

# Uniqueness and possession: Typological evidence for type shifts in nominal determination

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**Abstract.** This paper highlights the analogy of definiteness and possession by utilising the distinction between semantic and pragmatic as outlined in Löbner (2011) Concept Type and Determination approach. Assuming, on the basis of the features  $[\pm \text{ unique}]$  and  $[\pm \text{ relational}]$ , a classification into the four logical types *sortal*, *relational*, *individual*, and *functional concept*, nouns will be used either in congruence with or deviating from their underlying type. I present evidence from Germanic and Mayan languages for the following claims: (1) noun uses that deviate from the underlying type tend to be reflected by overt morphology. (2) In article split languages, phonologically ‘strong’ forms indicate pragmatic uniqueness, thus, denote a function from  $[- \text{ unique}]$  to  $[+ \text{ unique}]$ , whereas ‘weak’ forms tend to be semantically redundant. Regarding possession, ‘alienable’ morphology denotes a function from non-relational to relational (pragmatic possession), whereas ‘inalienable’ morphology is restricted to semantic possession. Overall, split systems imply a strong correlation between conceptual markedness and morphosyntactic markedness.

**Keywords:** type shift, definiteness, possession, alienability, definite articles, typology, compositional semantics

## 1 Introduction<sup>1</sup>

In this paper I highlight the analogy of two types of nominal determination, namely definiteness and possession, and their cross-linguistic manifestation. I utilise the distinction between semantic and pragmatic as outlined in the Concept Type and Determination (CTD) approach to definiteness in Löbner (1985, 2011; cf. also Ortmann 2014). This perspective on determination will be pursued in case-studies from, among others, Mayan and Germanic languages.

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With respect to definiteness, the major assumptions of this approach are the following. Unique reference comes about in two different manners. Semantic uniqueness entails that the reference of a noun is unambiguous because of its lexical (or compositional) semantics. Pragmatic uniqueness, in contrast, refers to those uses of nouns whose unique reference only comes about due to the discourse context or context of utterance, which is the case with anaphoric and deictic uses. The present paper underpins this approach by presenting typological evidence that shows that noun uses that are not congruent with the underlying type are indicated by overt morphology. I argue that the morphosyntactic data speak in favour of the following generalisations: in languages that display a definite article split, the phonologically ‘strong’ definite article denotes a function of the kind  $\langle\langle e, t \rangle, e\rangle$ , while ‘weak’ forms tend to be semantically redundant. As far as the category of possession is concerned, so-called ‘alienable’ morphology (such as relator affix, classifier, and genitive case) denotes a function of the kind  $\langle\langle e, t \rangle, \langle e, \langle e, t \rangle \rangle\rangle$ . Overall, split systems display a greater correlation of semantics and morphosyntactic markedness.

The paper is structured as follows: In section 2, I outline the CTD approach. In section 3 I offer a small typology of adnominal possession and analyse alienability splits in terms of the distinction between semantic and pragmatic possession, and of type shifts from non-relational to relational noun concepts. Correspondingly, section 4 offers a small typology of definite article splits and provides an analysis in terms of the distinction between semantic and pragmatic uniqueness, and of type shifts from non-unique to unique noun concepts. Section 5 summarises the major theses advocated in this paper.

## 2 Setting the stage: the theory of Concept Types and Determination (CTD)

Löbner (1985) proposes a three-way distinction of nominal concept types that distinguishes sortal, relational and functional concepts. The initial distinction is further elaborated in Löbner (2011) in which he introduces a classification that is based on two dimensions: arity and reference. More specifically, the contrasts that underlie these concept types are monadic vs. polyadic, and inherently unique vs. not inherently unique. The resulting classification is illustrated in the following table.

|                           | not inherently unique   | inherently unique  |
|---------------------------|---|--|
| not inherently relational | sortal nouns ( <b>SN</b> ) $\langle e, t \rangle$<br><i>dog, tree, adjective, water</i>                       | individual nouns ( <b>IN</b> ) $e$<br><i>sun, weather, Mary,</i><br><i>prime minister</i>              |
| inherently relational     | relational nouns ( <b>RN</b> ) $\langle e, \langle e, t \rangle \rangle$<br><i>sister, leg, friend, blood</i> | functional nouns ( <b>FN</b> ) $\langle e, e \rangle$<br><i>mother, surface, head,</i><br><i>begin</i> |

Thus the cross-classification of the properties ‘relational’ and ‘unique reference’ gives rise to the following noun types: SNs are one-place predicates; for example,

*dog* delimits the set of individuals that are dogs, hence its logical type is  $\langle e, t \rangle$ . RNs do the same in relation to some possessor, thus characterising, for example, the set of Hannah's sisters, hence their type is  $\langle e, \langle e, t \rangle \rangle$ . INs unambiguously single out individuals (often depending on a given time/world coordinate, as with *weather*, *temperature*, *prime minister*, to be specified in terms of a situational argument in the sense of Löbner 1985). FNs do the same in relation to a possessor argument; an example is *the beginning of the 21st century*. In this way, INs and FNs are unambiguously assigned exactly one referent, so their logical types are  $e$  and  $\langle e, e \rangle$ , respectively.

There are two different manners in which unique (or non-ambiguous) reference can emerge. Semantic uniqueness results from the meaning of the noun: underlying INs and FNs warrant the unambiguity of reference, as in *the pope* and *John's mother*. By contrast, the unique reference of underlying SNs and RNs as in *the table*, *the man at the corner* and *the daughter of John*, respectively, does not come about because of the lexical meaning of the nouns *table*, *man* and *sister*, but rather because of the anaphoric and/or situative context. For example, one of Hannah's sisters has been already mentioned, or Hannah happens to have exactly one sister. Accordingly, Löbner (1985, 2011) speaks of pragmatic uniqueness.

Since all definite descriptions exhibit non-ambiguous reference<sup>2</sup>, any occurrence of an underlyingly SN or RN as a definite description implies its use as an individual concept or functional concept, respectively. Consequently, the CTD notation differentiates between a noun's underlying type, such as SN, RN, IN, FN, and its actual use, such as SC, RC, IC, FC. A major objective of the CTD approach is to account for the flexibility in the usage of nouns. Virtually any noun can be used as any one of the four concept types. In other words, type shifts (in the sense of Partee 1986) into all directions are possible, from each concept type to any other. As a consequence, a noun can be used either in congruence with or deviating from its underlying concept type. In the case of *the table* we are dealing with a type shift from [- unique] to [+ unique] (SN  $\rightarrow$  IC). This shift is indicated by a definite article in many languages. Moreover, in languages with generalised article use such as English the definite article is also obligatory with INs and FNs, that is, in cases of semantic uniqueness. In these cases it applies vacuously. Indefinite uses of INs and FNs as in *a sun* and *a mother of five* involve the opposite shift, thus, from IN and FN to SC and RC.

Fully along the lines of the opposition of semantic and pragmatic uniqueness, I propose that the contrast of inalienable and alienable possession should be re-interpreted as semantic and pragmatic possession. Semantic possession is called so because some relation of affiliation is inherent to the lexical meaning of the possessum. Pragmatic possession is called so because the POSS relation is established by the context rather than by the lexical meaning of the possessum.

<sup>2</sup> For controversial cases such as 'configurational uses' see Löbner (2011: 298) and references there. See also Carlson & Sussman (2005) on 'weak definites' such as (*go to*) *the store*, as well as Coppock & Beaver (2012) on anti-uniqueness effects of predicative definites.

In the remainder of the paper I argue in favour of the following analogy: the operation that converts [– relational] to [+ relational] (SN → RC, IN → FC) is denoted by what is traditionally called alienable possession, in exactly the same way as the change from [– unique] to [+ unique] is denoted by a strong definite article in case of pragmatic uniqueness.

### 3 The Typology of Adnominal Possession: The Role of Semantic vs. Pragmatic Possession

#### 3.1 Alienability Splits

In the typological literature, the contrast pair of alienable vs. inalienable is used to distinguish two (not necessarily mutually exclusive) classes of nouns with respect to their morphosyntactic behaviour in possessive contexts. Looking at alienability splits across languages inevitably brings about the question as to their conceptual basis:

Inalienable possession (which corresponds to semantic possession) is characterised by inherent affiliation and by relations that are not subject to the possessor’s choice or control: First and foremost among these are kinship, body parts, part-whole, and location.

