

Weak vs. Strong Definite Articles - Meaning and Form Across Languages

Florian Schwarz



Workshop on Definiteness Across Languages

Universidad Nacional Autónoma de México

June 22nd, 2016

<http://www.florianschwarz.net/DefMex.pdf>

Meanings and Forms of Definite Descriptions

- Background: recent work on **multiple realizations** of definiteness within languages
- Crosslinguistic Questions:
 - Variation in **form**?
 - Variation in **meaning** (and meaning contrasts)?
- Broader implications:
 - Role of **context** in interpretation
 - Mechanisms for **quantificational covariation**
 - **Noun phrase structure** in natural language

Plan for Today

- Review of **Weak vs. Strong Article Contrast** in German(ic)
- Sketch of analysis in Schwarz (2009)
- **Cross-linguistic** exploration:
 - Variation in **Form**
 - Variation in **Meaning Contrast**
 - An **Additional Dimension of Variation**
or a more **gradient analysis?**

Definites and Uniqueness

Attempt at unified theory #1:

Context: Standing in an office with **exactly one table**.

(1) The table is covered with books.

Intuitive Idea:

Definites pick out an individual with a **unique property**

Challenge:

To what extent does uniqueness have to hold?

Definites and Anaphoricity

Attempt at unified theory #2:

- (1') a. There is **a table** and a chair in my office.
 b. **The table** is covered with books.

Intuitive idea:

Definites pick out an individual that has been introduced by a
previous expression

Challenge:

What about cases where there is no antecedent?

Two Types of Definites (Schwarz, 2009)

- Both analyses are needed
- Corresponding phenomena instantiated by different definite descriptions forms in various languages
- More complex picture that can more easily integrate otherwise problematic cases, based on empirical motivation

(also see Birner & Ward, 1994; Poesio & Viera, 1998, a.o.)

Languages with Two Definite Articles

- Several Germanic languages / dialects have long been known to have two full article paradigms, e.g:
- Rhineland dialect Heinrichs (1954); Hartmann (1967),
Mönchen-Gladbach dialect Hartmann (1982), Cologne dialect
Himmelmann (1997), Bavarian Scheutz (1988); Schwager (2007)

(2) Example: The definite article paradigms in Fering

	m.Sg.	f.Sg	n.Sg.	Pl.
A-article	<i>a</i>	<i>at</i>	<i>at</i>	<i>a</i>
D-article	<i>di</i>	<i>det</i>	<i>det</i>	<i>dön</i>

(Ebert, 1971, p. 159)

A Contrast with Definite Articles in Standard German

If certain independent morphological conditions are met,
there are two forms for preposition-article sequences:

- (3) a. *Hans ging zu dem Haus.*
Hans went to the_{strong} house
'Hans went to the house.'
- b. *Hans ging zum Haus.*
Hans went to-the_{weak} house
'Hans went to the house.'

(a.o Hartmann, 1978; Haberland, 1985; Cieschinger, 2006)

Terminology

Descriptively, the two forms correspond to two distinct definite articles, as in Fering.

Form	Article Type	Gloss
<i>zum</i>	weak	<i>P-the_{weak}</i>
<i>zu dem</i>	strong	<i>P the_{strong}</i>

Table: Terminology for the German Article Forms

A Contrast in Meaning

Our central concern:

The two forms **contrast in meaning**

- (4) *In der Kabinettsitzung heute wird ein neuer Vorschlag*
In the cabinet meeting today is a new proposal
✓ vom / **#von dem** *Kanzler* erwartet.
by-the_{weak} / by the_{strong} chancellor expected
'In today's cabinet meeting, a new proposal by the
chancellor is expected.'

Uniqueness and the Weak Article

(5) # *In der Kabinettsitzung heute wird ein neuer Vorschlag*

In the cabinet meeting today is a new proposal

vom Minister erwartet.

by-the_{weak} minister expected

‘In today’s cabinet meeting, a new proposal by the minister is expected.’

- There’s **only one chancellor**, but several ministers.
- The weak article seems to **require uniqueness**

Anaphoricity and the Strong Article

- Uniqueness is **neither sufficient nor necessary** for the_{strong}
- the_{strong} becomes available if there is an **antecedent** (6)

(6) a. *Hans hat gestern **einen Minister** interviewt.*

Hans has yesterday a minister interviewed

‘Hans interviewed a minister yesterday.’

b. ✓ *In der Kabinettsitzung heute wird ein neuer*

In the cabinet meeting today is a new

*Vorschlag **von dem Minister** erwartet.*

proposal by the_{strong} minister expected

‘In today’s cabinet meeting, a new proposal by the minister is expected.’

