Specificity and Definiteness in Sentence and Discourse Structure

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Abstract

The paper gives a contrastive analysis of the two semantic categories *specificity* and *definiteness*. It argues against the traditional picture that assumes that specific expressions are a subclass of indefinite NPs. The paper rather assumes that the two categories are independent of each other. Definiteness expresses the discourse pragmatic property of familiarity, while specificity mirrors a more finely grained referential structure of the items used in the discourse. A specific NP indicates that it is referentially anchored to another discourse object. This means that the referent of the specific expression is linked by a contextually salient function to the referent of another expression.

1 INTRODUCTION

Indefinite expressions show a contrast in readings that can be informally illustrated by example (1) from Fodor & Sag (1982). The indefinite NP *a student* has two interpretations: In the specific interpretation the referent of the indefinite NP is determined, as the continuation (1a) suggests. In the non–specific reading, the referent is not determined as the continuation (1b) motivates:

(1) **A student** in Syntax 1 cheated on the exam.

    a. His name is John.
    b. We are all trying to figure out who it was.

There is no uniform definition of the notion 'specificity'. The literature provides characterizations for different aspects of specific NPs, as listed in (2). A specific reading of an indefinite NP is pretheoretically characterized by the 'certainty of the speaker about the identity of the referent', 'the speaker has the referent in mind', or 'the speaker can identify the referent'. Another version of this characterization is that the referent of a specific NP is fixed or determined before the main predication is computed and that it matters which referent we select out

of the set of entities that fulfill the description. It is also assumed that specific indefinites are 'scopeless' like proper names or demonstratives, i.e. they always show widest scope, and therefore are assumed to be existentially presupposed. Furthermore, it is often assumed that the insertion of adjectives like *a certain* indicates specificity. The list can be continued.

(2)   *Pretheoretical and informal characterization of specificity from the literature*

   (i)   certainty of the speaker about the identity of the referent
   (ii)   the referent is fixed/determined/not depending on the interpretation of the matrix predicate
   (iii) specific indefinite NPs are 'scopeless' or 'referential terms', i.e. they behave as if they always have the widest scope
   (iv)   specific indefinite NPs are referential terms, i.e. they are existentially presupposed
   (v)   specific indefinite NPs can be paraphrased by *a certain*

Note, however, that none of these characteristics seems to be a sufficient condition for specificity, nor do the different aspects seem to be coherent descriptions of specificity. In particular, the wide scope behavior of specific indefinites is disputed. As Enç (1991: 2f) notes, the question whether specific indefinites are expressions that have wide scope with respect to at least one other operator or whether they are expression that have always widest scope is a theory-dependent question of defining specificity. In order to compare different theories we need an independent way to determine a specific NP. I assume, therefore, that adjectives like *a certain* indicate a specific reading, even though we find indefinite NPs with *a certain* that have narrow scope—I call these instances *relative specificity* (see section 4.3). I also assume that the Turkish accusative-case suffix for direct object in preverbal (base) position is an indicator for specificity (see Johanson 1977; Enç 1991; Kornfilt 1997, and section 3).

   Discussing cases of relative specificity and some more data from Turkish, I conclude that the characteristic aspects of specificity are captured by the assumptions (2ii) and (2v). I refute assumptions (2i), (2iii) and (2iv) as too general (in many, but not all cases, these characteristics follow from the assumptions (2ii) and (2v)). In particular, I dispute the definition of specific indefinites as 'the speaker has the referent in mind' as rather confusing if one is working with a semantic theory. For the time being, I propose the following informal characterization in (3).

(3)   *Informal characterization of specificity used in this paper*

    (i) the interpretation of a specific NP does not depend on the interpretation of the matrix predicate or semantic operators such as modal verbs

    (ii) the referent of a specific NP is functionally linked to the speaker of the sentence or to another referential expression in the sentence such as the subject or object

    (iii) The lexical item *a certain* prominently marks a specific reading of an indefinite NP

(3i) negatively describes a specific NP as not determined by the matrix predicate or other semantic operators such as modal verbs or verb of propositional attitudes (for negation see the discussion in section 6). (3ii) positively describes the dependence of specific NPs on other referential expressions, as will be shown in section 6. (3iii) assumes that specific indefinite NPs can be disambiguated by lexical material, such as English *a certain*. This claim, however, is not uncontroversial (see the discussion in section 4.4).

The characterization in (3) does not claim that specific NPs have always wide scope. This observation is confirmed by the discussion of 'relative specificity', i.e. cases in which the specific indefinite does not exhibit wide, but intermediate or narrow scope behavior. Based on such data, I argue that specificity expresses a referential dependency between introduced discourse items. Some of the examples for illustrating specificity are taken from the novel *The Name of the Rose* by Umberto Eco. The novel forms the background for the sentences under investigation and controls the referential properties of the context. I also use translations of the same sentences as cross–linguistic evidence for grammatical reflexes of semantic distinction (for a more detailed account toward this contrastive method, see von Heusinger 2002).

The paper is organized as follows: In section 2, I discuss the widely used description of specific NPs as a subclass of indefinite NPs as 'known/identifiable to the speaker' and show that this description is inadequate. Modern semantic theories have shown (since Karttunen 1976) that definiteness cannot be explained with recourse to identifiability. It will be shown that identifiability cannot be used to define specificity, either. In section 3, I discuss the morphological marking of specificity in Turkish by the accusative case suffix. This indicator of specificity will be compared with more indirect markings in languages such as English or Italian, using examples from the novel *The Name of the Rose*. In section 4, I present different instances of what

are called specific cases, such as scopal specificity, epistemic specificity, partitive specificity, and relative specificity. In section 5, I present two families of semantic approaches to definiteness and specificity: the pragmatic approach assumes that specificity is a question of scope and additional pragmatic information—from the early beginnings, this 'additional' information has also been represented as a semantic structure, as in Jackendoff's (1972) 'modal structure'. The lexical ambiguity approach assumes that there are two indefinite articles, an existential and a referential, which then yield non-specific and specific readings, respectively. However, both theories are restricted with respect to the phenomena they describe. In section 6, I present a more general theory of specificity that is based on the notion of 'referential anchoring' at the level of discourse representation: a specific NP is anchored to another discourse entity.

2   SPECIFICITY AND DEFINITENESS

In this section, I discuss the relation between definiteness and specificity; in particular I argue first that specificity is not simply a subcategory of indefinite NPs, but an independent category that can therefore form a cross-classification. Second, I motivate that specificity is to be analyzed in terms of an additional structure which I call 'referential structure' of a text.

The category 'specificity' was introduced for indefinite NPs as an analogy to the category 'referentiality' for definite NPs. Quine (1960: Section 30, 141ff) discusses the referential properties of definite NPs in examples like (4): The definite NP *the dean* behaves differently in the scope of an intensional verb like *look for*. Quine (1960: section 31, 146ff) observes that a very similar ambiguity can be constructed with indefinite NPs, such as in (5). This contrast was later termed specific v. non-specific (Baker 1966; Fillmore 1967):

(4)   John is looking for **the dean**.

    a.   . . . , whoever it might be.   *non-referential*
    b.   . . . , namely for Smith, who happens to be the dean.
                                                     referential

(5)   John is looking for **a pretty girl**.

    a.   ..., whoever he will meet, he will take her to the movies.