The major characteristics of alienable possession (which corresponds to pragmatic possession) is temporary affiliation, where the possessor typically has control over the possessum. Accordingly, the function of the possessum (eating, drinking, growing, tool, etc.) for the possessor is of relevance. It is precisely in this area that the notion ‘possession’ can be understood in the literal sense, like that of legal ownership. Often the relation between the two individuals is conceptualised as a contextually instantiated relation, dependent on the speech situation, as in *my chair*, which can denote the chair that I am sitting on at the moment.

In order to relate this conceptual contrast to the morphology and syntax of natural languages, I give a brief overview of some major modes of expressing an (in)alienability distinction in possession. The nouns on the left in the subsequent examples (1a), (2a) and (3a) are semantically relational, FNs in terms of the classification above. Being FNs, they are inherently possessed, and therefore directly combine with a possessor affix or a possessor phrase. This corresponds to the typological notion of inalienable possession. By contrast, the nouns in (1b) to (3b) are sortal and can therefore be combined with a possessor only after they are overtly morphologically extended:

- Possessor agreement is directly attached to the noun rather than mediated by a connective: In contrast to the FN stem *ətalʷ* ‘mother’, the SN stem *ʔwa:* ‘house’ must be morphologically extended by the connective prefix *-əʷ* in order to be possessed.<sup>3</sup>

<sup>3</sup> In the glosses, I use the following abbreviations of grammatical categories: ACC ‘accusative’, AUX ‘auxiliary’, COMP ‘complementiser’, COP ‘copula’, DAT ‘dative’, DEF

(1) Diegueño (Yuman < Hokan; Mexico; after Nichols 1992: 117):

|                   |                               |
|-------------------|-------------------------------|
| a. <i>ʔ-ətaly</i> | b. <i>ʔ-ə<sup>n</sup>-ʔwa</i> |
| 1SG-mother        | 1SG-POSS-house                |
| ‘my mother’       | ‘my house’                    |

The term ‘connective’ (or ‘relator’) is merely an informal label. I will argue in the following subsection that these markers establish the relation of possession, hence my annotation ‘POSS’.

- Possessor agreement is directly attached to the noun rather than attached to a classifier:

(2) Paamese (Oceanic < Austronesian, Vanuatu; Crowley 1996: 384ff)

|                       |                                   |
|-----------------------|-----------------------------------|
| a. <i>yati-n ēhon</i> | b. <i>ani emo-n ēhon</i>          |
| head-3SG child        | coconut POSSCL(potable)-3SG child |
| ‘the child’s head’    | ‘child’s drinking coconut’        |

Possessive classifiers like that in (2b) can be analysed as encompassing the function of a relator plus some additional, more specific information concerning the sortal properties of the possessum (for example, edibles, domestic animal). Sometimes possessive classifiers specify the relation POSS as being conceived as permanent or temporary, or characterising the utility of the possessum for the possessor. As a widespread typological strategy, possessive classifiers serve as the morphological base to which the possessor agreement is attached (Seiler 1983).

- The possessor is realised as a prefix rather than as a free (possessive or personal) pronoun:

(3) Eastern Pomo (< Hokan; California), after Nichols 1992: 118)

|                    |                    |
|--------------------|--------------------|
| a. <i>wí-bayle</i> | b. <i>wáx šári</i> |
| 1SG-husband        | 1SG.GEN basket     |
| ‘my husband’       | ‘my basket’        |

Significantly, all of the illustrated contrasts are attained by straight affixation or juxtaposition of the possessor on the inalienable side, and ‘mediation’ by a classifier, a connective, a free (possessive) pronoun, or a case marker on the possessor on the alienable side. As a result, the generalisation is that less conceptual distance is mirrored by less morphosyntactic complexity (see the introduction to Chappell & McGregor 1996 and references there).

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‘definite article’, DEM ‘demonstrative pronoun’, DEREL ‘de-relativisation’, DI ‘distal determination’, E ‘ergative’, EP ‘epenthetic consonant’, F ‘feminine’, GEN ‘genitive’, IMP ‘imperative’, LOC ‘locative’, M ‘masculine’, N ‘neuter’, NEG ‘negation’, NOM ‘nominative’, NON3RD, ‘1st or 2nd person’, PART ‘participle’, PAST ‘past tense’, PL ‘plural’, POSS ‘relation of possession’, POSSCL ‘possessive classifier’, PRES ‘present tense’, REFL ‘reflexive pronoun’, REL ‘relative clause marker’, SG ‘singular’, STR ‘strong article form’, SUPERL ‘superlative’, WK ‘weak article form’ ; 1, 2 and 3 represent first, second and third person, respectively.

Obviously, one and the same concept need not be treated alike in all languages with an alienability split. There is in fact considerable (in parts also culturally driven) cross-linguistic variation as to the class of nouns that may enter inalienable possession. Aspects of language-specific demarcations are discussed, among others, in Seiler (1983), in Nichols (1988: 572) regarding North American languages, as well as in the contributions of Chappell & McGregor (1996). A theoretical implication is that the propensity of [+ relational] nouns to be treated as inalienable is a default that may be overwritten by idiosyncratic specification.

### 3.2 Type Shifts in Possession

In this section I show that the distinction of semantic vs. pragmatic possession largely accounts for what is known as the alienability contrast: Semantic possession implies that the relation between the noun's referential argument (the possessum) and the possessor argument is inherent to the noun's lexical semantics. Pragmatic possession implies that the POSS relation is only contextually established, and often depends on the utterance situation.<sup>4</sup> I argue that morphological markers of alienable possession such as connectives and classifiers should be interpreted as establishing a non-inherent, hence pragmatic POSS relation. Specifically, the goal is to motivate the following claim:

- (4) **Claim:** Pragmatic possession involves the type shift from [– relational] to [+ relational].

This programmatic analysis, which follows the programme outlined in Löbner (2011), will be pursued more radically here, in that the assumed shift operation will be paired with morphosyntactic material that has the function of denoting the operation.

The type shift mentioned, the effect of its application to a SN, and finally the discharging of the possessor argument is schematically and successively sketched in (5).

- (5) a. sortal noun, e.g. *house*:  $\lambda x.\text{HOUSE}'(x)$   
 b. template of POSS shift SC  $\rightarrow$  RC:  $\lambda N.\lambda y.\lambda x.[N(x) \wedge \text{POSS}(y, x)]$   
 c. (b) applied to (a)  $\lambda y.\lambda x.[\text{HOUSE}'(x) \wedge \text{POSS}(y, x)]$   
 d. (c) applied to possessor *John*:  $\lambda x.[\text{HOUSE}'(x) \wedge \text{POSS}(\text{John}', x)]$

Note that a template that is equivalent to the POSS type shift (b) is also assumed by Barker (1995; 2011: 1114) for English, based on compositional semantic grounds rather than on typological evidence; cf. also Vikner & Jensen (2002) and Partee & Borshev (2003). I will now look closer at the relevant data in terms of a case study from two Mayan languages.

<sup>4</sup> In Barker (2011: 1113) this distinction is labelled lexical vs. pragmatic interpretation; see also Vikner & Jensen (2002: 194-216) for a similar though not identical distinction.

### 3.3 ‘Alienable’ Morphology Indicates Pragmatic Possession ([−relational]→[+relational])

In this and the following subsection, I provide a case study which builds on earlier joint work with Corinna Handschuh (cf. Ortmann & Handschuh 2004). It will be shown that Mayan languages are especially explicit in the morphological encoding of noun type shifts, in both directions. Let me first illustrate how non-relational nouns (SNs) are transformed into RCs by means of suffixation of *-il*, and by vowel lengthening, respectively.