Initial Assessment

The two articles differ in the way they relate to their context:

- the_{weak} comes with a **uniqueness-requirement**

(✓ *the_{weak} chancellor* vs. ✗ *the_{weak} minister*)

- the_{strong} is **anaphorically dependent** on an antecedent

(*a minister ... the minister*)

Bridging

Definites can relate back to the context in indirect ways, e.g., in bridging uses Clark (1975); Hawkins (1978); Prince (1981):

- (7) a. John was driving down the street.
b. **The steering wheel** was cold.
- (8) a. John bought a book today.
b. **The author** is French.

How do German articles map onto bridging contexts?

Bridging Contrast

- (9) *Der Kühlschrank war so groß, dass der Kürbis problemlos*
 The fridge was so big that the pumpkin without a problem
im / *#in dem Gemüsefach* untergebracht werden
in-the_{weak} / *in the_{strong}* crisper stowed be
konnte.
 could

‘The fridge was so big that the pumpkin could easily be stowed **in the crisper.**’
Part-Whole Relation

- (10) *Das Theaterstück missfiel dem Kritiker so sehr, dass er in*
 The play displeased the critic so much that he in
seiner Besprechung kein gutes Haar #am / *an dem*
 his review no good hair *on-the_{weak}* / *on the_{strong}*
Autor ließ.
 author left

‘The play displeased the critic so much that he tore **the author**
 to pieces in his review.’
Producer Relation

Covariation

- (11) *Jeder Student, der ein Auto parkte, brachte einen Parkschein*
 Every student that a car parked attached a parking-pass
am / *#an dem Rückspiegel an.*
 on-the_{weak} / on the_{strong} rear view mirror PART
 ‘Every student that parked a car attached a parking pass to the rearview mirror.’
- (12) *Jeder, der einen Roman gekauft hat, hatte schon einmal eine*
 Everyone that a novel bought has had already once a
Kurzgeschichte #vom / von dem Autor gelesen.
 short story by-the_{weak} / by the_{strong} author read
 ‘Everyone that bought a novel had already once read a short story by the author.’

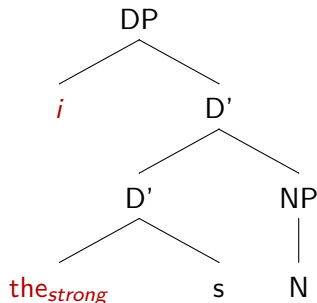
Sketch of the Analysis

- Core definite article encodes **Fregean uniqueness** relativized to situations (→ weak article denotation)
- Strong article involves additional **anaphoric element**
- Bridging effects based both on situation structure and nature of nouns
- Two mechanisms that can give rise to covariation

(see Schwarz, 2009, for full details)

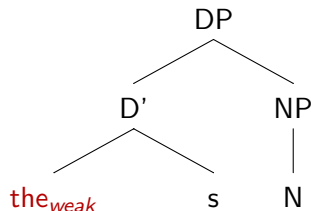
Denotations

(13) a.



$$\lambda s_r \lambda P. \lambda y. \iota x [P(x)(s_r) \ \& \ x = y]$$

b.



$$\lambda s_r \lambda P. \iota x [P(x)(s_r)]$$

Core Features

- **Uniqueness** plays essential role
- Relativized to **situation pronoun**, introduced with D-head
 - topic situation
 - resource situation
 - covarying situation
- Two mechanisms that can give rise to covariation
 - indirectly, through **quantification over situations**, and
 - directly, through **(dynamic) binding**
- Implications for analysis of **domain restriction**:
either through situations, or direct binding of individual
variable (no C-variable)

Semantic Unification - Purely Structural Account?

Hanink (to appear); Grove & Hanink (to appear)

- Just one definite article after all?
- Put all the variation in the structure
- Distributed Morphology account of contraction
- Welcome avenue for refinement of analysis, but
 - How does this relate to languages with full article paradigms?
 - What are the implications for article contrast in languages that use bare NPs for weak-article correlates?
 - **Also:** Grubic (2016) on Ngamo provides evidence for relational strong article variant, favoring multiple lexical entries.

Remaining Challenge: Relative Clauses

Another can of worms:

- Article contrast interacts in complex ways with relative clauses
- (Overly) simplistic generalization:
Restrictive relatives require strong article on head noun
- But other subtypes of RCs may exhibit further variation
- Even the simple generalization is hard to capture
(see Grove & Hanink, to appear, for a recent proposal)
- Difficult terrain requiring further work, but important to include in cross-linguistic picture!

(see Wiltschko, 2013; Hofherr, 2013; Simonenko, to appear, a.o.)

The Weak/Strong Contrast Across Languages

Main empirical questions:

- What other languages employ the same (or similar) contrasts?
- What variation exists in the formal expression of the contrast?
- What variation exists in terms of the semantics/pragmatics of the contrast?

