Definiten esssplits

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- 1. Observations about definite descriptions
- 2. Concept Types and (In)Definite Determination Concept types, (In)definite determinations, (in)congruent uses
- 3. Uses of Definites Uses in the light of CTD, type e, semantic vs. pragmatic uses
- 4. Splits: Cross-linguistic data Types of splits
- 5. Scale of definiteness implicational scale in terms of uses





1. Observations about definite descriptions

For languages with definiteness marking:

- There are certain conceptual types of nouns for which the definite article is almost obligatory.
- Certain types of definite NPs are usually not marked with a definite article, e.g. proper names and personal pronouns.
- There are splits of definiteness marking in almost all languages.
- In most cases, definite articles developed from demonstratives.
- Semantic theory is preoccupied with anaphoric uses of definites.





2. Concept types

[© stands for: "in need of support by special context"]

individual concepts

- (1) **The**/©A **pope** will visit Switzerland in 2016.
- (2) By 2030, the catholic church will have **a**/*the different pope.

sortal concepts

- (3) **A**/©The cat killed **a**/©the mouse.
- (4) © Our cat caught a mouse yesterday. She killed the/©a mouse.

functional concepts

- (5) **The**/©A mother of Jeanne consulted the teacher.
- (6) Every person has *a*/*the *mother*.





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[–U]	[+U] conceptually unique	
sortal nouns girl book water © definite © possessiv logical type: <e,t></e,t>	<pre>individual nouns pope; Jeanne; she ✓ definit © possessiv logical type: <e></e></pre>	[-R]
relational nouns daughter part kin © definit ✓ possessiv logical type: <e,<e,t>></e,<e,t>	functional nouns mother mouth amount ✓ definit ✓ possessiv logical type: <e,e></e,e>	[+R] conceptually relational





[–U]	[+U] conceptually unique	
sortal concepts	individual concepts	[–R]
describe the potential referents in terms of its properties	describe the potential referents in terms of a functional relation to the situation	
►unary predicate	description of an individual	
open number of referents	►1 referent	
relational concepts	functional concepts	[+R]
describe the potential referent in terms of a relation to a "possessor"	describe the potential referent in terms of a functional relation to a "possessor"	conceptually relational
▶binary predicate	unary function concept	
▶open number of referents	►1 referent per possessor	





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Concept types and determination

- The conceptual type of a noun or pronoun is **lexically fixed** (modulo polysemy): The meaning of a sortal/relational/individual/functional [pro]noun is a concept of the respective type.
- When a CNP (common noun phrase = operand of determination) is formed, the noun may undergo conceptual shifts,
 - (overtly) by combination with modifiers
 - (overtly) by combination with argument specifications
 - (covertly) by application of a general meaning shift (e.g. metonymy)
 - (covertly) by adding contextual information
- Simple determination (= definite / indefinite / possessive / absolute without further semantic content) fixes the conceptual type of the NP token. Determination may coerce a type shift of the CNP.



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Definite determination

- Definite determination means:
 "Construe the NP token as a conceptually unique description, i.e. as [+U] ! ".
 - The meaning/function of definite determination is the same for singular, plural, and mass CNPs

Indefinite determination

- Indefinite determination means:
 "Construe the NP token as a sortal description, i.e. as [–U] ! ".
 - The meaning/function of indefinite determination is the same for singular, plural, and mass CNPs





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Congruency and type shifts

- If the CNP is not semantically [+U], definite determination coerces a type shift [–U] → [+U]
 - > In particular, definite determination coerces a type shift on sortal nouns: anaphoric and deictic DDs
- If the CNP is not of semantically [–U], indefinite determination coerces a type shift [+U] → [–U]
 - > Indefinite uses of individual or functional concepts
- Determination is (in)congruent iff_{def} the CNP is (not) of the resulting type.
- A DD is semantically definite if
 A DD is pragmatically definite if

 $\begin{array}{ll} \text{iff}_{\text{def}} & \text{the CNP is [+U].} \\ \text{iff}_{\text{def}} & \text{the CNP is [-U].} \end{array}$





