

Definites, Demonstratives, Bare Nominals: What competes with What

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Definiteness across Domains

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Overview

Section I: Setting the Stage: Assumptions and Claims

Section II: X-linguistic Variation in Definiteness

Section III: Predicting Distribution: English, Mandarin, Akan, German

Section IV: What about Anaphora?

I: Setting the Stage

1.1. The Challenge of Definite Bare Nominals

What is the strong-weak article distinction?

In its simplest form: a *weak* definite article is a *uniqueness*-based definite
a *strong* definite article is an *anaphoric* definite
Schwarz (2009)

Is the bare nominal (NP or DP with a null D) a definite?

Languages without definite articles certainly allow definite readings for bare nominals (Hindi)

Even languages with determiners can allow definite readings for bare nominals (Akan)

What challenges, from a cross-linguistic perspective, do definite readings of bare nouns pose?

- Empirically demarcating the precise distribution of the main players: Nominals with definite determiners, Nominals with demonstratives, and Nominals with no overt D.
- Nailing down the types of competition that regulate distribution.

1.2. Theoretical Assumptions

What principles regulate competition?

Blocking (Chierchia 1998): Lexical exponents block covert counterparts
(lexical exponent: a determiner/demonstrative or a structural position with lexical manifestation; covert counterpart: an NP with no D or a DP with a null D)

1a. Some children came in. #(The) children seemed happy.

Blocking by overt determiner

1b.

tin	te	tʃ ^h atro	eʃe tʃ ^h ilo.	du	to	tʃ ^h atro	boʃlo
three	CL	student	came	two	CL	student	sat
tin	te	tʃ ^h atro	eʃe tʃ ^h ilo.	#tʃ ^h atro	du	to	boʃlo
three	CL	student	came	student	two	CL	sat

“Three students came. Two (of the) students sat down.”

Dayal 2012. See also Bhattacharya 1999

Blocking by NP → D Raising

Maximize Presupposition (Heim 1991, see also Hawkins?): a presuppositional item is favored over a non-presuppositional item in contexts that satisfy the relevant presupposition.

1c. The/#A sun is shining.

$$\begin{aligned} \llbracket \text{the}_{\text{SING}} \rrbracket &= \lambda P_{\langle e, t \rangle} \lambda Q: |P| = 1. \exists x [P(x) \wedge Q(x)]. \\ \llbracket a \rrbracket &= \lambda P \lambda Q \quad \exists x [P(x) \wedge Q(x)]. \end{aligned}$$

Note: competition is dependent on some structural kinship between exponents. ACC case on Hindi bare NP (arguably → definite reading) does *not* block definiteness on the caseless form (Dayal 2011).

1d. anu kitaab/kitaab-ko paRhegii
 Anu book book-ACC read-FUT
 “Anu will read a book/the book.”

kitaab: def/indef kitaab-ko: def

Non-competing Partners: there are near synonymous pairs that do not compete, though they give rise to preferences:

[[Demonstrative]] = $\lambda P. \lambda R. \iota x: \forall y [P(y) \wedge R(y) \leftrightarrow y \sqsubseteq x]$ Ahn 2022

[[Def Det]] = $\lambda P: |P| = 1. \iota x [P(x)]$ Link 1983

The two may bump up against each other but do not compete directly because they involve distinct functions, demonstratives are functions from a property and an index, definites from just a property – if that were not so, Maximize Presupposition would rule out the demonstrative in deictic and anaphoric contexts:

1e. Kim has read that/the book. *In a context with just one salient book.*

1f. Kim bought a book and a pen.
She put that/the book on the shelf. *Anaphoric contexts.*

Ranking of Covert Type-shifts: Chierchia 1998, revised Dayal 2004.

- Reference to kinds cannot be set aside – bare nominals in most languages that have them allow for kind-level readings.
- Definite readings for bare nominals can readily exist alongside kind-level readings in most bare nominal languages.
- “Indefinite readings” of bare nominals cannot be collapsed with that of regular indefinites.