Preview of picture presented here

- **Substantial uniformity** in meaning contrast between definite forms across a fair number of languages, with
 - interesting variation in form that seems crucial for understanding interplay of formal and semantic ingredients
 - only very minor variation in meaning/use
- Second class of languages
 - Potentially **different contrast**, due to another dimension of variation?
 - Or do we need a more gradient account of variation after all?
- **Theoretical Questions:**
 - What is the best analysis, allowing for variation as necessary?
 - If there are multiple contrasts, how are they related?

Languages with uniform meaning contrasts

Caveat:

Not all of these cases have been looked at to exactly the same extent and there thus may be more variation than apparent here. But I tried to only include relatively well-documented cases that so far have essentially yielded complete overlap with the German contrast

Two systematic distinctions between definites:

- Contrast between two overt forms
- Bare nouns vs. overt form

(cf. the distinction between Type I and Type II splits in Ortman, 2014)

Overt Contrasts

- (West-)Germanic
- Icelandic (Ingason, 2016)
- Possibly Hausa, Lakhota (see Schwarz, 2013, for references)

Bare vs. Overt Contrasts

- Akan (Arkoh & Matthewson, 2013)
- Korean (Cho, 2016; Ahn, 2016)
- Mauritian Creole (Wespel, 2008)
- Czech (ˇ Simík, 2015)
- Thai & Mandarin (Jenks, 2015)
- Upper Silesian (Ortmann, 2014)
- Upper Sorbian (Ortmann, 2014)
- Ngamo (Grubic 2016)
- Cases currently under investigation:
 - ASL (Irani & Schwarz, 2016)
 - Lithuanian (Sereikaite, 2016)

Some Illustration

- The following slides provide illustrative pairs of examples from languages where the contrast has been studied in some detail
- Mostly using **bridging contrast** for illustration
→ Most subtle (and perhaps surprising) part of contrast
- But contrast holds systematically between anaphoric and unique definites in all these cases

Illustration: Akan (Arkoh & Matthewson, 2013)

Weak Yè-hú-ù dàn dádáw bí w`ɔ̀ èkùrásí hó *ńkyénsìdán*
 1pl.subj-see-Past building old Ref at village there roof
 (#*ńú* / #*bí*) é-hódwòw
 (**Fam** / **Ref**) Perf-worn-out
 ‘We saw an old building in the village; (**#the** / **#a (certain)**)
roof was worn out.’

(Arkoh & Matthewson, 2013, p. 14)

Strong Àsáw nú yé-è òhín nú fɛw árá mà ò-kyé-è
 dance Fam do-Past chief Fam beautiful just Comp 3sg.subj-give-Past
òkyiréǹ nú àdzí
 trainer **Fam** thing
 ‘The dance was so beautiful that the chief gave **the trainer** a
 gift.’

(Arkoh & Matthewson, 2013, p. 15)

Illustration: Mauritian Creole (Wespel, 2008)

Weak *Mo fin visite enn lavil dan provins. Lameri ti pli ot*
 I ACC visit one village in province **town-hall** PST more high
ki legliz.
 than **church**
 'I visited a village in the province. **The town hall** was higher
 than **the church**.' (Wespel, 2008, p. 155; source: O.M.22.)

Strong *Li fin kontan liv la ek aster li envi zwen loter la.*
 she PST love book DEF and now she want meet **author** DEF
 'She was fond of the book and now she wants to meet **the**
author.' ((Wespel, 2008, p. 156); source: O.M.2.8.)

Illustration: ASL (Irani & Schwarz, 2016)

Weak IX_a CAR, POLICE STOPPED WHY (#IX_a) MIRROR
BROKEN.

‘The car was stopped by the police because the mirror was broken.’

Strong JOHN BUY IX_a BOOK. #(IX_a) AUTHOR FROM
FRANCE.

‘John bought a book. The author is from France.’

Illustration: Korean (Cho, 2016)

Weak *Gyeolhonski-e gatda. Sinbu-ga/#ku sinbu-ga paransek-ul*
 Wedding-to went bride-NOM/that bride-NOM blue-ACC
ipeotda.
 wore

‘(I) went to a wedding. The bride/#that bride wore blue.’

Strong *Jonathan-un eojebam-e sesigan dokseorul haetda. ku*
 Jonathan-TOP yesterday night-at three hours reading did. ku
soseolchayk-i/#soseolchayk-i jaemi-itdago saengakhaetda.
 novel-NOM /#novel-NOM interesting thought.