                                non-specific

    b.   ..., namely for Mary.   *specific*

2.1   *Definiteness and specificity on a identifiability-scale*

The intuitive concept of specificity (see (2)) very quickly spread over the linguistic literature. However, this concept is most often understood as secondary semantic property of NPs that applies only to indefinite NPs. Additionally, it has become very common to describe or define definiteness and specificity within a single scale in terms of identifiability by speaker and hearer, as in (6). According to this view, definite NPs are used if both the speaker and hearer can identify the referent, and specific indefinite NPs are used if only the speaker can identify the referent, while non-specific indefinites indicate that none of them can identify the referent:

(6)   The 'identifiability' criteria for definiteness and specificity

identified by	definite (+ specific)	indefinite specific	indefinite non–specific
speaker	+	+	−
hearer	+	−	−

This view is often ascribed to Givón (1978), who gives a more differentiated picture, however. First, he (1978: 293) defines specificity—what he calls 'referentiality'—in the following way:

> 1.1. Referentiality [= specificity, KvH]
> In the terms used here, referentiality is a semantic property of nominals. It involves, roughly, the speaker's intent to 'refer to' or 'mean' a nominal expression to have non-empty references—i.e. to 'exist'—within a particular universe of discourse. Conversely, if a nominal is 'non-referential' or 'generic' the speaker does not have a commitment to its existence within the relevant universe of discourse. Rather, in the latter case the speaker is engaged in discussing the genus or its properties, but does not commit him/herself to the existence of any specific individual member of that genus.

In this definition, specificity is defined in terms of (i) existential presupposition (cf. (2iv)) and (ii) in terms of the type of the referent (individuals v. predicates). The latter aspect is generally taken to

distinguish between particular v. generic readings of NPs. Givón (1978: 296) also makes clear that he understands definiteness as a property of linguistic discourse structure, rather than of the world: 'The notions 'definite' and 'indefinite,' as far as referential nominals are concerned, are used here strictly in their discourse-pragmatic sense, i.e. 'assumed by the speaker to be uniquely identifiable to the hearer' v. 'not so assumed', respectively.' However, the definition in terms of attitudes of the speaker towards the mental representation of the hearer is quite complex, making this definition quite difficult to work with. Therefore, the simplified picture (6) is generally used.

There are three tacit assumptions about this view of the relation between definiteness and specificity that are incorrect: (i) definiteness is explained in terms of identifiability of the referent, and (ii) specificity is a subcategorization of indefinite NPs as speaker identifiable but not as hearer identifiable. (iii) Definiteness and specificity are ordered according to a scale which excludes a definite non-specific interpretation. In what follows, I refute each of the three assumptions.

2.2   *Identifiability as criteria of definiteness*

A definite NP is said to be known or to be identifiable for speaker and hearer. The following examples from the novel *The Name of the Rose*, however, show that this is not the case. In (7) most occurrences of definite NPs introduce new referents—referents that are unknown to the reader (or hearer). The definiteness indicates that the new referent is functionally connected with some other discourse item which has been introduced previously (see Löbner 1985). Once we have established a discourse item for *the abbey*, we can also introduce one for *its walls*— by using a function from abbeys onto their walls (knowing that abbeys generally have walls). The two superlatives in (8) show that uniqueness is the relevant factor for definiteness in this case.

(7)   While we toiled up **the steep path** that wound around **the mountain**, I saw **the abbey**. I was amazed, not by **the walls** that girded it on every side, similar to others to be seen in all **the Christian world**, but by **the bulk** of what I later learned was **the Aedificium**. This was an octagonal construction that from a distance seemed a tetragon (a perfect form, which expresses **the sturdiness and impregnability** of **the City of God**), whose southern sides stood on **the plateau of the abbey**, while **the northern ones** seemed to grow from **the steep side of the mountain**, a sheer drop, to which they were bound. (21)

(8) 'Come, come,' William said, 'it is obvious you are hunting for Brunellus, **the abbot's favorite horse**, fifteen hands, **the fastest in your stables.**'(23)

One could still argue that the occurrences of definite NPs in (7) and (8) are in some way identifiable for the hearer, even though perhaps indirectly. However, the following two examples clearly show uses of definite NPs where the referent is not identifiable (neither for speaker nor for hearer): The definite NPs *the righteous man* and *the doors* in (9) and (10) cannot be identified by the speaker and hearer, they do not even refer to identifiable objects, and in (10) the definite NPs do not refer to an existing object. Example (9) illustrates very nicely that the NP is definite because it is anaphorically linked to a discourse item already introduced (but not necessarily to an identified referent 'in the world').

(9) [...] And I know that he [= the Evil One] can impel his victims to do evil in such a way that the blame falls on **a righteous man**, and the Evil One rejoices then as **the righteous man** is burned in the place of his succubus. (29)

(10) William asked him whether he would be locking **the doors.** 'There are no doors that forbid access to the scriptorium from the kitchen and the refectory, or to the library from the scriptorium.' (85)

These different uses of definite NPs exceed what can captured by the notion 'identifiability'. Definiteness is rather explained by uniqueness (Russell 1905; Neale 1990), familiarity (Karttunen 1976; Kamp 1981; Heim 1982), functionality (Löbner 1985) or by salience (Lewis 1979; von Heusinger 1997), to name only a few theories.

2.3 *Identifiability as a criterion of specificity*

Specific indefinite NPs are assumed to be speaker-known but hearer-unknown. Let us apply the notion of identifiability to specificity for the sake of the argument (even though we have just seen that identifiability does not help to understand definiteness). I refute this claim by showing that this condition is too strong and too weak at the same time. The indefinite NP *a secret* in (11) can be interpreted as specific, even though the speaker does not know the identity of its referent (more of these cases of 'relative specificity' in section 4.4). The referent of the (specific ?) indefinite NP *an equally terrible sin* is known to both,

speaker and hearer. It is the sin of homosexuality—something the abbot cannot reveal by its name. In a theory of identifiability, one would expect definite NPs instead of the indefinite. The indefiniteness of the two NPs in (11) and (12) can only be explained in the terms of discourse representation theories: the two referents cannot be linked to a previously established discourse referent—this is why indefinite NPs are used.