$\{\cap, \cup\} > \exists$ (where \exists yields scopally-sensitive indefinite readings,
 \cap only narrowest scope indefinite readings)

- | | |
|--|--|
| 2a. Mary ate apples/an apple. | \exists |
| b. Mary didn't see policemen/a policeman. | $\neg\exists$ only |
| c. Mary didn't see a policeman. | $\neg > \exists$ &
$\exists > \neg$ |
|
 | |
| 3a. Students kept entering the room for an hour. | $\text{Adv} > \exists$ |
| b. A student/Some students kept entering the room for an hour | $\exists > \text{Adv}$ |

Ranking privileges kind-formation and definite readings over scopally active indefinite readings.

1.3. Demonstratives and the Presupposition of Contrast Potential

Bare plurals and definites

- Standard positions: Bare plurals are kind terms, definites presuppose uniqueness (whether they are lexically encoded or not).
- I also assume a nearly equivalent version for the definite readings of kind terms, using simply the extension of the kind in the context of evaluation.
- I focus on the singular form for definites/demonstratives, but generalizable to the plural.

$\llbracket \text{Bare Plural} \rrbracket = \lambda P: \lambda s \iota x [P_s(x)]$

Chierchia 1998

$\llbracket \text{D}_{\text{WEAK/REGULAR}} \rrbracket = \lambda P: |P_s| = 1. \iota x [P_s(x)]$

Link 1983; Sharvy 1980

$\llbracket \text{D}_{\text{STRONG}} \rrbracket = \lambda P. \iota x [P(x) \wedge R(x)]$

Proposal: Demonstratives have a **Presupposition of Contrast Potential (PCP)**

$$\llbracket \text{Demonstrative} \rrbracket = \lambda i \lambda P: \exists j [j \neq i \wedge \iota x [P(x) \wedge f(i, x) \neq \iota x [P(x) \wedge f(j, x)]]].$$

$$\iota x [P(x) \wedge f(i, x)]$$

If $f = \text{location}$: λP

$$\exists j [j \neq i \wedge \iota x [P(x) \wedge \text{at}(i, x)] \neq \iota x [P(x) \wedge \text{at}(j, x)]]].$$

$$\iota x [P(x) \wedge \text{at}(i, x)]$$

- With P : dog', pointing at location i can yield a distinct dog than pointing at location j (*deictic* reading if location j is not part of the locations in the context of evaluation, *contrastive* reading if j is part of the context locations).
- With P : $\lambda y [y = m]$, and pointing at Mary's location, **the at-issue content** will be satisfied but not the **PCP** –

Mary cannot be at two locations at the same time \Rightarrow #4c.

What is it about exclamatives that can repair the PPC violation? In other words, what is it about exclamations/exclamatives that satisfies the potential for contrast?

1.4. Demonstratives: Uniqueness and Amelioration by Exclamation

First Definites

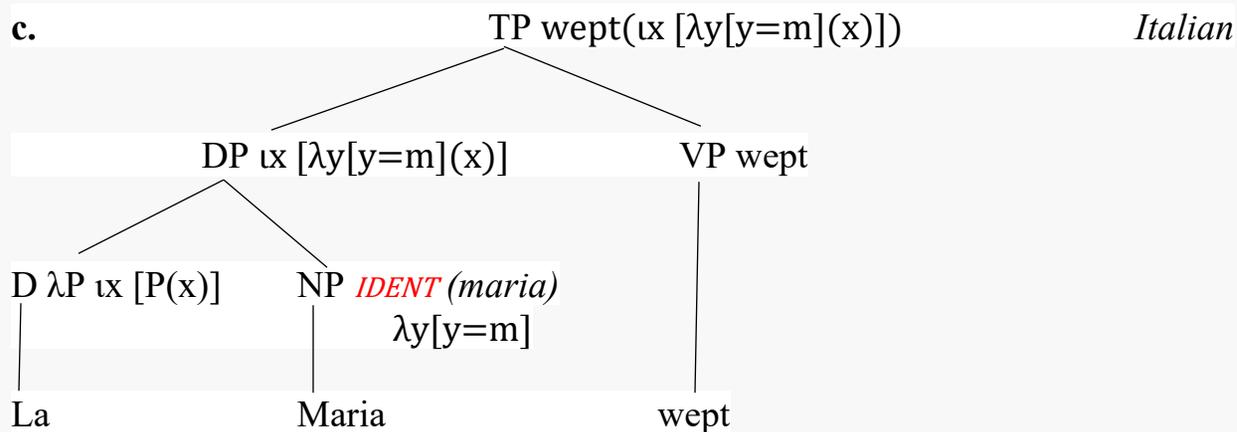
- There are languages that allow definites+ proper names, and languages that don't.
- Exclamation has no ameliorating effect in languages that don't.