‘Jonathan read for three hours last night. (He) found the novel interesting’

(Cho, 2016, p. 6)

Illustration: Thai (Jenks, 2015)

Weak *rót khan nán thúuk tamrát sàkàt phǎw? mǎj.dǎj tìt*
 car CLF that ADV.PAS police intercept because NEG attach
satikəə wáj thǐi thábian (#baj nán).
 sticker keep at license CLF that

‘That car was stopped by police because there was no sticker on the license.’

Strong *ʔəw khít wāa khəw bəw nán prǎw mǎak, mǎe-wāa khǎw*
 Paul thinks COMP poem CLF that melodious very, although 3P
cà mǎj chǎp náktɛɛ Nkləw #(khon nán).
 IRR NEG like poet CLF that

‘Paul thinks that poem is beautiful, though he doesn’t really like the poet.’

(Jenks, 2015, p. 109)

Illustration: Icelandic (Ingason, 2016)

Weak (Context: The speaker is annoyed that she always loses. There is only one winner per round.)

Alltaf eftir hverja umferð eru spilin gefin aftur af
always after each round are cards.the given again

[_{DP} *hinum* óþolandi sigurvegara].
by [_{DP} HI-*the*_{weak} intolerable_{evaluative} winner]

‘Always after each round, the cards are dealt again by the intolerable winner.’

(Ingason, 2016, p. 131)

Strong (Previous discourse: Mary talked to a writer and a terrible politician.)
She got no interesting answers from ...

... *þessum* / #*hinum* *hræðilega* *stjórnmálamanni*.
... this / #HI-*the*_{weak} terrible_{evaluative} politician

(Ingason, 2016, p. 108)

Illustration: Lithuanian (Sereikaite, 2016)

Weak *Tai ka darė musu Prezidentė, tai turės daryti*
 That what do.PST our president.SG.F.NOM that have.FUT do-to
naujas prezidentas.
 new.NOM.M.SG president.NOM.M.SG
 ‘Things that our president did have to be done by the new president as well.’

Strong *Mes nusipirkome nauja avangardistiša paveikslą. Už nuoplenus*
 We bought new avant-grade painting. For merits
*avangardui, jaunas-is / *jaunas*
 to avant-garde, new.NOM.M.SG-DEF / *new.NOM.M.SG
menininkas buvo apdovanotas premija.
 artist was received premium.
 ‘We bought a new avant-garde painting. For the merits to avant-garde, the new artist received a premium.’

Variation in Form

A Basic Generalization:

(Framed in terms of Analysis in Schwarz (2009))

A ‘more’ in meaning corresponds to ‘more’ in form

- German articles are ‘reduced’ forms
- Full Germanic paradigms: complexity of forms
- Null vs. overt form

Two Interesting New Variants

- Icelandic (Ingason, 2016)
 - Same form (suffix) in most contexts
 - Certain adjectives block D-lowering
 - Free form only expresses weak article
 - Demonstrative 'fills in' for strong article
- Lithuanian (Sereikaite, 2016)
 - Suffix on adjectives marks strong forms (also appears on Demonstratives)
 - Noun phrases with 'short-form' adjectives seem to have both indefinite and weak article definite readings
 - Syntactic arguments for DP-layer despite apparent lack of articles
(cf. Serbo-Croatian)

The Form-Meaning Mapping

- How best to account for **form-meaning pairings**?
- Key **choice-points** in analysis of article contrast:
 - just **one definite article**, with added structure for ‘strong articles’
 - Two **separate lexical entries**
 - **No meaning for definite article** *per se*, mere signal of unambiguity / type-shift (Löbner, 1985)

Bare NPs expressing Weak Article Definites

- Perhaps most common case cross-linguistically:
Bare nouns used for ‘weak article definites’
- **Key Questions:**
 - What is the **structure of definite bare NPs**?
 - How do the ‘weak and strong article definites’ **relate** in these cases?
 - Do the bare noun phrases have **additional indefinite interpretations**?

To D or not to D?

- Weak article definites expressed by bare NPs:
Null D or purely semantic **type-shift**?
- (At least) two ways in which **article contrast** literature **bears on this issue**:
 - Analysis of definite articles (and contrast between different forms) constrains options for analysis of bare NPs
 - Variation in bare NP interpretations would support existence of Null D's (assuming type-shifters are universal)
- **Initial evidence**: at least some languages (Akan, Lithuanian, ASL) display genuine definite/indefinite ambiguity for bare nouns (contra Dayal 2016), suggesting null definite D's exist.
- **In addition**: Lithuanian may involve null strong determiners!