(11) The fact is, Benno said, he had overheard a dialogue between Adelmo and Berengar in which Berengar, referring to **a secret** Adelmo was asking him to reveal, proposed a vile barter, which even the most innocent reader can imagine. (137)

(12) It would already be serious enough if one of my monks had stained his soul with the hateful sin of suicide. But I have reason to think that another of them has stained himself with **an equally terrible sin**. (33)

2.4 *Cross-classification of definiteness and specificity*

There is no convincing definition of definiteness (and specificity) in terms of identifiability. I will assume here that definiteness expresses the discourse pragmatic property of familiarity (Karttunen 1976; Heim 1982; Kamp 1981, and following work in discourse semantics). The second question is then what is the nature of specificity. I assume that specificity is a 'referential property' of NPs. This property cuts across the distinction of definite v. indefinite, like genericity. Prince (1981: 231) observes that both definite and indefinite NPs exhibit different 'ways of referring':[1]

(13) Different ways of referring of *indefinite NPs*

    a. *A body* was found in the river yesterday.   *specific*
    b. *A tiger* has stripes.   *generic*
    c. John is *a plumber*.   *predicative*
    d. I never saw *a two-headed man*.   *attributive* [= *non-specific*]
    e. He won't say *a word*.   *negative polarity idiom piece*

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[1] Prince (1981: 231): 'In their most usual reading, only the italicized NP in (1a) [= (13a), KvH] can actually be said to be *specific*. The italicized NPs in (1b–e) [= (13b–e), KvH] are all *nonspecific*, though of different types (generic, predicative, attributive, and negative polarity idiom-piece, respectively). However, definite NPs exhibit a similar range of understandings.' My use of 'non-specific' correlates with Prince's 'attributive' since I assume that specific as well as non-specific NPs are 'individualized', i.e. refer to one individual.

(14) Different ways of referring of *definite NPs*

    a. *The body* was found in the river yesterday.   *specific*
    b. *The tiger* has stripes.   *generic*
    c. Ronald is *the president*.   *predicative*
    d. They'll never find *the man that will please them*.

                                                             attributive
    e. He doesn't mean *the slightest thing* to me.

                                    negative polarity idiom piece

The exact nature of specificity will be discussed in section 6. Informally, specificity mirrors a more finely-grained structure of referential relations between the items used in the discourse (what Jackendoff 1972 calls 'modal structure'). This structure is independent of the discourse pragmatic status of the NP (expressed in terms of definiteness) and the scopal behavior of that NP. Specificity affects definite NPs as well as indefinite NPs. A specific NP indicates that the associated discourse item is referentially anchored to another discourse item and therefore inherits the scopal properties of its anchor (among other properties).[2]

(15) Cross-classification of definiteness and specificity

	discourse old	discourse new
referentially anchored to discourse referents	*referential or specific def. NPs*	*specific indef. NPs*
referentially bound by operators	*attributive or non-spec. def. NPs*	*non-spec. indef. NPs*

    This picture is confirmed by the early literature on specificity where often a comparison was made between non-specific indefinite NPs and attributive readings of definite NPs, on the one hand, and specific indefinite NPs and referential definite NPs on the other (cf. Partee 1970). However, the comparison was mainly explained in terms of scope or in terms of an ambiguity between quantifiers and a referential operator (see section 4.1 and 4.2).

[2]I assume that every NP receives an index that must be either anchored to a discourse item or bound by some discourse operator (such as negation, intensional verbs etc.). The second condition is necessary since both definite and indefinite NPs are terms which can serve as antecedents for anaphoric pronouns. In an alternative view, indefinites are predicates that can receive a 'singular term'-reading contextual force. However, in such a view there is no uniformity of definite and indefinite NPs. See section 6 for more discussion.

3 GRAMMATICAL ENCODING OF SPECIFICITY

As opposed to definiteness, there are no sets of specific v. non-specific articles in Indo-European languages. This probably caused the assumption of the purely pragmatic nature of specificity in contrast to the semantic nature of definiteness (see section 4.1). However, there are many other languages that mark specificity lexically or morphologically. Lyons (1999: 59) summarizes observations from other languages: 'Articles marking specificity, or something close to specificity, rather than definiteness are fairly widespread.' In the remainder of this section, I present data from Turkish where specificity is reflected in the morphological marking of the direct object and of the subject in embedded sentences.[3]

3.1 *Turkish*

Turkish is an agglutinating and suffixing language. The main verb is sentence final and most suffixes are phrase-final. The unmarked word order is: subject > indirect object > direct object > predicate, as illustrated in (16):

(16) ressam biz-e   resim-ler-i   göster-di
     artist   1pl-dat picture-pl-acc show-di.past
     'An artist showed us the pictures'

Embedded clauses are realized by nominalized predicates. The subject of such nominalized predicates is in the genitive (with or without a genitive case ending—see below). The genitive shows agreement on the nominalized predicate in form of a possessive suffix. Embedded sentences can be arguments of superordinate predicates, as illustrated in (17):

(17) [Türkiye'nin$_1$ büyük ol-duǧ-un$_1$]-u   bil-ir-im
     Turkey-gen   big   be-NOM-3pos]-acc   know-aor-1sg
     'I know the big-being of Turkey' = 'I know that Turkey is large'

3.2 *Turkish object marking*

The accusative-case suffix $-I$ indicates the specificity of its noun. (The I represents the set of accusative suffixes which differ according to

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[3] This observation goes back to Kornfilt (1997), but it was already noted by Johanson (1977) and Kornfilt (1984). Kornfilt (1997) assumes that the marking of specificity is not restricted to the direct object but also to the subject in embedded sentences.

phonological rules). Turkish does not have a definite article, but an indefinite article *bir*, which is derived from the numeral *bir,* but which differs from it in distribution. The direct object can be realized as a bare noun without case endings or as a noun with the accusative-case suffix − *I*. In (18a) the bare noun *kitap* expresses a reading that comes close to an incorporated reading.[4] The demonstrative *bu* 'this' requires the case suffix in (18b). The form *kitabı* with the case-suffix in (18c) is generally translated as a definite NP, while the form *bir kitap* in (18d) with the indefinite article and without the case suffix is translated as an indefinite NP. However, (18e) shows that the case-suffix expresses specificity rather than definiteness, since it can be combined with the indefinite article (see Lewis 1967; Johanson 1977; Erguvanlı 1984; Dede 1986; Kornfilt 1997, among others).

(18) Referential options for the direct object in preverbal position

    a. (ben)   *kitap*   oku-du-m   *incorporated*
         I   book   read-past-1sg 'I was book-reading'

    b. (ben)   *bu kitab-ı*   oku-du-m   *demonstrative*
         I   this book-**acc** read-past-1sg 'I read **this** book.'

    c. (ben)   *kitab-ı*   oku-du-m   *definite* (?)
         I   book-**acc** read-past-1sg 'I read **the** book.'

    d. (ben)   **bir** *kitap*   oku-du-m   *indefinite*
         I   **a** book   read-past-1sg 'I read **a** book.'

    e. (ben)   **bir***kitab-ı* oku-du-m   *indef. spec.*
         I   **a** book-**acc** read-past-1sg 'I read **a certain** book.'

Direct objects with the accusative-case suffix can only receive a specific reading, while direct objects without the accusative-case suffix can be

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[4]Erguvanlı (1984: 23) calls the bare NP in (18a) *non-referential* and distinguishes it from the indefinite NP *bir kitap* in (18d) by 'the ability of the latter, but not the former, to pronominalize.