**Yucatec:** (6a,c) displays the SNs *nah* and *ha*, without a possessor, in contrast to the possessive use in (6b,d), which requires the suffix *-il*.<sup>5</sup>

- (6) Yucatec Mayan (Lehmann 1998: 56; Tozzer 1921: 50)
- |                     |                     |              |                         |              |
|---------------------|---------------------|--------------|-------------------------|--------------|
| a. <i>le nah-o'</i> | b. <i>in nah-il</i> | c. <i>ha</i> | d. <i>u ha-il</i>       | <i>tš'en</i> |
| DEF house-DI        | 1SG.E house.POSS    | water        | 3SG.E water-POSS        | well         |
| ‘the house’         | ‘my house’          | ‘water’      | ‘the water of the well’ |              |

Crucially, alienably possessed nouns require the suffix *-il* irrespective of whether they are only combined with a possessor agreement clitic (*in* in (6a)), or with a lexical possessor *tš'en* in addition to *u* as in (6d). The class of nouns that follows this pattern is according to Lehmann (1998: 61) the largest and most productive.

**Mam:** Mam resembles Yucatec in that a large group of sortal nouns obligatorily undergo an overt change in order to be able to combine with a possessor. Consider the examples in (7).<sup>6</sup>

- (7) Mam (Mayan; England 1983: 67)
- |               |                      |                |                       |
|---------------|----------------------|----------------|-----------------------|
| a. <i>xaq</i> | b. <i>n-xaaq=ai</i>  | c. <i>ne'l</i> | d. <i>n-nee'l=a</i>   |
| rock          | 1SG.E-rock-POSS-NON3 | sheep          | 1SG.E-sheep.POSS-NON3 |
| ‘rock’        | ‘my rock’            | ‘sheep’        | ‘my sheep’            |

In contrast to the Yucatec strategy of employing an affix, Mam uses a prosodic strategy, namely that of vowel lengthening. Cross-linguistically it is not unusual for grammatical features to be marked supra- or subsegmentally; for example, by grammatical tone in African languages, or quantitative ablaut in Germanic. In the case of Mam, the category of POSS is prosodically realised, more precisely, by a vowel weight unit, that is, a mora.<sup>7</sup> As in the case of Yucatec, it is obvious from the examples in (7) that the morphological operation that makes nouns

<sup>5</sup> See Bricker et al. & Po'ot (1998: 358f) for other suffixes with essentially the same function, as well as for further details concerning possession in Yucatec.

<sup>6</sup> As in Yucatec, the possessor clitics belong to the ergative paradigm (‘set A’ in the Mayanist tradition).

<sup>7</sup> In addition to vowel lengthening, some nouns undergo further regular vowel-related processes when they are possessed (cf. England 1983: 44). For example, the processes involved in *n-paatzán=a* ‘my sugarcane’ (with the unpossessed variant *ptz'on*) are stress assignment, prevocalic glottalisation, and reduction of unstressed vowels, hence the phonetic form [mpá:tz'ənə].

‘possessable’ is clearly separated, morpho(phono)logically as well as semantically, from possessor agreement. In the same way that *-il* is distinct from *in* in Yucatec, lengthening is distinct from *n-* in Mam in that the first establishes the POSS relation, and the latter specifies the possessor.

There are nouns for which the alternation is less transparent because of phonological irregularity; for example, the vowel following the stressed syllable may be deleted, as in *tz’lom* – *n-tz’áalm-a=ya* ‘my plank’. Sometimes the alternation is even entirely blurred by prosodic factors. Mam does not allow for more than one long vowel per word. Since it does not allow for super-long vowels either, there is no possibility of lengthening for a stem with an underlying long vowel: *b’ee* – *n-b’ee=ya* ‘my road’, *jaa* – *t-jaa-t=a xu’j* ‘the woman’s house’ (England 1983: 34, 143). In this (apparently frequent) pattern, the possessed stem of a noun does not differ from the unpossessed variant. However, the fact that Yucatec and its relative Mam behave analogously in essential regards lends further support for my analysis of the POSS shift as being overtly realised.

Overall, the generalisation is that in the possessed use, alienable nouns in Mam are subject to vowel lengthening unless they already contain an underlying long vowel. Thus, the POSS shift is realised by filling an abstract vowel position.

**Representations:** In order to account for the above data I pursue a compositional analysis that pairs the involved semantic type shift operations with the involved morphological exponents. In particular, the relator morpheme is analysed as the morphological exponent of establishing the relation POSS for alienable nouns as in (5b), thus, denoting the function from [– relational] to [+ relational].

For the state of affairs in Yucatec, we can assume the following composition:

- (8)
- |                            |                   |  |
|----------------------------|-------------------|--|
| a. sortal noun:            | <i>nah:</i>       | $\lambda x.$ HOUSE'(x)   |
| b. overt POSS shift:       | <i>-il:</i>       | $\lambda N.\lambda y.\lambda x.[N(x) \wedge \text{POSS}(y, x)]$      |
| c. result of POSS shift:   | <i>nah-il:</i>    | $\lambda y.\lambda x.[\text{HOUSE}'(x) \wedge \text{POSS}(y, x)]$    |
| d. discharge of possessor: | <i>in nah-il:</i> | $\lambda x.[\text{HOUSE}'(x) \wedge \text{POSS}(\text{SPEAKER}, x)]$ |

As regards the Mam data, we can assume that the exponent of the POSS-operation is a prosodic element (much like tense is marked by grammatical tone in some Bantu languages). The lengthening, then, is the prosodic effect of adding a morpheme that merely consists of a syllable weight position, devoid of any segment. In prosodic phonology, syllable weight positions are referred to as moras. Consequently, the exponent of the POSS shift in Mam is a mora ( $\mu$ ).

- (9)
- |                            |                  |  |
|----------------------------|------------------|--|
| a. sortal noun:            | <i>ne'l:</i>     | $\lambda x.$ SHEEP'(x)   |
| b. overt POSS shift:       | $\mu:$           | $\lambda N.\lambda y.\lambda x.[N(x) \wedge \text{POSS}(y, x)]$      |
| c. result of POSS shift:   | <i>nee'l:</i>    | $\lambda y.\lambda x.[\text{SHEEP}'(x) \wedge \text{POSS}(y, x)]$    |
| d. discharge of possessor: | <i>nee'l=la:</i> | $\lambda x.[\text{SHEEP}'(x) \wedge \text{POSS}(\text{SPEAKER}, x)]$ |

What I propose, then, is a lexicalist solution under which a semantic operation is paired with morphological material. With respect to the semantic status of

the possessor this solution simply entails that all possessors, including markers of possessor agreement, are logically treated as individuals, devoid of any relationality of their own. Thus, possessor agreement markers have the same semantics as personal pronouns (where the subscript ‘ $\cup$ ’ represents the utterance parameter relative to which the extension of the pronoun is determined).

- (10) possessor clitic as entity:  $in: \iota z[z = \text{SPEAKER}_{\cup}]$

In this way, the representation can be kept as simple as possible. Whatever is assumed as the semantics of personal pronouns, it will sufficiently characterize the clitics at issue. This is a consequence of the POSS shift, and it has two further advantages.

First, it correctly predicts that in the default case [+ relational] nouns such as ‘mouth’ take a possessor clitic without prior application of the POSS shift due to the relational semantics of the noun; see (14a). Second, it accounts for the fact that the same set of clitic agreement markers occurs with transitive verbs, specifying the ergative argument and also having pronominal status (the Mayan language generally exhibiting the pro-drop property).

Both of these facts would be unexplained if one were to assume a special semantics for these markers that would make reference to possession. This distinctive POSS semantics would have to be ‘turned off’ for inalienable possession and for the subject (or object, according to the language), which involve the same markers. It is obvious that this would result in undesirable polysemy.

Under the present approach, possessive classifiers are also accounted for straightforwardly. For a fairly large set of SNs in Yucatec, the operation for pragmatic possession is achieved by possessive classifiers, especially by those for domestic animals and for food; consider (11).

- (11) Yucatec Mayan (Lehmann 1998: 62f., 38)
- |  |   |
|--|---|
| <p>a. <i>in w-o'ch ha's</i><br/>         1SG.E EP-POSSCL banana<br/>         ‘my banana’</p> | <p>b. <i>in w-àlak' k'éé'n-o'b</i><br/>         1SG.E EP-POSSCL pig-PL<br/>         ‘my pigs’</p> |
|--|---|

These classifiers can be represented as in (12). In addition to contributing the POSS operation as in (8) and (9), each classifier imposes its sortal restrictions on the possessum.