Variation in Meaning

- Data considered so far exhibits **uniform semantic contrast**
- But there is some variation in article contrasts
- Illustration of fairly minor variations:
 - Variation in anaphoric uses
 - Variation in situational uniqueness
 - Variation in situational bridging
- More substantial variation: Haitian Creole

Discourse Anaphoric Chains

- Common discourse development in narrative texts:
 - Introduce character with indefinite (*Once upon a time, there was a fisherman*)
 - Pick it up with strong article (*The-strong fisherman*)
 - Later resort to weak article (at least for main character(s))
- Icelandic (Anton Ingason, p.c.): keep using strong form
- **Note:** Consistent with formal analysis, purely pragmatic difference in choice amongst possible forms?

Strong for (certain) Situational Uniques

Akan vs. German: Different ways of getting to family dog:

- (14) **Context:** You and your spouse own one dog. While your spouse is away, someone breaks into your house and you are telling them about it on the phone. You say:

- a. *Der Einbrecher ist zum Glück vom/#von dem Hund*
 the burglar is luckily *by-the_{weak}/#by the_{strong}* dog chased
verjagt worden
 been

'Luckily, the burglar was chased away by the dog.' (German)

- b. *Òwifó nù, bédòm nù ká-á nú-dú árá má*
 thief FAM dog FAM follow-PAST 3SG-OBJ-on just so
ò-gúán-ìì
 3SG-SUBJ-run-PAST

'The thief, the dog chased away.' (Akan)

Arkoh & Matthewson (2013)
 (Mauritian Creole possibly similar; Wespel (2008, pp. 189-90))

Strong for Salient Uniques - A Challenge?

Not necessarily. . .

- What strong article definites require is that there be a **contextually salient** value for *i*.
- General **contextual salience** can be sufficient for pronoun use:

- (15) a. After a long day at job with obnoxious boss, to spouse:
Do you know what he₁ did today?
- b. One parent to the other, while away, about their son:
Is he₂ walking yet?

- So Akan could fill *i* in (14b) through similar contextual means.
- **Remaining question:** Why does Akan differ from most languages, which seem to prefer the weak article here? (role of indefinite bare NPs?)

Situational Bridging in Amern

Wespel (2008) cites Amern data showing strong article use for situational / part-whole bridging:

- (16) *Vör worən en də nāldər kerək on wolən os äns*
 we were in DEF of-N church and wanted us once

di altöörs bekikə.

DEF.PL_{strong} altars look-at

‘We were in the church of Waldniel and wanted to have a look at the altars.’

(Heinrichs 1954:99)

A challenge? Not necessarily

Relational nouns can serve usual role in relational bridging.

Variation with relational nouns

- Other languages have been reported to display variation precisely with this type of bridging
- Ortman (2014): Upper Sorbian exhibits generational variation: Strong article *tón* not obligatory in cases like:

(17) *Moje awto jo dórbjato do reparatury, (tón) motor be kaput*
'My car needed repairing, the motor was broken'

- Book-author bridging requires strong article for all speakers.
- Judgments reported to be hard for Upper Silesian.
- **Question:** What's behind variation (and change) here?

Interim Assessment

- The basic semantics can account for the considered cases
- From this perspective, we then seem to be dealing with **pragmatic variation** of sorts
- This requires exploration and explanation, but doesn't necessarily undermine the weak/strong analysis

More Substantial Semantic Divergence

- Haitian Creole exhibits a contrast that seems to go **substantially beyond weak vs. strong** (with bare vs. ‘marked’ forms)
- **No Bridging contrast** (like Amern)
(all with overt correlate (as opposed to Null) form)
- **But in addition:**
 - Overt form with basic ‘larger/immediate situation’ uses
 - Bare form only with ‘complete functional descriptions’
 - Relation of ‘la’ to domain of *only*, superlatives

Haitian Creole

Weak *Yè, mwen viste yon vil provens. Meri a pi wo*
 Yesterday I visit one town province **town-hall DEF** more high
ke legliz la.
 than **church DEF**

‘Yesterday I visited a town in the province. **The town hall** was higher than **the church**.’

(Wespel, 2008, p. 114; source: (E.F.36.9.))

Strong *Eli te renmen liv la, e kounye a li vle rankontre*
 Eli PST love book DEF and now DEF she want meet
otè a.
author DEF

‘Eli loved the book, and now she wants to meet **the author**.’

(Wespel, 2008, p. 114; source: (E.F.32.))

The contrast in Haitian Creole

- (18) *papa Mari*
‘the father of Mary’
(NOT a possessive, according to Wespel, 2008)
- (19) *Pyé se sèl gason nan fanmi li.*
P COP **only boy** in family his
‘Peter is **the only boy** in his family.’ (Wespel, 2008, p. 118;
source: (E.F.76.20.a.))
- (20) *Fanmi sa a, se yon gwo fami, men Pyé se sèl gason*
family DEM DEF COP INDF big family but P COP **only boy**
an.
DEF
‘This family is big, but Peter is **the only boy**.’ (Wespel, 2008, p.
119; source: (E.F.76.20.b.))