(63)   Ali kaç   gündür **bir** *resim* yapı-yor-du   nihayet bugün {**on-u**/Ø} bit-ir-di
      Ali how-many day   one pict. make-prog-past finally today it-acc   finish-aor-past
      'Ali was making (painting) a picturee for days, finally he finished it today.'
(64)   Ali kaç   gündür *resim* yapı-yor-du   nihayet bugün {**✶on-u**/Ø} bit-ir-di
      Ali how-many day   pict. make-prog-past finally today it-acc   finish-aor-past
      'Ali was painting (picture-making) for days, finally he finished (it) today.'

On-u 'it' (referring to *a picture*) can alternate with zero pronominalization in (63), as expected, but (64) *it* refers to the non-referential DO [= direct object] *resim* 'picture', is unacceptable.' Thus, the bare NP is different from the NP with the indefinite article. However, Erguvanlı (1984: 24–29) also provides arguments against an incorporation-analysis for the bare NP.

interpreted either way, as illustrated in (19) and (20) from Dede (1986: 158):[5]

(19) Bir öğrenci-**yi** arı-yor-um.   Bul-amı-yor-um
      a student-acc look‗for-prog-1sg   find-inabil-aor-1sg
      'I am looking for a student.   I can't find him'   *specific*
                                          (★'I can't find one')
                                                                    ★*non-specific*

(20) Bir   öğrenci   arı-yor-um.   Bul-amı-yor-um
      a   student   look‗for-prog-1sg find-inabil-aor-1sg
      'I am looking for a student. I can't find him'   *specific*
      'I am looking for a student. I can't find one'   *non-specific*

3.3   *Turkish subject marking*

A similar contrast exists for the subject of embedded sentences. The predicate of an embedded sentence in Turkish is a nominalized form that shows agreement with the subject, realized by the possessive marker. The subject is realized in the genitive, either with the genitive-case suffix -*In*, or without it showing the same contrast as the direct object with or without the accusative-case suffix. An embedded subject with the genitive-case suffix is interpreted as specific and one without the genitive-case suffix as non-specific. The indefinite article *bir* and the genitive-case suffix mark a specific indefinite subject Kornfilt (1997: 216, ex. (762) = (21)).

(21) [köy-ü   **haydut**   bas-tığ-ın]-ı   duy-du-m.
      [village-acc   robber   raid-Nom-poss.3sg]-acc   hear-Past-1sg
      'I heard that **robbers** raided the village'

(22) [köy-ü   **bir haydut-un**   bas-tığ-ın]-ı   duy-du-m.
      [village-acc   a robber-gen raid- Nom-poss.3sg]-acc hear-Past-1sg
      'I heard that **a certain robber** raided the village'

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[5]Dede (1986: 157) observes that the condition for case marking of the direct object are more complex. Among other conditions, movement is marked by the case: 'The direct object which is removed from its unmarked position, that is, from immediately preverbal position for some reason such as focusing or contrast of another constituent always takes the ACC case endings.'

(i) Bizim   ev-de   çay-i   her zaman   Aytül   yap-ar
     our   house-loc   tea-acc   always   Aytül   make-aor
     'Aytül always makes the tea in our family'

(ii) ★Bizim ev-de   çay   her zaman   Aytül   yap-ar.

See Kornfilt (2001), who shows that the accusative-case suffix often is used 'due to formal reasons', e.g. agreement marking or syntactic movement. Therefore, I use only examples with the direct object in its base position.

3.4 *A contrastive view*

Even though the data are more complex than the given picture, I assume that the accusative-case marking of the direct object in the preverbal (base) position and the genitive-case marking of the embedded subject in combination with the indefinite article is a fairly good indicator for a specific indefinite NP. This test is in any case more robust than the more indirect indicators in English or Italian, illustrated by the translation of (23c). The context of the novel is that one monk indicates to William of Baskerville (the medieval Sherlock Holmes) that he knows something (specific!), but that he is not ready to disclose it:

(23) 'But in the abbey there are rumours, . . . strange rumours . . . '—'
Of what sort?'

a. 'Strane. Diciamo, di **un monaco** che nottetempo *ha voluto* avventurarsi in biblioteca, per cercare **qualcosa** che Malachia non *aveva voluto* dargli, e ha visto serpenti, uomini senza testa, e uomini con due teste. Per poco non usciva pazzo dal labirinto. . .' (97)

b. 'Strange. Let us say, rumours about **a monk** who decided to venture into the library during the night, to look for **something** Malachi had refused to give him, and he saw serpents, headless men, and men with two heads. *He* was nearly crazy when he emerged from the labyrinth. . .' (89)

c. 'Garip söylenti-ler örneğin,   [**bir rahib-in**$_1$ geceyarısı, strange rumour-pl for example, [a monk-gen   midnight [[Malachi'nin$_2$ kendine ver-mek iste-me-diğ-i$_2$] [[M.-gen himself-dat   give-inf want-NEG-NOM poss.3sg] **bir kitab-ı**   bul-mak için]   gizlice kitaplığ-a girmey-e a book-acc   find-inf   to]   secretly library-dat enter-to kalkış-tığ-ı$_1$]   (. . .)   dair   söylenti-ler' (137) venture-NOM-poss.3sg]   about   rumour-Pl 'There are strange rumours, for example rumours about [a monk midnights secretly into the library venturing [to find a book [that Malachi did not want to give him]]]'

The context of the novel strongly suggests that the speaker knows the referent of the indefinite NP *a monk/un monaco* but not the referent of the indefinite pronoun *something/qualcosa*. The specificity of the indefinite *a monk* is indicated in different ways: In the English translation the anaphoric pronoun *he* in (22) begins a new sentence. Therefore, it would be difficult to embedded its antecedent *a monk* under the NP *rumours*. If that is the case then the indefinite NP *a*

monk must be specific, otherwise it could not serve as antecedent for the pronoun. In the Italian original the indicative mood of the relative clause (*ha voluto*) indicates that the head noun *un monaco* is specific. This is confirmed by the Turkish translation, where the subject *bir rahib-in* of the embedded sentence that ends in *kalkıştığı* shows double marking (indefinite article plus case ending).

Note that the (somewhat 'free') Turkish translation *bir kitabı* for the Italian *qualcosa* or English *something* is marked as specific. The specificity of this NP is confirmed by the setting of the novel (and the lexical meaning of the word involved): Malachi (the librarian) can only refuse to give something to the monk if the monk had asked for a specific thing. In Italian, the predicate *aveva voluto* in the relative clause is in the indicative, and thus indicating that the head noun *qualcosa* is specific. In English, the relative clause modifying *something* contains the proper name *Malachi*, which again is a good indication that the indefinite pronouns is linked to the referent of that proper name. In comparing the three languages, Turkish marks specificity clearly, whereas subtle indicators must be looked for in English or Italian.

4 TYPES OF SPECIFICITY

In the discussion of specificity, different kinds of specific indefinites are distinguished. The main distinction is organized into two dimensions: scope and referentiality. A prototypical specific indefinite is assumed to have wide scope and a referential reading. Depending on the theory, the one or other aspect is more focused upon. However, the observation that specific indefinites can also have narrow scope has challenged theories of specificity. Following Farkas (1995), I present the following groups: (i) scopal specific indefinites, (ii) epistemic specific indefinites, and (iii) partitive specific indefinite. I discuss an additional group (iv) which I call 'relative specific indefinites' and which cover narrow-scope specifics.