- (12)  $\acute{a}alak'$ :  $\lambda N.\lambda y.\lambda x.[N(x) \wedge \text{DOMESTIC\_ANIMAL}(x) \wedge \text{POSS}(y, x)]$   
 $o'ch$ :  $\lambda N.\lambda y.\lambda x.[N(x) \wedge \text{FOOD}(x) \wedge \text{POSS}(y, x)]$

### 3.4 ‘Inalienable’ Morphology Indicates Semantic Possession

In the previous I have analysed the morphological strategies of changing SNs into RCs. Let us now turn to the converse operation. Recall from the (a) examples of (1) to (3) above that the notion of semantic possession entails that the POSS relation is inherent to the lexical meaning. This corresponds to the fact

that inalienable possession is morphologically unmarked. But this in turn brings about the question of markedness in non-possessed uses of relational nouns.

In numerous genetically unrelated languages of the Americas and of Melanesia, an overt morphological marker is required if underlying [+ relational] nouns (RNs and FNs) are used as SCs and ICs, that is, without a possessor argument. While this operation is occasionally referred to as ‘absolutivisation’, Seiler (1983) proposes the term ‘de-relationisation’, hence I gloss the marker at issue as *derel* in the following. Again, the Mayan languages prove to be particularly explicit in encoding the operation.

- (13) Mam (Mayan, Guatemala; England 1983: 69)
- |  |   |
|--|---|
| <p>a. <i>n-yaa’=ya</i><br/>         1SG.E-grandmother=NON3RD<br/>         ‘my grandmother’</p> | <p>b. <i>yaa-b’aj</i><br/>         grandmother-DEREL<br/>         ‘grandmother’</p> |
|--|---|

Being relational, the nouns of this class enter the possessive construction as inalienable, that is, without a POSS suffix or vowel lengthening. In order to use such a noun without a possessor, a suffix must be attached that changes the noun into an absolute (that is, sortal) noun. There are two suffixes that fulfil this function: *-b’aj* is used with body part and kinship terms, and *-j* with nouns denoting clothing; cf. *w-aam-a* ‘my skirt’ vs. *aam-j* ‘skirt’. As far as terms for nourishment are concerned, some take *-b’aj*, while others take *-j*.

Likewise, Yucatec employs the suffix *-tsil* for licensing the non-possessed use of a relational noun:

- (14) Yucatec Mayan (after Lehmann 1998: 70ff)
- |   |   |
|---|---|
| <p>a. <i>in chi’</i><br/>         1SG.E mouth<br/>         ‘my mouth’</p> | <p>b. <i>le chi’-tsil-o’</i><br/>         DEF mouth-DEREL-DI<br/>         ‘the mouth’</p> |
|---|---|

According to the perspective taken here, we are dealing with a morphologically overt operation that reduces the argument structure of the noun, much in the same way as passive and antipassive morphology. The variant with reduced argument structure is morphologically marked, which corresponds to the fact that it is derived from the variant with the full argument structure.<sup>8</sup>

In terms of concept types, then, de-relativising suffixes can be conceived of as denoting a shift from [+ relational] nouns to [– relational] concepts. This is represented in (15).<sup>9</sup>

<sup>8</sup> Another instance of de-relationisation comes from Teop (Western-Oceanic, Papua New Guinea). Ulrike Mosel (p.c.) informs me that the suffix *-na* serves the same function, as in *sina-na* mother-DEREL ‘(a) mother’. One more case in question is Cahuilla (Uto-Aztecan; Seiler 1983) .

<sup>9</sup> Strictly speaking, in the case of FNs (as opposed to RNs) it takes the combination of two shifts to arrive at an SC. One is de-relativisation as in (15), the other is [+ unique] → [– unique] (‘de-functionalisation’, as it were) and will be briefly touched in 4.2. The effect of the two shifts is represented below in (18).

- (15) ‘derelative’ affixes:  $-b'aj, -j, -tsil$ :  $\lambda R.\lambda x.\exists yR(x, y)$

The operation corresponds to what is called a ‘detransitivization type-shifter’ by Barker (2011: 1114f), conceived of as a silent operator. In some languages, a de-relativising shift can be followed by the reverse, thus, [+ relational]  $\rightarrow$  [– relational]  $\rightarrow$  [+ relational]. The result of this sequence of operations is that the possessum is provided with a contextual (rather than inherent) relation of possession. Consider the difference that Koyukon makes for one and the same noun between inalienable use, which bears on the inherent part-whole affiliation, and alienable use, which bears on a contextual association with the possessor ((16b) vs. (16c)).

- (16) Koyukon (Athapaskan < Na-Dene; Thompson 1996: 666f)
- |                   |                       |                          |
|-------------------|-----------------------|--------------------------|
| a. <i>nelaane</i> | b. <i>be-nelaane</i>  | c. <i>se-k'e-nelaane</i> |
| meat              | 3SG-meat              | 1SG-POSS-meat            |
| ‘meat, flesh’     | ‘his/her (own) flesh’ | ‘my (animal’s) meat’     |

In (16c), in order for the inalienable possessor to be unrealised, a shift  $RN \rightarrow SC$  as represented in (15) must apply, albeit in a ‘silent’ fashion like in English. Subsequently, the prefix *k'e-* is applied, which denotes the function  $SC \rightarrow RC$  and establishes the relation POSS for alienable nouns just like the Mayan markers represented in (9b) and (10b), and the alienable possessor is saturated in terms of the pronominal prefix specifying first singular. The theoretical implication is that alienability distinctions may interact with further type shifts.

This leads to the important issue of ‘temporary’ (in)alienability assignments. Commonly, nouns are not invariably assigned to one of the two classes; that is, one often encounters so-called temporary (or ‘fluid’) (in)alienability assignments (not to be confused with temporary possession, as opposed to permanent possession) that come about by different conceptualisations. Consider the following contrast pair, in which the alienably possessed variants are marked by a free pronoun and a preposition, respectively:

- (17) Patpatar (Oceanic < Malayo-Polynesian; Chappell & McGregor 1996: 3)
- |                     |                                     |
|---------------------|-------------------------------------|
| a. <i>a kat-igu</i> | b. <i>agu kat</i>                   |
| DEF liver-1SG       | 1SG liver                           |
| ‘my liver’          | ‘my liver (that I am going to eat)’ |

In order to illustrate how the present approach captures temporary possession, I offer the representation in (18). The operation (18c) existentially binds the argument that is originally related to the possessum, and at the same time provides a different relation between which is contextually instantiated (hence the subscript ‘context’), thus introducing an alienable possessor.

- (18) Representation of temporary possession in Patpatar
- a. scheme for FNs:  
 $\lambda y. \iota x [(\text{SortalComponent}(x)) \dots \wedge (\text{RelationalComponent}(x, y))]$
  - b. instantiation by *kat* ‘liver’:  
 $\lambda y. \iota x [\text{LIVER}'(x) \dots \wedge \text{PART-OF}(x, y)]$
  - c. shift FN  $\rightarrow$  SC plus contextual relation (thus, FN  $\rightarrow$  SC  $\rightarrow$  RC):  
 $\lambda RC. \lambda z. \lambda x. \exists y [RC(x, y) \wedge \text{POSS}_{\text{context}}(z, x)]$
  - d. (18c) applied to (18b):  
 $\lambda z. \lambda x. \exists y [\text{LIVER}'(x) \wedge \text{PART-OF}(x, y) \wedge \text{POSS}_{\text{context}}(z, x)]$

The result (18d) can be applied so as to discharge the possessor in exactly the same way as (9d).

Summing up, the essence of this section is that the distinction of semantic vs. pragmatic accounts for what is known as the alienability contrast: ‘alienable’ morphology (esp. connectives, classifiers) denotes a function from SN to RC. ‘Inalienable’ is morphologically unmarked because the relation of affiliation is inherent. In this respect, the inalienable construction corresponds to either weak or absent definite articles, which will be the object of the following section.