(parallel contrasts with superlatives)

Relation to Article Contrast Analyses

- At odds with weak/strong contrast a lá Schwarz (2009)
- Weak article with global uniques is a core case for Schwarz (2009)
- Are we dealing with a **fundamentally different contrast**?
(If so - how did it emerge from French, in contrast to, e.g., Mauritian Creole, with standard weak/strong distinction?)
- **Next:** Sketch of an alternative analysis
(building on Wespel 2008)

la as a marker of Resource Situation

Wespel (2008): *la* indicates use of a 'resource situation variable'

- **Variation:** *la* indicates that **situation pronoun** $\neq s_{topic}$ of its clause (i.e., free or bound from up higher Percus, 2000)
- Overt phrases within the DP (e.g., relatum DP, PP) can provide s-variable value directly, making *la* unnecessary:
papa Mari, plafon chanm mwen ('the ceiling of my room')
- Interestingly, there is variation corresponding to situational uniqueness through common knowledge vs. anaphoricity

(21) a. *Kote manje mwen?*

where meal my (relative to topic situation?)

b. *Kote manje mwen an?*

where meal my DEF (previous mention)

'Where is my meal?' (Valdman 1977a:116)

Additional Issues for Situational Analysis

- Required assumption: global uniques require situation pronoun
- Relation between 'la' and situations/intensional contexts:
 - Relation of presence of 'la' to *de re* readings?
 - *la* occurs on clauses in HC as well - another place for situation pronouns?
- Relation between Haitian and Mauritian 'la'-correlates:
different paths to similar but distinct systems:
roughly: anaphoric individual variables vs. situation variables?

Further complications

- So far:
 - Pragmatic variations, including lack of bridging contrast, e.g., in Amern
 - Different contrast, with 'strong article' use even for global uniques
- A further set of languages, e.g., Bangla, Jinyun, possibly Cantonese
 - No bridging contrast
 - Bare form for certain larger situation uses, Bare Classifier (=strong?) for others?
- **Possibly related:** 'general vs. specific definites' in Cantonese and Lithuanian (Jenks 2016, Sereikaite 2016)
- **Question:** Is this one gradient spectrum after all?

Semantic vs. Pragmatic Uniqueness

An alternative gradient analysis (Löbner, 1985, 2011; Ortmann, 2014):

Semantic vs. Pragmatic Uniqueness

- **Semantic** uniqueness:
unambiguous based on **noun alone** (context-independent)
- **Pragmatic** uniqueness:
unambiguous based on (linguistic or extra-linguistic) **context**

[...] the distinction between semantic and pragmatic uniqueness is the basis of all conceptually governed article splits, in that a shift towards an IC [Individual Concept] or FC [Functional Concept] is overtly signaled.

(Ortmann, 2014, p. 296)

Type Distinctions

Lexical type-distinction between noun types

	Monadic	Polyadic
Non-unique (pragmatic)	Sortal nouns <i>dog, stone</i> $\langle e, t \rangle$	Relational nouns <i>sister, finger</i> $\langle e, \langle e, t \rangle \rangle$
Unique (semantic)	Individual nouns <i>Sun, prime minister</i> <i>e</i>	Functional nouns <i>father, head</i> $\langle e, e \rangle$

(adapted from Ortmann, 2014)

Scale of Definiteness

A scale of uniqueness, 'defined according to the degree of invariance of reference of nominal expressions' (Ortmann, 2014):

(22) **Scale of Uniqueness**

deictic sortal noun < anaphoric sortal noun < SN with establishing relative clause < relational DAA* < part-whole DAA, non-lexical functional nouns, < lexical individual nouns/functional nouns < proper names < personal pronouns

(Ortmann, 2014, p. 314; adapted from Löbner (2011))

*DAA=Definite Associate Anaphora \approx Bridging

Issues

- Are uniqueness-based type differences **well-motivated**?
- How can the measure for the uniqueness scale be **made precise in formal terms**?
- **No meaning contrast** between forms
- **Compositionality** Challenges
(‘unambiguous based on noun’ - not noun phrase!)
- What is the **analysis of covariation**?

Definites in Contextually Supplied Situations

Sortal nouns of various sorts can be turned functional through appropriate contexts - variation on (6b) (where strong was required):

Context: Hans, who works at a ministry, and his wife are talking about what has been going on at work.

- (23) a. What happened to the proposal you drafted?
 b. *Der Vorschlag wurde in der Kabinettsitzung gestern*
 the proposal was in the cabinet meeting yesterday
vom_s Minister vorgestellt, aber 7 SPD-Minister
 by-the_{weak} minister introduced but 7 SPD-ministers
haben dagegen gestimmt.
 have against voted
 'The proposal was introduced by the minister in
 yesterday's cabinet meeting, but 7 SPD-ministers voted
 against it.'