4.1 *Scopal specificity*

Classically, the contrast between a specific and a non-specific reading of an indefinite is illustrated by examples such as (24). The historical reason for this is that in the same context definite NPs show different readings (see (3) and (4) above).[6] The paraphrases in (24a) and (24b) motivate the specific and non-specific readings in term of scope, respectively. (24a)

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[6]It is interesting to note that many people who illustrate specificity with this example deny that it is also a category for definite NPs (see the discussion in section 2).

can be continued with (24a$'$) since the pronoun *her* refers back to the existential quantifier that is outside of the scope of *want*. In (24b), the quantifier is inside the scope, thus a link to a pronoun is not possible. Therefore, we can only continue as in (24b$'$):[7]

(24) John wants to marry **a Norwegian**.

    a. There is **a Norwegian**$_1$, and John **wants** to marry her$_1$.

    a$'$. He met her$_1$ last year.

    b. John **wants** that there is a **Norwegian**$_1$ and he marries her$_1$.

    b$'$. He will move to Norway to try to achieve this goal.

    The interaction of the indefinite with other operators can also be illustrated with negation, as in (25), with a universal quantifier, as in (26), or it can interact with more than one other operator, as in (26) and (27). In these cases we expect three readings, which the reader can easily work out.

(25) Bill didn't see **a misprint**.   (Karttunen 1976)

    a. There is a misprint which Bill didn't see.

    b. Bill saw no misprints.

(26) Bill intends to visit **a museum** every day.   (Karttunen 1976)

(27) Luce expects Pinch to ask him for **a book**.

                           (Kasher & Gabbay 1976)

Karttunen (1976: 377) observes that we can disambiguate a sentence with an indefinite and another operator by anaphoric linkage. While the indefinite NP in (28) can be specific or non-specific, it can only be specific in (29).[8]

(28) Harvey courts **a girl** at every convention.

(29) Harvey courts **a girl** at every convention. **She** is pretty.

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[7]There is a further reading (i), which is discussed in Geurts (1998). He argues that certain readings of indefinites cannot be accounted for in terms of scope, but rather his presuppositional treatment of specificity. See also Geurts (2001).

    (i)   John believes that there is this Norwegian$_1$ and he wants to marry her$_1$.

[8]There are exceptions to this rule, if the continuation includes a similar quantifier as the antecedent sentence:

    (i)   Harvey courts *a girl* at every convention. *She* always comes to the banquet with him.

4.2   *Epistemic specificity*

The contrast described in the last section arises in the presence of other operators such as negation, universal quantifier or verbs of propositional attitudes. An analysis in terms of scope seems to work well. However, there are examples that show the same (intuitive) contrast in the absence from other operators. In the specific reading of (30), we can continue with (30a), while the non-specific reading can be continued by (30b). Kasher & Gabbay (1976) mention examples (31)–(33), where they state a clear contrast between a specific and a non-specific reading. This contrast is described as a lexical ambiguity between indefinites as referential terms v. indefinites as non-referential terms, i.e. quantifiers. The specific indefinite refers to its referent directly, while the non-specific indefinite depends on the interpretation of other expressions in the context.

(30) **A student** in Syntax 1 cheated on the exam.

    a.   His name is John
    b.   We are all trying to figure out who it was

(31) I talked with **a magician** and so did Uri.

(32) Olivia is married to **a Swede**, but she denies it.

(33) **A book** is missing from my library.

4.3   *Partitive-specificity*

Milsark (1974) argues that indefinite NPs can either receive a weak (or existential) interpretation or a strong (or presuppositional) interpretation. In (34) the indefinite *some ghost* receives a weak interpretation, but gets a strong interpretation in (35) (presupposing that there are other groups of ghosts). The reading in (35) is generally called 'partitive'.

(34) There are **some ghosts** in this house

(35) **Some ghosts** live in the pantry; others live in the kitchen

Enç (1991: 5f) observes that this contrast between a partitive and a non-partitive reading of indefinite NPs is in the same way morphologically marked as the contrast between specific v. non-specific indefinite (see section 3 above for the details of Turkish). Given (36) as the background knowledge for the participants, the speaker can utter (36a)

expressing the partitive meaning: the two girls must be included in the named set. In Turkish this is marked by the accusative suffix −ı on the direct object. Continuing with (36b) (without the suffix), the two girls are not included in the mentioned set. (36a) is equivalent to (37) with an overt partitive:

(36) Oda-m-a   birkaç çocuk   gir-di
      room-poss.1sg-dat   several child   enter-di.past
      'Several children entered my room'

     a. iki kız-ı   tanı-yor-du-m   *partitive*
        two girl-acc know-prog-di.past-1sg
        'I knew two (of the) girls'

     b. iki kız   tanı-yor-du-m   *non-partitive*
        two girl know-prog-di.past-1sg
        'I knew two girls'

(37) Kız-lar-dan iki-sin-i   tanı-yor-dum   *overt partitive*
      girl-pl-abl   two-poss.3sg-acc know-prog-di.past-1sg
      'I knew two of the girls'

Enç claims that partitives denote a subset of a given set, here, two girls from the set of given girls. Partitives always exhibit wide scope since the set from which they pick out some elements has been mentioned previously, i.e. it is part of the discourse. This means that partitives are complex expressions that are formed by an indefinite choice from a definite set. This view is supported by the contrast between the following three partitive expressions from the novel *The Name of the Rose*: the partitive *one of my monks* in (38) has a specific reading—it refers to the monk Adelmo, who has been found dead at the beginning of the story. In (39), the partitive is rather non-specific, while in (40), it is a negative one.

(38) 'It would already be serious enough if **one of my monks** had stained his soul with the hateful sin of suicide. But I have reason to think that another of them has stained himself with an equally terrible sin.' (33)

(39) 'In the first place, why **one of the monks**? In the abbey there are many other persons, grooms, goatherds, servants. . .' (33)

(40) The library was laid out on a plan which has remained obscure to all over the centuries, and which **none of the monks** is called upon to know. (37)

So it seems that the function of partitives consists of two independent referential functions: first a partitive refers to a discourse-given set. This is the definite aspect of partitives. Second, there is a choice out of this set. This choice can be specific, non-specific, negative, etc.[9] Thus partitives are complex semantic constructions[10] and not necessarily specific, as shown in the examples above. I, therefore, do not include partitives in the investigation of specific indefinites proper.

4.4   *Relative specificity*

There are indefinite NPs that are neither wide scope nor referential, but are still 'specific'. Higginbotham (1987: 64) illustrates this by the examples (41) and (42):

> In typical cases specific uses are said to involve a referent that the speaker 'has in mind.' But this condition seems much too strong. Suppose my friend George says to me, 'I met with a certain student of mine today.' Then I can report the encounter to a third party by saying, 'George said that he met with a certain student of his today,' and the 'specificity' effect is felt, although I am in no position to say which student George met with.

(41) George: 'I met a certain student of mine'

(42) James: 'George met a certain student of his.'