## 4 The Typology of Definite Article Splits: The Role of Semantic vs. Pragmatic Uniqueness

The major tenet of the non-ambiguity approach to definiteness (Löbner 1985, 2011) is that any definite noun phrase indicates unique reference, meaning that its head noun is used as a functional concept (more precisely, IC or FC). It has already been pointed out above that, in the same way as possession comes about in two ways, this also holds true of unique reference: on the one hand, uniqueness may result from the meaning of the noun itself. This is the case with FNs and INs, as in the temperature (in Tbilisi at noon). On the other hand, uniqueness can result from the linguistic or extra-linguistic context; that is, in cases of anaphoric uses of SNs or of situational definiteness (the man at the corner). This distinction, referred to as semantic uniqueness versus pragmatic uniqueness, motivates the asymmetries with regard to the distribution of definite articles that are found cross-linguistically.

### 4.1 Article Splits

Given the contrast of semantic and pragmatic uniqueness, Löbner (2011) assumes a scale whose elements are arranged according to the restriction in the choice of possible referents. In (19) I render the scale in the slightly revised version established in Ortman (2014).<sup>10</sup>

<sup>10</sup> ‘DAA’ represents ‘definite associative anaphora’ (also known as ‘bridging’). Like other anaphora, DAAs are anchored by the referent of a previously mentioned NP; e.g. . . . a house . . . the door . . . Non-lexical FCs come about by combining nouns (of any type) with ordinals or superlative adjectives and will be discussed in 4.3.1.

- (19) Scale of uniqueness (Ortmann 2014: 314, adapted from Löbner 2011):  
 deictic with SN < anaphoric with SN < SN with establishing relative  
 clause < relational DAA < part-whole DAA < non-lexical FC < lexical  
 IN/FN < proper name < personal pronoun

The steps on the scale of uniqueness depict the degree of invariance of reference for the various kinds of nominal expressions. The choice among possible referents of the head noun is necessarily limited towards the right end, where semantic uniqueness is located. The choice of referents gets increasingly broader from right to left, in line with the fact that for SNs to refer uniquely, the dependence on the context is high (hence the notion pragmatic uniqueness). The basic hypothesis of the CTD theory is that the distinction between semantic and pragmatic uniqueness, arranged in a more gradated fashion on the scale in (19), is the basis of all conceptually governed article splits. Concretely, the scale is connected with the following empirical predictions:

- (20) Predictions entailed by the scale of uniqueness:
1. A decrease of obligatoriness in the use of articles as one moves from the left end to the right. This decrease correlates with a decrease of functional load.
  2. Diachronically, the use of the article spreads from left to right along the scale, thus eventually covering also those areas where it is functionally redundant.

An instance of Prediction 2 is the use of articles with proper names for persons in, for example, Modern Greek and colloquial German. It is a statement with respect to the grammaticalisation of definiteness, in harmony with and corroborated by the generalisations in Himmelmann (1997) and Lyons (1999: 275ff). As regards the implicational statement of Prediction 1, I refer to those languages in which definiteness markers systematically occur in some contexts and not in others as exhibiting a split article system. The contexts of pragmatic uniqueness will be among those in which definite articles occur. Since articles denote a function  $\langle\langle e, t \rangle, e\rangle$  from SN/RN to IC/FC in these contexts, their ‘functional load’ (i.e., their importance) is highest here. Accordingly, the diachronic expectations expressed by the scale are that the use of articles spreads from left to right. This is the typical development of any language in which articles emerged from erstwhile demonstratives, and German is no exception. In Old High German, definite articles are only obligatory with anaphoric NPs, but typically missing with FNs as in example (21a), in fact even with an FC that results from an establishing relative clause as in (21b) (so-called autophoric reference).

- (21) Old High German (Luke, 2, 46; translation from 8th century)
- a. ... *her uuas fon huse inti fon hiuuiske Dawides.*  
           he was from house and from line David’s FCs
  - b. ... *wurðun taga gifulte thaz siu bari.*  
           were days fulfilled that she gave\_birth AUTOPHORIC

The passage confirms the central point of this section, namely that semantic uniqueness is unmarked in the sense of not being overtly indicated by a determiner, in harmony with the uniqueness scale and the predictions in (20).

As far as the right edge of the scale is concerned, it is fairly rare for personal pronouns to be accompanied by articles. In Maori, the article variant *a* is used with proper names and personal pronouns of all persons: *ki a au* PREP DEF 1SG ‘to me’ *a koutou* DEF 2PL ‘you’ *i a raatou* OBJ DEF 3PL ‘them’ (Bauer 1993: 4, 371, 368; cf. also note 11). On the other hand, it is quite common for languages not to have definite articles at all. This is the case if demonstratives do not obligatorily occur with anaphoric nouns and, especially, if they are not used with definite associative anaphora either.<sup>11</sup>

The fact that there is considerable variation, and that languages extend the distribution of articles to environments where they are redundant, suggests a tension of competing factors. These factors are economy on the one hand (to be stated as Avoid overt operators where they are vacuous), and the uniform syntactic behaviour of nouns on the other hand, roughly: All NPs with unique reference should receive the same determiner. Since any language with articles has to balance these conditions it is not surprising that virtually all article languages show some split.

The fundamental claim of Ortman (2014) is that language-specific article asymmetries are of one of the two sorts mentioned in (22).

- (22) **Split I:** A leftmost segment of the scale is marked by the definite article, the rest remains unmarked.

**Split II:** Two segments of the scale (normally pragmatic and semantic uniqueness) are morphosyntactically distinguished in terms of different article forms, each of which will be subject to the Predictions 1 and 2 of (20).

Examples of Split I systems are Old High German (as well as the previous stages of all other languages with meanwhile generalised article use), Old Georgian (cf. Boeder 2010, Ortman 2014: 315-318) and West Slavic (more on which below).

The Romance language Catalan is an instance of Split II. According to Hualde (1992), Catalan, especially the variety of the Balearic Islands, exhibits the following sets of articles: the forms *(e)l, la, els, les*, thus, l-forms as in other Romance languages. They occur with “nouns that have a unique referent” (Hualde 1992: 281). By contrast, in anaphoric contexts the forms *es, sa, ses*, which like French *ce* derive from Latin *ipse*, are used. A minimal pair is *l’Església* ‘the (Catholic) Church’, which is semantically unique, and the pragmatically unique *s’església* ‘the church (building)’. Incidentally, we are actually dealing with a three-way split, since in the variety of the Balearic Islands proper names are preceded by particular article forms, *en, na*, that is, by a preproprial article, e.g. *en Joan*. Another case in point is Maori, as described by Bauer (1993), which features *te/ngaa* as the more widely used article, obligatory in cases of semantic uniqueness (INs, FNs, superlative FCs), moreover optional in anaphoric

<sup>11</sup> For these and other criteria see Himmelmann (1997).

contexts. The forms *taua/aua* are confined to anaphoric and autophoric noun phrases.<sup>12</sup>

As we will see, the grammaticalised distinction between semantic and pragmatic uniqueness in terms of a split II system is especially common in West-Germanic languages.

## 4.2 Type Shifts in Definiteness

The analysis for definiteness splits is fully parallel to the analysis of possession in section 2. Consequently, the claim I will defend is the following:

- (23) **Claim:** Pragmatic uniqueness involves a shift from [– unique] to [+ unique]. ‘Strong’ articles overtly denote this operation, their logical type thus being  $\langle\langle e, t \rangle, e\rangle$ . ‘Weak’ articles indicate semantic uniqueness. They signify an identity mapping  $\langle e, e \rangle$ .

Notice that since the logical type  $\langle e, t \rangle$  subsumes SNs as well as RNs whose argument has been saturated, the ‘strong’ article operation mentioned in (23) captures both subtypes of [– unique]. Furthermore, note that analogously to de-relativisation as analysed in 3.4, we can conceive indefinite uses of INs and FNs (e.g., a sun, many fathers of this success, a mother) as ‘de-functionalisation’. In other words, these uses involve a shift in the opposite direction, that is,  $\text{IN} \rightarrow \text{SC}$ ,  $\text{FN} \rightarrow \text{RC}$ , and  $\text{FN} \rightarrow \text{SC}$ , respectively  $\langle\langle e, \langle e, t \rangle \rangle$ , and  $\langle\langle e, e \rangle, \langle e, \langle e, t \rangle \rangle\rangle$ , and  $\langle\langle e, e \rangle, \langle e, t \rangle \rangle$ .<sup>13</sup>

In the following subsections, the goal is to provide evidence for the claim in (23). Further instances are discussed and analysed in Ortmann (2014).