Italian

English

5a. [TP [DP [√]la [N Maria]] [VP pianse]]

b. [TP [DP *the/[√]∅ [N Maria]] [VP wept]]



d. [[DP]] = m

[[TP]] = wept(m)

English

- N denotes the unique individual x named Mary.
- The Italian definite combines with it via Partee's IDENT ($e \rightarrow \langle e, t \rangle$).
- English uses the basic meaning of proper names, the simplest option.

What happens to definites + proper names when they occur with exclamative force? Nothing!

6a. [TP [DP \sqrt{la} [N Maria]] [VP è così alta]!]

b. [TP [DP *the/ $\sqrt{\emptyset}$ [N Maria]] [VP is so tall]!]

Back to Demonstratives.

Exclamation repairs something that is otherwise broken.

- No language allows demonstratives with proper names (at least in basic cases).
- The ameliorating effect of exclamation seems to hold cross-linguistically.

7a. # [TP [DP **quella** [N Maria]] [VP pianse]] b. # [TP [DP **that** [N Maria]] [VP wept]]

8a. [TP [DP **quella** [N Maria]] [VP è così alta]!] b. [TP [DP **that** [N Maria]] [VP is so tall]!]

- The proper name incurs a PCP violation: $|IDENT([\text{Maria}])| = 1$.
- Exclamation introduces the dimension of degree into the calculation (McCready 2008, Rett 2011)
- The task: put these two together in a way that zooms in on how the introduction of degree semantics repairs the PCP violation.

A place to start: What is the interpretation of an exclamative without the demonstrative?

Proper Names + Exclamatives

Rett (2011): Exclamatives express “a scalar expectation: that the speaker expected a gradable property to be instantiated only up to a particular degree, and the actual value exceeded that expectation”.

9a. Maria is tall.

b. λd [tall(maria, d)] $\Rightarrow \exists d$ [d > pos \wedge tall(m, d)]

10a. Maria is so tall!

b. At-issue-content: $\exists d$ [d > pos \wedge tall(m, d)]

Not-at-issue content:

$\exists d' d' < d$. expected(Sp_C, tall(m, d')) \wedge realizes(Sp_C, tall(x, d))

11a. M-Op $\sim \lambda d$. λx . $\mu(x) = d$,

where μ , a measurement function, is valued contextually.

$\lambda d \lambda x \exists d' d' < d$: expected(Sp_C, $\mu(x, d')$) \wedge realizes(Sp_C, $\mu(x, d)$). $\mu(x, d)$

b. Maria is such a saint!

$\lambda d \lambda x \exists d' d' < d$: expected(Sp_C, saintliness(x, d')) \wedge realizes(Sp_C, Saintliness(x, d)).

saintliness(x, d) (**Maria**)

Demonstratives + Proper Names + Exclamatives

[[Demonstrative]] =

$$\lambda i \lambda P: \exists j [j \neq i \wedge \text{ix}[P(x) \wedge f(i, x)] \neq \text{ix}[P(x) \wedge f(j, x)]]]. \text{ix}[P(x) \wedge f(i, x)]$$

If $f = \text{location}$:

$$\lambda P \exists j [j \neq i \wedge \text{ix}[P(x) \wedge \text{at}(i, x)] \neq \text{ix}[P(x) \wedge \text{at}(j, x)]]]. \text{ix}[P(x) \wedge \text{at}(i, x)]$$

- With $P: \lambda y [y = m]$, and pointing at Mary, the at-issue content will be satisfied; the PCP will be violated -- Mary cannot be at two locations at the same time \Rightarrow #4c.

12. If f is contextually set as the measure function related to height, and P is $\lambda y [y = m]$

12a. [[that Maria]] =

PCP: $\exists d' [d' \neq d \wedge$

$$\lambda Q[Q(\text{ix}[\lambda y[y=m]](x) \wedge \mu\text{-height}(d', x))] \neq \lambda Q[Q(\text{ix}[\lambda y[y=m]](x) \wedge \mu\text{-height}(d, x))].$$

At-issue content:

$$\text{ix}[\lambda y[y=m]](x) \wedge \mu\text{-height}(d, x)]$$

12b. [[_{DP} That Maria] [_{VP} is so tall]!]

