certain poem of Pindar.
d. Ann read sm poem of Pindar.

The lexical expressions $this_{indef}$ and *a certain* in (35b–c) contribute the referential reading by their semantic content and render the utterance false if Ann is reading a different poem, as predicted by the referential theory. If we assume that the indefinite article is ambiguous between a specific and non-specific reading, the speaker is only committed to the weaker reading, but this is independent of the assumption that the specific reading has a referential representation. (ii) There is a second controversy: Fodor and Sag's (1982) referential semantics for specific indefinites seems to fit quite well the behavior of *this*-indefinites, but not of *a certain*-indefinites or indefinites with a (specific) indefinite article. So we might want to distinguish between three classes of indefinites: referential indefinites, specific indefinites, and non-specific indefinites. But then we need a different semantics for specific indefinites, which was sketched in §9.4.2 (iv) under the notion of

'referential anchoring'. The holder of the referential intention can shift from the speaker to other discourse referents that are able to hold such an intention. (iii) The referential anchoring must not be taken as just an instance of discourse linking as assumed in the familiarity theory for partitive indefinites. Such theories model partitive indefinites by presupposing (rather than asserting) the (p. 167) restrictor set of the indefinite and they also further restrict that set out of which an indefinite selects its referent. Still they do not deal with the identification of the referent. This means partitivity is orthogonal to specificity, and familiarity theories may not be able to account for specificity if understood as the linguistic expression of referential intention. (iv) A very open issue is the interaction between the sentence semantic contribution of specific indefinites and their discourse pragmatic ones as discussed in the last subsection. Here we have to learn much more about the interaction, but we also have to model the communicative interaction of speaker and hearer (see Kamp 2014). I have to leave this perspective open for further research.

9.5 Summary

The semantic–pragmatic category 'specificity', which is informally described by the speaker 'having a referent in mind' is used to describe various semantic and pragmatic contrasts. I have argued that there is a core notion of specificity underlying the intuitive concept, namely referential anchoring. The referent of a specific indefinite is dependent on some discourse participant. The anchor must be familiar to speaker and hearer, while the content of the anchoring function must be unfamiliar to the hearer (to distinguish specific indefinites from definites). Still the hearer has to accommodate the fact that there is a function and must establish a permanent representation for the specific indefinite. I have shown that this approach is quite flexible and can account for various particular constraints associated with special specificity markers. However, it cannot explain all phenomena associated with different types of specificity, which might get different kinds of explanation (such as genuine intermediate scope indefinites via embedded topics, see Ebert, Endriss, and Hinterwimmer 2009). I discussed the similarities between specific indefinites and partitive indefinites as well as 'topical' indefinites and showed that they are independent notions, but with similar effects. Finally, I compared the semantic properties of specific indefinites with their discourse pragmatic functions, which open up a new domain of research, namely the interaction of semantic and pragmatic properties with discourse properties of nominal expressions.

Acknowledgments

German Research Foundation (DFG) as part of the SFB 1252 "Prominence in Language" in the project C04 "Conceptual and referential activation in discourse" at the University of Cologne.

Notes:

([1]) Baker (1966) termed these two readings of indefinites 'specific' versus 'non-specific' in his master's thesis. See also Fillmore (1967) for one of the first uses of 'specific'.

([2]) Jeanette Gundel kindly informed me that Fodor and Sag's (1982) claim about topicalization favoring a specific interpretation is too strong (see Gundel 1999 for an extensive discussion).

([3]) Barbara Abbott kindly informs me that there are specific uses of indefinites, as in (i) where the referent is also hearer known, but still discourse new.

Klaus Von Heusinger

Klaus von Heusinger is Professor and Chair of German Linguistics and director of the Collaborative Research Center "Prominence in Language" at the University of Cologne. His research interests include the semantics and pragmatics of referring expressions and semantics-pragmatics in general. His current research focuses on differential object marking, discourse structure, and the encoding of definiteness and specificity in different languages, including Germanic, Romance, Altaic, and Semitic. He has edited various volumes and published in various journals, including Journal of Semantics, Lingua, Research on Language and Computation, and Theoretical Linguistics.