## 4.3 ‘Zero’ and Weak Articles Indicate Semantic Uniqueness

**4.3.1 The ‘Zero’ Article Implies Semantic Uniqueness: Split I:** A paradigm case of a Split I system (that is, article as opposed to no/zero article) is that of Colloquial Upper Sorbian (Obersorbische Umgangssprache) as

<sup>12</sup> Besides, there is a special article form that is found with proper names (like in Catalan), and moreover with pronouns. Note that Catalan and Maori are not unusual in featuring so-called prepropriial articles. One source of the latter, e.g., in dialects of Norwegian, are third person forms of personal pronouns; cf. Matushansky (2008).

<sup>13</sup> An anonymous reviewer raises the question as to the exact nature of such a shift from  $e$  to  $\langle e, t \rangle$ ; specifically, if one should exclusively think of it as Partee (1986) IDENT, in which case there would be a problem with respect to a presupposition of existence (cf. Coppock & Beaver 2012: 533f). Essentially, we are dealing with a variety of shifts of which IDENT is only one. As a matter of fact, Partee (1986: 122) herself proposes another  $e$  to  $\langle e, t \rangle$  shift, labelled PRED, which returns properties from their entity-correlates. One other is, following Löbner (2011: 284f), a shift that is operative with proper names in predicative or indefinite use, as in *He’s an Einstein*. Yet another instance is a shift from an individual constant into a predicate, by way of making use of its descriptive contents, as it seems to be necessary, e.g., for *a moon*.

analysed by Breu (2004). The definite article was grammaticalised from the former demonstrative pronoun *tón, ta, to*. In present-day use it is found in many environments (even including some environments of semantic uniqueness) but not all. Crucially, the article does not occur with lexical INs or FNs:

- (24) Upper Sorbian (< West Slavic; Breu 2004: 30)
- |                                      |  |   |
|--------------------------------------|--|---|
| a. <i>stónco</i><br>sun<br>'the sun' | b. <i>Tame jo <u>dwórnišćo</u>.</i><br>there AUX station<br>'There's the station.' | c. <i>Tame jo <u>cyrkej</u>.</i><br>there AUX church<br>'There's the church.' |
|--------------------------------------|--|---|

This behaviour is shared by another West Slavic language, viz. the Upper Silesian variety of Polish, as analysed by Czardybon (2010). In Upper Silesian, the definite article, grammaticalised from the demonstrative *tyn, ta, te*, is also excluded with lexical INs and FNs:

- (25) Upper Silesian (< West Slavic; Czardybon 2010: 37)
- |                    |              |                    |                    |
|--------------------|--------------|--------------------|--------------------|
| <i>To jest</i>     | <i>chyba</i> | <i>koniec tego</i> | <i>film-u.</i>     |
| DEF.N COP.3SG.PRES | probably     | end                | DEF.GEN.M film-GEN |
- 'This is probably the end of the film.'

For all contexts further left on the scale of uniqueness, articles are either optional or even obligatory. For example, Czardybon (2010: 35) states that articles are commonly missing with non-lexical ICs and FCs, as in *Nojlepszo zozą jes moja* 'The best sauce is mine'; however, Adrian Czardybon (p.c.) informs me that at closer inspection it turned out that in most cases articles can in fact optionally be used. That the article is realised with all steps still further to the left of the scale will be illustrated in the following subsection.

**4.3.2 The Weak Article Implies Semantic Uniqueness: Split II:** Split II pertains to a morphological opposition of two (paradigms of) definite articles. Often one is a phonologically reduced form of the other. For this reason, the contrast is commonly referred to as 'strong' vs. 'weak'. In fact many, if not most, spoken varieties of German have developed weak article forms, which indicate the presence of an IN or an FN.

Consider the definite articles of the Rhineland, here represented by the Ripuarian dialect of Central Franconian.

- (26) Definite articles of Kölsch (Ripuarian); after Tiling-Herrwegen (2002: 150)

|        |          | masc       | fem        | neuter     | plural             |
|--------|----------|------------|------------|------------|--------------------|
| strong | NOM/ACC: | <i>dä</i>  | <i>die</i> | <i>dat</i> | <i>die</i>         |
|        | DAT:     | <i>dä</i>  | <i>dä</i>  | <i>däm</i> | <i>dä (/denne)</i> |
| weak   | NOM/ACC: | <i>der</i> | <i>de</i>  | <i>et</i>  | <i>de</i>          |
|        | DAT:     | <i>dem</i> | <i>der</i> | <i>dem</i> | <i>de</i>          |

The weak article occurs with all subtypes of semantically unique concepts (INs or FNs) such as proper names (*der Pitter, et Marie*) and abstract nouns (*et Levve* ‘life’). (27) provides a so-called ‘weak definite’ noun use (that is, not showing particular reference; cf. Carlson & Sussman 2005):

- (27) Kölsch (< C. Franconian < West Germanic; Tiling-Herrwegen 2002: 142):  
*Nemm der Schirm met, et es am rähne!*  
 take DEF.M.WK umbrella with 3SG.N BE.3SG at rain.INF  
 ‘Take your (lit.: the) umbrella, it is raining.’

A very similar distribution is found for Alemannic, the dialect group that comprises Swiss German as well as the dialects of south-western Germany and the westernmost part of Austria. Studler (2014) speaks of the opposition as ‘full’ and ‘reduced’ article forms. The reduced forms *de, d, s* occur in contexts of inherent uniqueness. This is illustrated in (28) by a (non-lexical) FN and an IN.

- (28) Swiss German (Alemannic < West Germanic; Studler 2014: 155)  
 a. *s grööscht Schtück Chueche* b. *de Mond schiint*  
 DEF.N.WK largest piece cake DEF.M.WK moon shine.3SG  
 ‘the largest piece of cake’ ‘the moon is shining’

In accordance with our expectations, then, [+ unique] nominals take weak article forms in the dialects under consideration.

#### 4.4 (Strong) Articles Indicate Pragmatic Uniqueness ([– unique] → [+ unique])

**4.4.1 Article as Opposed to no Article: Split I:** While in Upper Silesian *tyn, ta, te* were shown to be rejected in contexts of semantic uniqueness, in anaphoric and autophoric contexts the occurrence of these forms is obligatory (and they can therefore be said to function as definite articles). The notion of autophoricity implies that unique reference is established by restricting the noun’s potential referents in terms of a relative clause as in (29), hence the notion of an ‘establishing relative clause’.

- (29) Upper Silesian (< West Slavic; Czardybon 2010: 34)  
*Jak sie nazywo tyn ptok, co kradnie?*  
 how REFL call.3SG DEF.ACC.M.SG bird REL steal.3SG  
 ‘What is the name of the bird that steals?’

In Upper Sorbian, contexts of anaphoricity and autophoricity also require the article, as shown in (30a) and (30b), respectively.<sup>14</sup>

<sup>14</sup>Thanks to Adrian Czardybon for providing the glosses for the examples from Sorbian.

(30) Upper Sorbian (< West Slavic; Breu 2004: 39, 22)

- a. *Papa jo s woza panol ha ji sej ruku zlamal.*  
 Papa AUX from car fall.PRET and 3SG REFL hand break.PRET

**Ta** ruka dyrbi něk dvě nězli we gipsu wostać.  
 DEF.F.SG hand must.3SG now two weeks in cast stay

‘Daddy fell from the cart and broke his hand. The hand now has to stay in the cast for two weeks.’

- b. *Kóždy dóstane tón žonu, kiž sej wón zastuži.*  
 everyone get.3SG DEF.ACC.F wife REL.F REFL 3SG.M deserve.3SG

‘Every man gets the wife that he deserves.’