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Levels of type shifts

Level 0	a. choice of lexical meaning variant	core semantics
	 b. compositional modification: attributes, complements, adjuncts 	
Level 1	general conceptual shifts applying across types of meanings (such as "artefact", "institution", "profession", "attribute", "property")	dynamic lexicon
Level 2	enriching the concept for the referent of an NP by adding extralinguistic information	pragmatic enrichment





3. Uses of definites

- Congruent definite determination: individual and functional CNPs If the CNP is [+U], definite determination is semantically redundant.
 - CNP = lexically [+U] individual and functional nouns (cf. the pope and mother examples)
 - CNP = lexically [–U] sortal or relational noun **plus** a modifier that turns a [–U] concept into a [+U] concept, such as
 - only (adnominal)



- [+U] appositions, number 2, word 'kinezumi', rumour that ...
- autophoric DDs: SC with "establishing clause"



level 0 shifts <



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- Incongruent definite determination: sortal and relational CNPs
 If the CNP is [-U], definite determination is functional;
 it inevitably involves a type shift [-U] → [+U] (or: <e,t> → e).
 - deictic use: The deictic gesture maps the sort described by the [-U] CNP to an individual of the sort. Note that "what S points to" is a functional concept (here enriched with sortal information on the value)
 - **anaphoric** use: The sentential and wider context of the *antecedent* plus the sentential context of the anaphoric definite NP yields an *individual concept* for the referent.
 - (8) Reinhold met a yeti. He took a picture of the snowman.

individual concept: "x such that: Reinhold met x; x is a yeti; (= antecedent sent. context) x is a snowman, x is visible" (= anaphor sent. cotext)



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- Functional concepts and definiteness (1)
 - The [U] value of a functional N/CNP is the minimum of the [U] values of the possessum concept and the possessor concept:
 - (9) a. [[the father]_{+U} of [the girl]_{+U}]_{+U}
 - b. [[the father]_{+U} of [a girl]_{-U}]_{-U}
 - c. [[a sister]_U of [the girl]_U]_U
 - d. [[a sister]_U of [a girl]_U]_U
 - If the possessum CNP is a functional concept (FC), it inherits its [U] value from the possessor concept.
 - **Referential transparency of FCs**: If the possessum CNP is an FC, it inherits the total determination from the possessor concept, i.e. being (in)definite, possessive, deictic, anaphoric, quantifying, generic etc.



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- Functional concepts and definiteness (1)
 - Definite or indefinite determination applies only to the immediate operand, not necessarily to the whole NP !
 - (> mismatch of constituent structure and semantic composition)
 - (10) a. Reinhold claims he saw [[the footsteps]_{+U} of [a yeti]_{-U}]_{-U} in the snow.
 - ≈ Reinhold saw [yeti footsteps]_{-U} in the snow.
 - ≠ Reinhold saw [the yeti footsteps]_{+U} in the snow.
 - b. Reinhold claims he saw [[the footsteps]_{+U} of [the yeti]_{+U}]_{+U} in the snow.
 - = Reinhold saw [the yeti's footsteps]_{+U} in the snow.
 - c. Reinhold claims he saw [[footsteps]_U of [a yeti]_U]_U in the snow.
 - ≈ Reinhold saw [yeti footsteps]_{-U} in the snow.
 - d. Reinhold claims he saw [[footsteps]_U of [the yeti]_U]_U in the snow.



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- Functional concepts and definiteness (2)
 - A functional CNP in absolute use (i.e. with no explicit possessor specification) with definite determination has an implicit [+U] possessor.
 - (11) special case: **definite associative anaphor** (DAA): definite [+U][+R] CNP with implicit anaphoric possessor argument
 - a. "How much is <u>this</u>?" "<u>The price_+U</u> [= of this_+U] is attached on the back."
 - b. I've bought <u>a car</u>, but something's wrong with <u>the clutch_{+U}</u> [of the car_{+U}].
 - A functional CNPs in absolute use with indefinite determination has a [–U] possessor (or else is shifted lexically to [–U]

(12) a. A father [of a student] came to my office hours the other day.

- b. A father [of the student] came to my office hours the other day.
- With functional CNPs in absolute use, explicit definite determination is
 pragmatically not redundant, as it entails that the possessor argument is [+U].