Definites in Contextually Supplied Situations (2)

(23b) 'The proposal was introduced by *the_{weak} s₁ minister* in yesterday's cabinet meeting, but *7 SPD-ministers* voted against it.'

- There are several ministers in the topic situation
- Nonetheless, *the_{weak} minister* is felicitous here
- It is interpreted relative to the contextually salient situation of Hans' work place
- Does this result in different lexical entry? (if merely context-motivated type-shift, it should require strong article)
- **Aside:** Clearly different contrast than in Haitian Creole analysis, where resource situation would require 'strong' article

Potential Strength: Predicts Variation

- The posited scale provides a fairly fine-grained **spectrum for language variation**
- Applied both **synchronically and diachronically** (Ortman, 2014)

Prediction: In principle, we should find cut-offs for article contrasts at each point of the scale.

Questions:

- Does variation fit on that scale, and
- is it as fine-grained as predicted?

Revisiting Haitian Creole

- Haitian Creole:
 - ‘father of Mary’ → no ‘la’
 - ‘sun’ → ‘la’
- uniqueness scale has global uniques on par with functional nouns with explicit arguments
- Any plausible addition of scale differences would lead to split predicting opposite direction for contrast
- ‘la’-related contrast with ‘only’ (and superlatives) not accounted for by split on uniqueness scale
- Finally, it’s not clear that there is as much fine-grained variation as uniqueness scale would predict
- If we have to add more fine-grained variation into article-semantics, another approach is needed.

Summary

- Article **contrast** found in **many languages**
- Semantically **largely uniform**, in line with Schwarz (2009)
- Analysis of contrast directly impacts perspective on definite bare NPs (suggestive evidence for **Null D**)
- **Additional variation** in article contrast **may require orthogonal account**
- Further work needed to assess full range of variation, and the need for gradient distinctions (e.g., Mainland Scandinavian, Bulu (Barlew, 2014))

The good news: We now have the tools in place for a more **extensive cross-linguistic assessment** (and we get to reap some of the fruit already at this workshop!)

Thank You!

- Ahn, Dorothy. 2016. Three kinds of definites. Ms. Harvard University.
- Arkoh, Ruby & Lisa Matthewson. 2013. A familiar definite article in akan. *Lingua* 123. 1–30.
- Barlew, Jefferson. 2014. Salience, uniqueness, and the definite determiner -te in bulu. In Sarah D'Antonio Todd Snider & Mia Weigand (eds.), *Proceedings of SALT 24*, 619–639.
- Birner, Betty J. & Gregory Ward. 1994. Uniqueness, familiarity, and the definite article in english. In *Proceedings of the twentieth annual meeting of the berkeley linguistics society*, 93–102.
- Cho, Jacee. 2016. The acquisition of different types of definite noun phrases in l2-english. *International Journal of Bilingualism* doi:DOI:10.1177/1367006916629577.
- Cieschinger, Maria. 2006. Constraints on the contraction of preposition and definite article in German. B.A. Thesis, University of Osnabrück.
- Clark, H. H. 1975. Bridging. In R. C. Schank & B. L. Nash-Webber (eds.), *Theoretical issues in natural language processing*, New York: Association for Computing Machinery.
- Dayal, Veneeta. 2004. Number marking and (in)definiteness in kind terms. *Linguistics and Philosophy* 27(4). 393–450.
- Dayal, Veneeta. 2016. Semantic universals: The case of definites and generics. Talk presented at Panel on Universals at PLC 40.
- Ebert, Karen. 1971. Zwei Formen des bestimmten Artikels. In Dieter Wunderlich (ed.), *Probleme und fortschritte der transformationsgrammatik*, 159–174. München: Hueber.
- Grove, Julian & Emily Hanink. to appear. Article selection and anaphora in the german relative clause. In *Proceedings of SALT 26*, .
- Haberland, Hartmut. 1985. Zum Problem der Verschmelzung von Präposition und bestimmtem Artikel im Deutschen. *Osnabrücker Beiträge zur Sprachtheorie* 30. 82–106.
- Hanink, Emily. to appear. The german definite article and the 'sameness' of indices. In *Proceedings of plc 40*, .
- Hartmann, Dietrich. 1967. *Studien zum bestimmten Artikel in 'Morant und Galie' und anderen rheinischen Denkmälern des Mittelalters*. Giessen: Wilhelm Schmitz Verlag.
- Hartmann, Dietrich. 1978. Verschmelzungen als Varianten des bestimmten Artikels? In Dietrich Hartmann, Hans-Joachim Linke & O. Ludwig (eds.), *Sprache in gegenwart und geschichte. festschrift für heinrich matthias heinrich*, 68–81. Köln: Böhlau.