Notice that *žonu*, ‘wife’ in (30b) must have previously undergone a silent shift from FN to SC, to be combinable with an establishing relative clause with the function of contrasting different sorts of wives.

In summary, where Split I articles occur they indicate pragmatic uniqueness, hence formally denoting a function that takes SN to IC.<sup>15</sup>

#### 4.4.2 The Strong Article Indicates Pragmatic Uniqueness: Split II:

As mentioned in 4.3.2, numerous spoken varieties of German such as Alemanic, Bavarian, and dialects of the Rhineland show this split. Notice that for all variants at issue the definite articles are at least prosodically distinct from the demonstrative pronouns in that the latter are stressed and often lengthened. First, let me return to Rhinelandic as mentioned in 4.3. Recall that the weak article occurs with semantically unique concepts (INs or FNs). The strong article, by contrast, occurs in contexts of deictic, anaphoric and autophoric reference, hence pragmatic uniqueness (see also Schroeder 2006: 560f and references there). This can be nicely illustrated by an example from Rheydter Platt, a variety of

<sup>15</sup> In contrast to Upper Silesian, in Upper Sorbian the article is also obligatory with non-lexical functional concepts (i.e., ICs and FCs that come about by ordinal numbers and superlatives, which comprises a function over the domain that is characterised by the noun predicate), provided the NP is the comment rather than the topic of the clause. Similarly, associative anaphora (DAAs) tend to be generally preceded by the article in Upper Sorbian (Breu 2004: 20, 41), whereas in Upper Silesian this tends to be restricted to part-whole DAAs (Czardybon 2010: 30ff, Ortmann 2014: 309ff). What this shows with respect to the language-specific cut-off points on the scale (19) is that for Upper Sorbian the obligatory use of articles is two steps further advanced than in Upper Silesian.

the lower Rhine:<sup>16</sup>

- (31) Rheydter Platt (< Low Franconian < West Germanic)  
*in dä Pott jeschutt, dat mit die Karr*  
 into DEF.M.STR pot poured 3SG with DEF.F.STR cart  
*narem Veld jefahre*  
 to\_DEF.DAT.WK field driven  
 ‘(was) poured into the pot and carried to the field with the cart’

The noun phrase *dä Pott* ‘the pot’ is coreferent with the previously introduced *e Vaat* ‘a barrel’, and *die Karr* with *enne Warel* ‘a cart’, respectively.

Another instance of a Split II is the opposition in Swiss German. It was shown above that weak forms are found with INs and FNs. The full forms in (32) signal anaphoric and autophoric use, that is, pragmatic uniqueness.

- (32) Swiss German (Alemannic < West Germanic; Studler 2014: 156)
- a. *Uf em Tesch liit es Buech. Das Buech*  
 on DEF.DAT.WK table lie.3SG INDEF.N book DEF.N.STR book  
*wot i lääse.*  
 want I read  
 ‘There is a book on the table. I want to read the book.’
- b. *Das Buech, wo-n-i geschter ghouft ha*  
 DEF.N.STR book REL-EP-1SG yesterday buy.PART have  
 ‘the book that I bought yesterday’

The opposition in the article forms in Alemannic, then, renders the conceptual difference of semantic and pragmatic uniqueness, where the latter requires a strong article. Like in Ripuarian and elsewhere, the strong forms indicate an operation that turns [– unique] to [+ unique].

Particularly revealing in this connection is an observation with respect to the distribution of definite articles in Fering, a variety of Northern Frisian spoken on the islands of Föhr and Amrum. Basically, the so-called D-forms *di*, *det*, *don* are unstressed variants of the demonstrative pronoun, and confined to pragmatic uniqueness, hence indicate the operation SN → IC. The so-called A-forms *a*, *at* cover the contexts of semantic uniqueness; see Ebert (1971) and Löbner (1985). The additional observation by Keenan & Ebert (1973) concerns the contrast found in autophoric context in the scope of matrix verbs that give rise to referential ambiguities. Consider the following example pair:

<sup>16</sup> The example (31) is an excerpt from spontaneous conversation among two elderly dialect speakers, recorded and transcribed by Jennifer Kohls. I would like to thank her for permitting me to quote her data.

- (33) Fering (Northern Frisian < West Germanic; Keenan & Ebert 1973: 422f)

*John wonnert ham, dat a / di maan wat woon*  
 John wonder 3SG.ACC.M COMP DEF.WK / DEF.STR man REL won  
*bisöopen wiar.*  
 drunk was  
 ‘John was surprised that the man who won was drunk.’

Crucially, the A-form in (33) is tied to a de dicto reading, that is, an opaque reading with the concept of ‘winner’ as such. The de re reading, that is, the transparent interpretation involving the extensional meaning of winner, is not available; it would instead require the D-form, which is ambiguous between both readings. This piece of data strongly confirms the thesis that split article systems serve to mark the functional distinction of semantic and pragmatic uniqueness. The weak article indicates that the uniqueness comes about independently of the situation and does not require any shift induced by the context.

Keenan & Ebert (1973: 423f) furthermore argue that the de dicto vs. de re contrast also accounts for the distribution of articles in Malagasy.

- (34) Malagasy (Austronesian; Keenan & Ebert 1973: 423f)

*Gaga Rakoto fa mamô ny / ilay mpandresy.*  
 surprised Rakoto COMP drunk DEF.WK / DEF.STR winner  
 ‘Rakoto was surprised that the winner was drunk.’

Of the two forms at issue, *ny* and *ilay*, the former is the general definite article that occurs in contexts of semantic as well as pragmatic uniqueness. Accordingly, it allows for both the opaque and the transparent reading in contexts analogous to (34). This is in contrast with the form *ilay*, “whose use is narrowly restricted to objects that the hearer has specifically identified prior to the utterance” (l.c.: 423). In other words, *ilay* covers a certain section of pragmatic uniqueness, hence it only allows for the de re reading. Note that this does not imply that every article split language will exhibit a de dicto vs. de re contrast comparable to those of Fering and Malagasy; for example, German does not, as an anonymous reviewer points out. Rather, as with the other asymmetries analysed in this section, the implication is that if there is such a contrast, the distribution will always be along these lines, and cannot be the reverse.

In sum, the generalisation for the various instances of Split II can be represented along the following lines: weak articles merely redundantly display unambiguous reference. Being otherwise vacuous, they denote an identity mapping of the type  $\langle e, e \rangle$ . Strong articles indicate that uniqueness comes about by reference to the context or discourse. They denote a semantic operation from [– unique] to [+ unique], thus, SN → IC.

## 5 Conclusion

I have argued in this paper that the distinction between semantic and pragmatic is successful in explaining morphosyntactic splits regarding two essential cate-

gories of nominal determination, namely uniqueness and possession. The goal was to provide evidence for the adequacy of conceptual noun types and of type shifts among them. The results show that type shift operations are not merely a construct in order to remedy the composition as conceived by the theoretician. Rather, they can be shown to be overtly integrated into compositional semantics. They should therefore be regarded as fundamental ingredients of the human language capacity, manifest in the overt lexical inventory of natural languages.