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Evidence

 Incongruent uses of definite and indefinite determination are less frequent than congruent uses.

sortal		[–U]	zero
relational		[–U]	zero
individual (lex.)		[+U]	zero
indiv. (p.n., p.p.)		[+U]	indef
functional		[+U]	def

from: Horn, Kimm & Gerland (to appear)

Incongruent ICs: lexical ICs > proper names > 3rd p.p. > 2nd, 1st p.p.





Evidence

- Incongruent determination requires more processing time. (work in progress)
- Incongruent determination receives more salient marking:
 - Incongruent uses are marked, while congruent uses are not
 - Congruent uses receive reduced marking as opposed to incongruent uses.
 - Definiteness splits:
 - > Existence of definiteness marking entails marking of pragmatic definiteness.
 - > Certain types of semantically definites NPs are left unmarked





4. The scale of uniqueness / definiteness

- deictic definites < anaphoric definites, SC with establishing rel. cl.
- pragmatic definites (PD) < semantic definites (SD)
- PD \leq definite associative anaphors (DAA) \leq SD
- semantic definites:

DAA

- < lexical IC, complex IC (SC with superlative, ordinal etc.)
 - < proper names
 - < 3rd person pronouns
 - < 2nd, 1st person pronouns





4. The scale of uniqueness / definiteness

Types of definite NPs IC 2nd,1st deictic anaph. 🔳 autoph. 🛽 DAA 3rd proper n. pragmatic definiteness semantic definiteness **Grammatical distinctions** general nouns names pronouns 2nd,1st 3rd adnominal demonstratives





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5. Definiteness splits

- 5.1 Adnominal demonstratives (Dem)
 - The standard uses of AD deictic and anaphoric require a [–U] CNP for enabling the deictic choice.
 - Demonstrative determination results in a [+U] NP:
 Dem Det: [−U] → [+U]

Demonstrative determination inevitably involves a level-2 type shift, i.e. reference draws on extralinguistic information.

- Historically, anaphoric demonstratives emerge from deictic demonstratives.
- Some languages have separate anaphoric determiners (e.g. Lakhota, Hausa. Lyons 1999: 53ff).
- Application of Dem coincides with pragmatic definiteness.





Split type A: no definiteness marking (Japanese, Chinese, Russian, Latin, ...)

l	deictic	anaph.	autoph.	DAA	IC	proper n.	3rd	2nd,1st
	demons	tratives			zero de	efinites		

- (13) Japanese
 - a. *sono hon wa nani?* DEM_{MED} book TOP what 'what's about this book?'

deictic, anaphoric

- b. kinō katta (*sono) hon wa tsumaranai autophoric yesterday bought DEM_{MED} book TOP boring
 'the book I bought yesterday is boring'
- c. kinō hon o katta. (*sono) taitoru wa oboe- nai DAA
 DEM_{MED} title TOP remember-NEG
 'I bought a book yesterday. I don't remember the title'







Split type B : demonstratives extended to semantic definites

deictic	anaph.	autoph.	DAA	IC	proper n.	3rd	2nd,1st
den	demonstratives				zero defi	nites	

West Slavic: Upper Sorbian [Breu 2004], Polish Upper Silesian [Czardybon 2010] (14) a.





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Split type C : definite article different from demonstratives (English, standard German)

deictic	anaph.	autoph.	DAA		С	proper n.	3rd	2nd,1st
demons	tratives							
definite article					zero definites			

Split type D : proper names included

Modern Greek





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Maori: definite article *te* (sg., generic), *ngaa* (plural) *a* (with local noun subjects, proper name and personal pronoun direct objects) [Bauer 1993]



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Split type F : demonstratives, strong def, weak def, zero

deictic	anaph.	autoph.	DAA	IC	proper n.	3rd	2nd,1st
demons	tratives						
strong	definite r	narking					
weak definite marking					ze	ero definit	es

Standard Swedish: weak def = def. suffix *–en/-et,* strong def = determiner + def. suffix [Stroh-Wollin 2003]

Standard Dutch: weak *de / het,* strong *die / dat* [Ortmann, to appear]





Split type G : demonstratives, strong def, weak def (including proper names), zero

deicti	c anaph.	autoph.	DAA	IC	proper n.	3rd	2nd,1st
demo	onstratives						
strong definite marking			weak	definite n	zero d	efinites	