Hintikka (1986) had made a similar observation in his discussion of the expression *a certain*. In (43), he shows that the specific indefinite *a certain woman* can receive narrow scope with respect to the universal quantifier and still be specific: there is a specific woman for each man. Hintikka suggests that the specific indefinite NP is to be represented by a Skolem-function that assigns to each man the woman who is his mother.

(43) According to Freud, every man unconsciously wants to marry **a certain woman**—his mother.   (Hintikka 1986)

    a. $\forall x \, [\mathrm{Man}(x) \rightarrow \mathrm{Wants}(x, \mathrm{marry}(x, f(x))]$
       with f: Skolem function from men onto their mothers
    b. $\forall x \, [\mathrm{Man}(x) \rightarrow \mathrm{Wants}(x, \mathrm{marry}(x, [\text{a woman}]_x)]$

[9]See also Kornfilt (2001) for examples with non-specific partitives in Turkish.

[10]Lyons (1999: 100) expresses a similar view with respect to the partitive article in French: 'The partitive article is almost certainly best regarded as a genuine partitive construction, and not as an indefinite article.'

Enç (1991: 21) discusses cases like this under the term *relational specifics* since they are linked to another discourse item by a (contextually salient) relation. She informally describes this relation as an assignment function that 'assign novel objects to familiar objects, relating objects to the domain of discourse'[11]. With Farkas (1997) we can describe the dependency of the specific NP *a certain woman* from the universal quantifier *every man* by the concept of 'co-variation': Farkas builds this dependency into the interpretation process: The value for the specific indefinite *woman* co-varies with the value for *man*. In other words, once the reference for *man* is fixed (during the process of interpreting the universal quantifier), the reference for the specific indefinite is simultaneously fixed. In (43b), I informally indicate this by indexing the indefinite NP with the variable bound by the universal quantifier.[12]

These observations on narrow-scope indefinites motivate a revision of the pre-theoretical description of specificity as the 'certainty of the speaker about the referent'. It was shown that a specific indefinite NP need not depend on the speaker or the context of utterance, it can also depend on other linguistic entities like the universal quantifier *every man* in (43) or on the proper name *George* in (42). In section 6, I develop on the idea that specificity is a marker for an expression that is *referentially anchored* to another expression, rather than 'absolutely' related to the speaker of a sentence. Before I give my formal reconstruction of this idea, I compare two current theories of specificity.

5   SEMANTIC THEORIES OF SPECIFICITY

In the following I discuss two semantic approaches to definiteness and specificity: (i) the pragmatic view; and (ii) the lexical ambiguity view. The two theories share the assumptions that definite and indefinite NPs are both quantifier phrases. The difference between the quantifier phrases is the uniqueness condition of the definite article. The theories differ in the conception of specificity: the pragmatic approach explains scopal specificity in terms of scope behaviour of

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[11]Enç distinguishes two cases of specificity: Relational specifics and partitive specifics. She (1991: 21) concludes 'that specificity involves linking objects to the domain of discourse in some manner or other. One acceptable way of linking is through this assignment function, by relating object to familiar objects. Another acceptable way of linking is the subset relation, which we have observed in covert and overt partitives.'

[12]Farkas focuses on a somewhat different case, namely on indefinites in the scope of some operator. She describes then the narrow scope (= 'non-specific') indefinites as 'dependent indefinite'. Thus, according to Farkas, dependent indefinites are non-specific. In my view, they can be specific if they co-vary with the value of an extensional operator like in (43) (see section 6 below).

the quantifiers involved, while epistemic specificity is seen as a purely pragmatic notion. The lexical ambiguity view assumes that there are two interpretations of indefinite NPs: an existential and a referential one. The latter has the same properties as other referential terms such as proper names and deictic expressions.

Both approaches in their classical versions are unable to account for relative specific indefinites. However, there are extensions of each of them that are intended to cover exactly these cases: Schwarzschild (this volume) and Yeom (1998) suggest domain restrictions for the pragmatic approach, Kratzer (1998) proposes dependent choice functions for the referential reading of the indefinite article.

5.1 *Quantifiers and pragmatics*

The classical theory of NPs (Frege, Russell, Montague) translates definite and indefinite NPs into quantifiers: indefinite NPs are existential quantifier phrases, while definite NPs are translated into a complex quantifier phrase expressing uniqueness of the object that falls under the description. Thus, the difference between indefinite and definite NPs is semantically expressed in the uniqueness condition. This was the background of this classical theory, as the notion of specificity was introduced in the late 1960s. When the de re–de dicto ambiguity of definite NPs was applied to indefinite NPs, a similar contrast appeared in the context of verbs of propositional attitudes, negation, questions, conditionals, modals, future, and intensional verbs (see Jackendoff 1972). I illustrate this by using the interaction from negation and NPs in (44)–(47):

(44) William didn't see **the book**—until he saw it in the finis africae.

    a. $\exists x \, \forall y \, [\text{book}(y) \rightarrow x = y \, \& \, \neg\text{See}(\text{william}, x)]$

(45) William didn't see **the book**—he began to wonder if there is one.

    a. $\neg\exists x \, \forall y \, [\text{book}(y) \rightarrow x = y \, \& \, \text{See}(\text{william}, x)]$

(46) William didn't see **a book** from the finis africae—until he saw it in the hands of Jorge de Burgos.

    a. $\exists y \, [\text{book}(y) \, \& \, \neg\text{See}(\text{william}, x)]$

(47) William didn't see **a book**—so he knew that they had removed all books.

    a. $\neg\exists y \, [\text{book}(y) \, \text{See}(\text{william}, x)]$

Epistemic specificity, as in (48), is explained by pragmatic principles. The characterization of specific NPs as 'the speaker has the referent in mind' is of a purely pragmatic nature—in the course of discourse, the speaker and hearer might get sufficient descriptive material in order to be able to uniquely identify the indefinite NP (cf. Neale 1990; Ludlow & Neale 1991).

(48) **A book** is missing from my library.

This view was disputed by Jackendoff (1972) and Fodor (1970, 1976). They argued that specificity cannot be explained in terms of quantifier scope—there must be an additional structure, what Jackendoff calls 'modal structure'. However, they didn't have the appropriate means to describe this structure in an adequate way. Schwarzschild (this volume) develops the classical approach and argues the domain restriction of the existential quantifier for the indefinite NP can lead to a singleton causing the wide-scope effect of specific indefinites.

5.2 *Lexical ambiguity approach*

Fodor & Sag (1982) propose lexical ambiguity of the indefinite article, giving up a uniform analysis of indefinites. Indefinites have either a specific or referential reading or they have a non-specific or existential reading. They assume that the contrast between the two readings is incommensurable. They illustrate this point by the interaction of indefinites with quantifiers as in (49). The indefinite has either a specific reading or a non-specific reading. The classical approach to this contrast is by means of different scope: the indefinite NP can get wide or narrow scope with respect to the definite NP *the rumour,* reflecting the specific and non-specific reading, respectively. However, the universal phrase *each student* in (50) cannot receive wide scope due to an island constraint. Thus, the specific reading in (49) cannot be described by a wide scope existential quantifier. Fodor & Sag propose that the indefinite NP is either interpreted as a referring expression or as an existential quantifier. The referring expression is scopeless like proper names and demonstratives, i.e. it behaves as if it always had widest scope, as in (49b). The quantificational interpretation, as in (49a), must observe island constraints like other quantifiers and accounts here for the non-specific reading.