Let me sum up the major theses I have advocated above:

1. As for definiteness, semantic uniqueness implies that the reference of a noun is unambiguous because of its lexical semantics. Pragmatic uniqueness refers to those uses of a noun in which a unique determination of its referent only comes about by the discourse or utterance context. Anaphoric or deictic reference, hence pragmatic uniqueness, implies a type shift  $\langle\langle e, t \rangle, e\rangle$  from sortal to individual (SN  $\rightarrow$  IC).
2. This distinction is reflected by two different sorts of splits: Split I: Pragmatic uniqueness is marked by the definite article, whereas semantic uniqueness is unmarked (e.g., in West Slavic). Split II: Pragmatic and semantic uniqueness is morphosyntactically separated by different article forms (e.g., in West Germanic and Catalan).
3. ‘Weak’ articles are semantically redundant, merely signalling the presence of an IN or FN. ‘Strong’ articles, as well as the articles of Split I languages, denote a function SN  $\rightarrow$  IC ( $\langle\langle et \rangle, e\rangle$ ). This holds, among others, for *dä, die, dat* (as opposed to *d(e)r, de, et*) as they are found in various versions in most spoken varieties of German.
4. Indefinite uses of underlying [+ unique] nouns (e.g., a sun) implicate a shift in the opposite direction (IN  $\rightarrow$  SC, FN  $\rightarrow$  RC), thus,  $\langle e, \langle e, t \rangle \rangle$  and  $\langle\langle e, e \rangle, \langle e, \langle e, t \rangle \rangle\rangle$ , respectively.
5. As for possession, semantic possession implies that the relation between possessum and possessor is inherent to the lexical semantics of the possessum noun. Pragmatic possession implies that the POSS relation is contextually established.
6. The distinction of semantic vs. pragmatic possession largely accounts for what is known as alienability contrast. In many languages sortal nouns must be endowed with a connective or classifier when combined with a possessor. Thus, ‘alienable’ morphology overtly denotes a function taking [– relational] to [+ relational], thus,  $\langle\langle e, t \rangle, \langle e, \langle e, t \rangle \rangle\rangle$ .
7. Conversely, ‘inalienable’ morphology merely signals the inherence of a relation of affiliation. Thus, for relative nouns the possessed use is canonical and unmarked, while the omission of a possessor in some languages requires a de-relativizing marker, thus, an overt exponent of an  $\langle\langle e, \langle e, t \rangle \rangle, \langle e, t \rangle\rangle$  operation converting [+ relational] to [– relational].
8. The two categories of nominal determination, definiteness and possession, have been shown to be parallel in the following regards: 1.) the distinction of semantic vs. pragmatic; 2.) the type shifts from underlying concept type to actual use; 3.) the close correlation of semantic and morphosyntactic markedness.

## References

- Barker, Chris. 1995. *Possessive Descriptions*. Stanford: CSLI Publications.
- Barker, Chris. 2011. Possessives and Relational Nouns. In C. Maienborn, K. von Heusinger & P. Portner (eds.), *Semantics: An International Handbook of Natural Language Meaning*, 1109–1130. Berlin: de Gruyter.
- Bauer, Winifred. 1993. *Maori*. London: Routledge.
- Boeder, Winfried. 2010. Klassizistische Sprachkompetenz: Der altgeorgische Artikel bei Sulchan-Saba Orbeliani. (Klasicisturi enobrivi kompetenturoba: zveli Kartuli naçevari Sulxan-Saba Orbelianis 'Sibrzne sicruisaši'). *Enatmecnirebis saqitxebi. Linguistic Issues* 2009 12. 140–163.
- Breu, Walter. 2004. Der definite Artikel in der obersorbischen Umgangssprache. In M. Krause & C. Sappok (eds.), *Slavistische Linguistik 2002. Referate des XXVIII. Konstanzer Slavistischen Arbeitstreffens*, München: Sagner.
- Bricker, Victoria R., Eleuterio Po'ot Yah & Ofelia Dzul Po'ot. 1998. *A Dictionary of the Maya Language as Spoken in Hocabá, Yucatán*. Salt Lake City: University of Utah Press.
- Carlson, Greg. N. & Rachel Sussman. 2005. Seemingly Indefinite Definites. In S. Kepser & M. Reis (eds.), *Linguistic Evidence: Empirical, Theoretical and Computational Perspectives*, 71–86. Berlin: Mouton de Gruyter.
- Chappell, Hilary & William McGregor. 1996. *The Grammar of Inalienability: a Typological Perspective on Body Part Terms and the Part Whole Relation*. Berlin: Mouton de Gruyter.
- Coppock, Elizabeth & David Beaver. 2012. Weak Uniqueness: The Only Difference between Definites and Indefinites. *Proceedings of SALT* 22. 527–544.
- Crowley, Terry. 1996. Inalienable Possession in Paamese Grammar. In H. Chappell & W. McGregor (eds.), *The Grammar of Inalienability: a Typological Perspective on Body Part Terms and the Part Whole Relation*, 383–432. Berlin: Mouton de Gruyter.
- Czardybon, Adrian. 2010. *Die Verwendung des definiten Artikels im Oberschlesischen im Sprachvergleich*. Master Thesis, University of Düsseldorf.
- Ebert, Karen H. 1971. *Referenz, Sprechsituation und die bestimmten Artikel in einem nordfriesischen Dialekt (Fering)*. Bredstedt: Nordfriisk Instituut.
- England, Nora C. 1983. *A Grammar of Mam, a Mayan Language*. Austin: University of Texas Press.
- Himmelman, Nikolaus. 1997. *Deiktikon, Artikel, Nominalphrase: Zur Emergenz syntaktischer Struktur*. Tübingen: Niemeyer.
- Hualde, José Ignacio. 1992. *Catalan*. London: Routledge.
- Keenan, Edward L. & Karen H. Ebert. 1973. A Note on Marking Transparency and Opacity. *Linguistic Inquiry* 4. 412–424.
- Lehmann, Christian. 1998. *Possession in Yucatec Maya*. Munich: Lincom Europa.
- Löbner, Sebastian. 1985. Definites. *Journal of Semantics* 4. 279–326.
- Löbner, Sebastian. 2011. Concept Types and Determination. *Journal of Semantics* 28. 279–333.
- Lyons, Christopher. 1999. *Definiteness*. Cambridge: Cambridge University Press.

- Matushansky, Ora. 2008. On the Linguistic Complexity of Proper Names. *Linguistic and Philosophy* 31. 573–627.
- Nichols, Johanna. 1988. On Alienable and Inalienable Possession. In W. Shipley (ed.), *In Honor of Mary Haas. Haas Festival Conference on Native American Linguistics*, 557–609. Berlin: Mouton de Gruyter.
- Nichols, Johanna. 1992. *Linguistic Diversity in Space and Time*. Chicago: The University of Chicago Press.
- Ortmann, Albert. 2014. Definite Article Asymmetries and Concept Types: Semantic and Pragmatic Uniqueness. In T. Gamerschlag, D. Gerland, R. Oswald & W. Petersen (eds.), *Frames and Concept Types: Applications in Language and Philosophy*, 293–321. Dordrecht: Springer.
- Ortmann, Albert & Corinna Handschuh. 2004. *Semantic Factors of Valence-Changing Processes with Nouns: Possession in the Mayan Languages*. DGfS-Jahrestagung Mainz, 25/2/2004.
- Partee, Barbara H. 1986. Noun Phrase Interpretation and Type-Shifting Principles. In J. Groenendijk, D. de Jongh & M. Stokhof (eds.), *Foundations of pragmatics and lexical semantics*, 115–143. Dordrecht: Foris.
- Partee, Barbara H. & Vladimir Borshev. 2003. Genitives, Relational Nouns, and Argument-Modifier Ambiguity. In E. Lang, C. Maienborn & C. Fabricius-Hansen (eds.), *Modifying Adjuncts*, 67–112. Berlin: Mouton de Gruyter.
- Seiler, Hansjakob. 1983. *Possession as an Operational Dimension of Language*. Tübingen: Narr.
- Studler, Rebekka. 2014. The Morphology, Syntax and Semantics of Definite Determiners in Swiss German. In Patricia Cabredo Hofherr & Anne Zribi-Hertz (eds.), *Crosslinguistic Studies on Noun Phrase Structure and Reference*, 143–171. Leiden: Brill.
- Thompson, Chad. 1996. On the Grammar of Body Parts in Koyukon Athabaskan. In H. Chappell & W. McGregor (eds.), *The Grammar of Inalienability: a Typological Perspective on Body Part Terms and the Part Whole Relation*, 551–676. Berlin: Mouton de Gruyter.
- Tiling-Herrwegen, Alice. 2002. *De kölsche Sproch. Kurzgrammatik Kölsch – Deutsch*. Cologne: Bachem.
- Tozzer, Alfred M. 1921. *A Maya Grammar. With Bibliography and Appraisal of the Works Noted*. Cambridge, MA. Reprinted 1974 by Kraus Reprint, Millwood, N.Y.
- Vikner, Carl & Per Anker Jensen. 2002. A Semantic Analysis of the English Genitive. Interaction of Lexical and Formal Semantics. *Studia Linguistica* 56. 191–226.