- Hartmann, Dietrich. 1982. Deixis and anaphora in German dialects: The semantics and pragmatics of two definite articles in dialectal varieties. In Jürgen Weissenborn & Wolfgang Klein (eds.), *Here and there: Cross-linguistic studies on deixis and demonstration*, 187–207. Amsterdam: John Benjamins.
- Hawkins, John A. 1978. *Definiteness and indefiniteness*. London: Croom Helm.
- Heim, Irene. 1982. *The semantics of definite and indefinite noun phrases*: University of Massachusetts Amherst PhD thesis.
- Heinrichs, Heinrich Matthias. 1954. *Studien zum bestimmten Artikel in den germanischen Sprachen*. Giessen: Wilhelm Schmitz Verlag.
- Himmelmann, Nikolaus. 1997. *Deiktikon, artikel, nominalphrase: zur emergenz syntaktischer struktur*. Tübingen: Niemeyer.
- Hofherr, Patricia Cabredo. 2013. Reduced definite articles with restrictive relative clauses. In Patricia Cabredo Hofherr & Anne Zribi-Hertz (eds.), *Crosslinguistic studies on noun phrase structure and reference*, BRILL.
- Ingason, Anton. 2016. *Realizing morphemes in the icelandic noun phrase*. Philadelphia, PA: UPenn dissertation.
- Irani, Ava & Florian Schwarz. 2016. Two types of definites in american sign language. Talk presented at the 2016 LSA meeting.
- Jenks, Peter. 2015. Two kinds of definites in numeral classifier languages. In Sarah D'Antonio, Mary Moroney & Carol Rose Little (eds.), *Proceedings of salt 25*, 103–124. <http://dx.doi.org/10.3765/salt>.
- Koulidobrova, Elena V. 2012. *When the quiet surfaces: 'transfer' of argument omission in the speech of asl-english bilinguals*. Storrs: University of Connecticut dissertation.
- Löbner, Sebastian. 1985. Definites. *Journal of Semantics* 4. 279–326.
- Löbner, Sebastian. 2011. Concept types and determination. *Journal of Semantics* 28(3). 279–333.
- Ortmann, Albert. 2014. Definite article asymmetries and concept types: Semantic and pragmatic uniqueness. In T. Gamerschlag et al. (ed.), *Frames and concept types: Applications in linguistics and philosophy Studies in Linguistics and Philosophy* 94, 293–321. Cham, Switzerland: Springer International Publishing.
- Percus, Orin. 2000. Constraints on some other variables in syntax. *Natural Language Semantics* 8(3). 173–229.
- Poesio, Massimo & Renata Viera. 1998. A corpus-based investigation of definite description use. *Computational Linguistics* 24. 183–216.
- Prince, Ellen F. 1981. Toward a taxonomy of given/new information. In P. Cole (ed.), *Radical pragmatics*, 223–255. New York: Academic Press.

- Scheutz, Hannes. 1988. Determinantien und Definitheitsarten im Bairischen und Standarddeutschen. In *Festschrift für Ingo Reiffenstein zum 60. Geburtstag*, 231–258. Göppingen: Kümmerle.
- Schwager, Magdalena. 2007. (Non-)functional concepts: Definite articles in Bavarian. Talk presented at the 8th Szklarska Poreba Workshop.
- Schwarz, Florian. 2009. *Two types of definites in natural language*. Amherst, MA: University of Massachusetts Amherst dissertation.
- Schwarz, Florian. 2012. Situation pronouns in determiner phrases. *Natural Language Semantics* 20(4). 431–475.
- Schwarz, Florian. 2013. Two kinds of definites cross-linguistically. *Language and Linguistics Compass* 7. 534–559.
- Sereikaite, Milena. 2016. Definiteness in Lithuanian. Ms., University of Pennsylvania.
- ˘ Simík, Radek. 2015. On pragmatic uses of demonstratives: The case of pragmatic discourse anaphora in Czech. Ms., University of Potsdam; <http://www.semanticsarchive.net/Archive/GE4Y2E1Z/simik-pragmatic-demonstratives.pdf>.
- Simonenko, Alexandra. to appear. Semantics of dp islands: The case of questions. *Journal of Semantics*.
- Wespel, Johannes. 2008. *Descriptions and their domains the patterns of definiteness marking in French-related creole*. Stuttgart: University of Stuttgart dissertation.
- Wiltschko, Martina. 2013. Descriptive relative clauses in Austro-Bavarian German. *Canadian Journal of Linguistics* 58(2). 157–189.