(49) John overheard the rumour that **a student of mine** had been
      called before the dean.

      a.   the rumour > there is a student

    b. a certain student > the rumour

(50) John overheard the rumour that each student of mine had been called before the dean.

    a. the rumour > each student
    b. *each student > the rumour

The theory makes a clear prediction: an indefinite is interpreted either as a referential term and always receives widest scope, or as an existential quantifier, which has to obey scope islands. We can now test this prediction on examples with two quantifiers as in (51). In (51), there are two quantifiers beside the indefinite, which stands in a scope island. According to Fodor & Sag's theory, we would only expect a narrow scope reading for the existential interpretation and a wide scope reading for the referential interpretation, but no intermediate reading. While judgments on intermediate readings are quite intricate, Farkas (1981, 1985) observed for certain examples like (51) that intermediate readings are often very natural. (51) has a reading (51a) according to which for each student there is one condition such that the student comes up with three arguments against the condition. This intermediate reading clearly states that such a radical theory of ambiguity cannot exhaustively describe the flexibility of indefinite NPs.

(51) Each student has to come up with three arguments that show that some condition proposed by Chomsky is wrong.

    a. each student > some condition > three arguments

Kratzer (1998) defends the lexical ambiguity hypothesis of Fodor & Sag (1982). She assumes that an indefinite NP is either represented as an existential quantifier, which obeys island constraints, or as a choice function f, which is bound by the context and, therefore, has widest scope. A choice function f or Φ is a function that assigns to a set one of its elements. In other words a choice function 'selects' one element out of the set that is expressed by the descriptive material. Following von Heusinger (1997, 2000) I represent indefinite NPs as indexed epsilon terms, as illustrated in (52). The reason for this is to distinguish between the logical representation (epsilon terms) and the semantic interpretation (choice functions). The epsilon operator is interpreted as a choice function that assigns one element to each set.[13]

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[13]Choice functions have recently become a powerful tool for representing indefinites (cf. Egli & von Heusinger 1995; Kratzer 1998; Winter 1997; von Stechow 2000; von Heusinger 2000 among others). We use the epsilon operator as the syntactic representation of the indefinite article, while the choice function is the corresponding semantic function.

In other words, the referent of an indefinite NP is found by selecting one element out of the set that is described by the description. Kratzer assumes that the choice function is always anchored in the context of utterance, here indicated with *speaker*. However, the intermediate reading is created by the dependence of the descriptive content of the indefinite from the value for professor. The extension of the set of books recommended by x co-varies with the value of x for professor. The choice function picks different elements from different sets. Note that the set of recommended books can contain more than one book. It is the choice function that singles out one element:

(52) a condition: $\varepsilon_i x$ [condition(x)]

    a. $||\varepsilon_i x$ [condition(x)]$|| = \Phi_1(||$condition$||)$
    b. $\Phi_1(||$condition$||) \in (||$condition$||)$

(53) Every professor rewarded every student who read **a book he had recommended**.

    a. $\forall x[\text{prof}(x) \rightarrow \forall y[\text{stud}(y)\ \&\ \text{read}(y, \varepsilon_{\text{speaker}}z[\text{book}(z)\ \&$
        $\text{rec}(x, z)]) \rightarrow \text{rew}(x, y)]]$
    b. $||$a book he had recom$|| = \varepsilon_{\text{speaker}}z[\text{book}(z)\ \&\ \text{rec}(x, z)]$

There are two problems with this account (cf. the discussion in Winter 1997 and von Stechow 2000). First, Farkas (1981, 1985) showed with examples like (51) that intermediate readings are possible even without variables in the indefinite NP. This problem can be accommodated if one assumes that additional material can be copied into the description of the indefinite NP. Second, if the set described by the descriptive material of the indefinite is extensionally equivalent for two different choices of professors in (54a), the representation counter-intuitively predicts that they invite the same lady. Kratzer (1998), therefore, modifies her approach and indexes the choice function (here the epsilon operator) with the variable x that is bound by the universal quantifier. She now can predict that depending on the professor x, the choice from extensional similar sets can be different.

(54) Every professor invited a lady he knew.

    a. $\forall x\ [\text{prof}(x) \rightarrow \text{invite}(x, \varepsilon_{\text{speaker}}y[\text{lady}(y)\ \&\ \text{know}(x, y)])]$
    b. $\forall x\ [\text{prof}(x) \rightarrow \text{invite}(x, \varepsilon_x y[\text{lady}(y)\ \&\ \text{know}(x, y)])]$

An alternative way to handle the mentioned problems is taken up by Schwarzschild (this volume) who keeps to the classical picture described in section 5.1. He investigates the properties of unique indefinite NPs or 'singleton indefinites', such as in (55).

(55) Everyone at the party voted to watch **a movie that Phil said was his favourite**.

Schwarzschild argues that the wide scope reading of the indefinite NP in (55) derives from the fact that its descriptive material uniquely describes one object. He then claims that all 'referential indefinites' (or 'specific indefinites') are singleton indefinites. In other words, it is just the descriptive material that causes the 'feeling' of different scopes (see Schwarzschild (this volume) for a detailed account).

To summarize, there have been basically two ways to model relative specific indefinites: In the pragmatic approach, domain restriction is used to produce a singleton set corresponding to the indefinite NP. In the lexical ambiguity view, choice functions are replacing a referential operator and they can depend on other linguistic expressions. Choice function naturally give one individual to each set. However, here a lexical ambiguity between specific and non-specific NPs are assumed. In the next section, I present a unified approach.

6   SPECIFICITY AS REFERENTIAL ANCHORING

The main thesis of this paper is that specificity indicates that an expression is referentially anchored to another object in the discourse. 'Referentially anchored' means that the referent of the specific NP is functionally dependent on the referent of another expression. Furthermore, I assume that this relation is sentence bound, i.e. a specific NP can only be anchored to discourse items that are explicit in the same sentence (or to the speaker of the sentence). This idea can be spelled out by extending Heim's (1982: 369f) Familiarity Condition (56).

(56) Heim's Familiarity Condition
   An NP_i in a sentence ϕ with respect to a file F and the Domain of filenames Dom(F) is

   (i)   [+definite] if $i \in \text{Dom}(F)$, and it is
   (ii)   [−definite] if $i \notin \text{Dom}(F)$

In order to account for specificity in terms of a referential anchor, I formulate the Specificity Condition (57) in similar terms. An NP is specific if its index (or filename) can be linked to an already established index. An additional restriction is that the index must be from the current sentence, rather than from the whole discourse. In this sense, specificity is sentence bound, while definiteness is discourse bound.