Standard German:weak def = contraction of preposition and article, [Schwarz 2009]German dialects:weak def = weak article, or contraction, [Studler 2004]North Frisian:weak "a-article", strong "d-article" (Fering) [Ebert 1971]





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Split type G : demonstratives, strong def, weak def, preproprial article

L	deictic	anaph.	autoph.	DAA	IC	proper n.	3rd	2nd,1st
	demons	tratives						
	strong definite marking			weak de	ef. mark.	prprpr	zero d	efinites

Swedish dialects: reduced 3rd person pronouns a / n with proper names as "preproprial" articles, [Dahl 2007]





Bauer, Winnifred (1993), Maori. Routledge London.

- Breu, Walter (2004), Der definite Artikel in der obersorbischen Umgangssprache. In: Marion Krause & Christian Sappok (eds.), *Slavistische Linguistik 2002. Referate des XXVIII. Konstanzer Slavistischen Arbeitstreffens. Bochum, 10.-12.9.2002*, 9–57. München: Sagner.
- Czardybon, Adrian (2010), *Die Verwendung des definiten Artikels im Oberschlesischen im Sprachvergleich*. Master Thesis, University of Düsseldorf.
- Dahl, Östen (2007), *Grammaticalization in the North: Noun Phrase Morphosyntax in Scandinavian Vernaculars.* Stockholm University. www2.ling.su.se/staff/oesten/downloads/Gram_north.pdf
- Ebert, Karen H. (1971), *Referenz, Sprechsituation und die bestimmten Artikel in einem nordfriesischen Dialekt (Fering)*. Bredstedt: Nordfriisk Instituut.
- Hawkins, John A. (1978), *Definiteness and Indefiniteness*. Croom Helm. London.
- Himmelmann, Nikolaus P. (1997), *Deiktikon, Artikel, Nominalphrase. Zur Emergenz syntaktischer Struktur*. Niemeyer. Tübingen.
- Horn, Christian, Nicolas Kimm, Doris Gerland (to appear), Empirical Evidence for Concept Types in German Texts. In Th. Gamerschlag, D. Gerland, R. Osswald, W. Petersen (eds.), *Concept types and frames - Applications in Language, Cognition and Philosophy.*

Lyons, Christopher. (1999), *Definiteness*. CUP. Cambridge.





- Ortmann, Albert (to appear), Definite article asymmetries and concept types: semantic and pragmatic uniqueness . In Th. Gamerschlag, D. Gerland, R. Osswald, W. Petersen (eds.), *Concept types and frames Applications in Language, Cognition and Philosophy.*
- Partee, Barbara, & Vladimir Borschev (2002), Integrating lexical and formal semantics: Genitives, relational nouns, and type-shifting. In Robin Cooper, Thomas Gamkrelidze (eds.), *Proceedings of the 2nd Tbilisi Symposium on Language, Logic and Computation*. Tbilisi State University. Tbilisi. 229–241.
- Schwarz, Florian (2009), *Two Types of Definites in Natural Language*. PhD dissertation, University of Massachusetts Amherst. Studler, Rebekka (2004). Voller und reduzierter Artikel in der schweizerdeutschen DP. In: Bračič, S., Čuden, D., Podgoršek, S. & Pogačnik, V. (eds.), *Linguistische Studien im Europäischen Jahr der Sprachen. Akten des 36. Linguistischen Kolloquiums in Ljubljana*. Frankfurt a.M.: Lang. 625–635.
- Stroh-Wollin, Ulla (2003), (Double) definiteness in Swedish. In: Hans-Olof Delsing et al. (eds.), *Grammatik i fokus Vol. 2: Festschrift for Christer Platzack*, 335-342. Lunds universitet: Institutionen för nordiska språk.
- Studler, Rebekka (2004), Voller und reduzierter Artikel in der schweizerdeutschen DP. In: Bračič, S., Čuden, D., Podgoršek, S. & Pogačnik, V. (eds.), Linguistische Studien im Europäischen Jahr der Sprachen. Akten des 36. Linguistischen Kolloquiums in Ljubljana. Frankfurt a.M.: Lang. 625–635.



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