(57) Specificity Condition

An NP$_i$ in a sentence ϕ with respect to a file F and the Domain
of filenames Dom(ϕ) is [+ specific] if there is a contextual salient
function f such that $i = f(j)$ and $j \in$ Dom(ϕ)

A specific NP can be anchored to the speaker index of an utterance, as
in (58a), to the subject of that sentence, as in (58b), or to a quantified
NP, as in (58c). For the following example, I give informally the
referential indices (names of filecards) as they might appear in the
process of interpretation. It should become clear that in (58a) and (58b)
the reference of the specific NP does not vary, while in (58c) it co-
varies with the reference for the universal quantifier. In the latter case,
it can be reconstructed as a function from the index for the universal
quantifier.

(58) Bill gave each student a (certain) task to work on.

    a. Bill gave each student a (certain) task$_{speaker}$ to work on
       b i_1 j
       b i_2 j
       b i_3 j
          etc.   with $j = f$(speaker)

    b. Bill gave each student a (certain) task$_{bill}$ to work on
       b i_1 j
       b i_2 j
       b i_3 j
          etc.   with $j = f(b)$

    c. Bill gave each student (x) a (certain) task$_x$ to work on
       b i_1 $\longrightarrow$ j_1
       b i_2 $\longrightarrow$ j_2
       b i_3 $\longrightarrow$ j_3
          etc.   with $j_n = f(i_n)$

In the remainder of this section I sketch one way to implement this
idea in a formal framework. My proposal has two main assumptions:
(i) indefinite NPs are translated into indexed epsilon terms, which are
interpreted as choice functions, and (ii) they are indexed by a referential
variable that must be anchored to another discourse item. The two
assumptions are independent. If one does not like assumption (i), one
can also start from a more Heimian-style or DRT-style representation
of indefinites and implement assumption (ii) in this representation (this
would lead to a theory similar to that of Farkas 1997). The contrast
between a specific and a non–specific indefinite can then be represented
by the way the referential variable of the indefinite NP is anchored

in the context. Specific indefinites are represented by anchoring the index to another (referential) expression, while the referential indices of non-specific indefinites are bound by either (modal) predicates (cf. Jackendoff 1972) or some other operator.

Following von Heusinger (1997; 2000) we represent indefinite NPs as indexed epsilon terms, as illustrated in (52), repeated as (59). The indexed epsilon operator is interpreted as a choice function Φ_1 that assigns one element to each set:

(59) a condition: $\varepsilon_i x\ [condition(x)]$

    a. $||\varepsilon_i x\ [condition(x)]|| = \Phi_1(||condition||)$
    b. $\Phi_1(||condition||) \in (||condition||)$

The referent of an indefinite NP is found by the operation of selecting one element out of the set that is described by the description. The selection depends on the context in which the indefinite is located. This treatment is similar to that of discourse representation theories (Heim 1982; Kamp 1981), where indefinites introduce new individual variables or discourse referents. One of the main advantages of using choice function variables instead is that indefinites need not be moved or raised for expressing various dependencies.

The second assumption is that indefinite NPs must get a referential index, analogously to the temporal index. Enç (1986) has shown that the temporal index can be freely assigned to the indefinite. It is not restricted to the time of evaluation of the matrix verb, as illustrated in (50). Enç (1986: 423): 'There does not seem to be any need for any constraints on the temporal arguments of nouns beyond the pragmatic ones'.

(60) The fugitives are now in jail.

I assume a referential argument (variable or index) for indefinites. This argument must be bound in some way. Often the argument is bound by the context or the speaker, yielding a wide-scope specific reading.

Combining the two assumptions, we gain the following representation for (61). (61a) represents the relative specific reading, i.e. the reading according to which the referent of the indefinite depends on some other referential expression in the sentence, here *Benno*. (61b) represents the 'absolute' specific reading, i.e. the reading according to which the referent depends on the speaker. Thus, this reading represents the classical intuition of 'the speaker has in mind'.

(61) The day before, Benno$_i$ had said he would be prepared to sin in order to procure **a rare book**$_i$. (183)

a. Said(benno,Would(Sin(benno, Procure(benno, $\varepsilon_{\text{benno}}x$ [book(x)])))))

b. Said(benno,Would(Sin(benno, Procure(benno, $\varepsilon_{\text{speaker}}x$ [book(x)])))))

We can analyze the readings of (62) as the non-specific reading (62a), and the two specific readings (62b) and (62c). In (62a) the index is bound by an existential quantifier in the scope of the negation—therefore, the indefinite has narrow scope with respect to the negation. In (62b) and (62c), the index is anchored to the speaker and to the subject of the sentence, respectively. In both cases the indefinite receives wide scope with respect to the negation.

(62) William didn't see **a book**.

a. $\neg\exists i$ See(william, $\varepsilon_i x$ [book(x)])

b. $\neg$See(william, $\varepsilon_{\text{speaker}}x$ [book(x)])

c. $\neg$See(william, $\varepsilon_{\text{william}}x$ [book(x)]))

There is no difference between (62b) and (62c) in terms of scope. However, if we replace the subject with a quantifier phrase as in (43), repeated as (63), we get a different picture. (63a) is the representation for the narrow-scope specific reading, according to which the choice of the indefinite depends on the value for *man*, while (63b) is the representation for a speaker-specific reading—here the indefinite has wide scope.

(63) According to Freud, every man unconsciously wants to marry **a certain woman**.

a. $\forall x$ [man(x) $\rightarrow$ want(x, marry(x, $\varepsilon_x \gamma$ [woman(γ)]))]

subject-specific

b. $\forall x$ [man(x) $\rightarrow$ want(x, marry(x, $\varepsilon_{\text{speaker}}\gamma$ [woman(γ)]))]

speaker-specific

7 SUMMARY

I argued that the pretheoretical characterization of specificity in (2) above as (i) certainty of the speaker about the identity of the referent, (ii) the referent is fixed, (iii) specific indefinite NP is 'scopeless', (iv) specific indefinite NPs are referential terms, and (v) specific indefinite NPs can be paraphrased by *a certain*, is neither characteristic for specific NPs nor is a coherent set of features. I therefore developed a different characterization in (3), repeated as (64). Here I add the

characterization (iv) according to which the accusative-case suffix can mark specificity under certain condition (likewise the genitive-case suffix for subject in embedded sentence in preverbal position):

(64) Characterization of specificity

  (i)   The interpretation of a specific NP does not depend on the interpretation of the matrix predicate or semantic operators such as modal verbs
  (ii)   The referent of a specific NP is functionally linked to the speaker of the sentence or to another referential expression in the sentence such as the subject or object
  (iii)   The lexical item *a certain* prominently marks a specific reading of an indefinite NP
  (iv)   The accusative-case suffix marks an specific indefinite direct object (in the preverbal base position) in Turkish

Specificity differs from definiteness is that definiteness is discourse bound and it identifies discourse items with each other. Specificity, on the other hand, is sentence bound and links a new discourse item to an already introduced discourse item (in that sentence) or to the speaker (or context index) of that sentence. I argued that the reference of a specific expression depends on the 'anchor' expression. Once the reference for the anchor is determined, the reference for the specific term is also determined, giving a 'relative' specific reading of the indefinite.

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