PCP: $\exists d' d' < d. \text{expected}(\text{Sp}_C, \text{height}(x, d')) \wedge \text{realizes}(\text{Sp}_C, \text{height}(x, d)).$

At-issue: $\text{tall}(d, \text{ix}[\lambda y[y=m]](x) \wedge \mu\text{-height}(d, x))$

Take-away:

Demonstratives include a presupposition of contrast potential, that cannot be satisfied by nouns that have uniqueness built into them (functional nouns, proper names, globally unique nouns that may be covertly functional – sun/moon (of our earth)).

II. Cross-linguistic Variation

2.1. Claims about the Strong-Weak Distinction

Claims in the Literature:

	Def-weak	Def-strong
German & Fering	[Prep+Def] A-article	[Prep Def] D-article
English	The	The
Mandarin	Bare NP	Demonstrative
Akan	Bare NP	<i>-no</i>

Fering & German – Ebert 1971, Schwarz 2009.

English – Jenks 2018 (and to some extent Schwarz 2009).

Mandarin – Jenks 2018.

Akan – Arkoh and Matthewson 2013.

Schwarz (2019) also lists

Icelandic

Lakhota

Korean

Czech

Upper Silesian

Lithuanian

Thai

Hausa

Mauritian Creole

Ngamo,

Upper Sorbian

American Sign Language

My Claims:

- The claim of a strong-weak distinction in article systems has been overstated.
- Three languages for which such a claim has been made turn out not to have this distinction: *English*, *Mandarin*, *Akan*.
- I am *not* arguing against the possibility of a strong-weak distinction in article systems in natural language -- *German & Fering* clearly do -- only against its universality.

2.2. Cross-linguistic Variation – Course Correction

- English *the* is not ambiguous between Def-strong and Def-weak
(Dayal & Jiang 2021)
- Mandarin bare NPs are not just “weak definite articles”, they are also “strong definite articles”
(Dayal & Jiang 2021, Bremmers et al 2021)
- Akan *no* is not Def-strong (Owusu 2022)

2.2.1. English ‘the’ is not ambiguous between Def-strong and Def-weak
(Dayal and Jiang 2021)

Two properties that German Def-strong has that English *the* does not:

- pronominal uses & potential for contrastive statements.

13a. Peter hat bei **dem** (Mann) called
Peter has by the_{strong} man called
“Peter has called him/the man.” Schwarz (2009: 22)

b. *Peter has called **the** / Peter has called **the man**.

14a. Hans ist in [**dem**]_F **Auto** [pointing at car 1] gekommen,
Hans is in the_{strong} car come

nicht in [**dem**]_F **Auto** [pointing to car 2]
not in the_{strong} car

Intended: “Hans came in that car, not in that car.” (Schwarz 2009: 34)

b. #Hans came in [**the**]_F **car** [pointing car 1], not in [**the**]_F **car** [pointing car 2]

Intended: “Hans came in that car, not in that car.”

Noted in Schwarz 2009:34, similar examples also in Roberts 2002

Take-away: English *the* is **not** ambiguous between **the**_{strong} & **the**_{weak}
There is no evidence beyond anaphora for the claim of **the**_{strong}.

2.2.2. Akan ‘no’ is not *Def_{strong}* (Owusu 2022)

Similar to English *the*, and unlike German *Def_{strong}*, *no* does not participate in contrastive statements. On data like (15), Owusu argues against the claim in Arkoh and Matthewson.

15.

a. #Abofra **nó** nim adee paa ena abofra **nó** abon.
child DEF know thing INT. CONJ child DEF not smart

‘The child is very intelligent and the child is not smart.’

b. #Me-pe car **nó** nanso me-m-pe car **nó** .
1SG-like car DEF but 1SG-NEG-like car DEF
‘I like that car [pointing at Audi] but I don’t like that car [pointing at Renault].’

(Bombi, 2018, p. 152)

Owusu (2022: 22-23)

- But bare NPs and NP–*no* carve up the space of possible definite readings: do uniqueness-based nouns have to be bare; anaphoric nouns have to have *no*? (section 3).

Take-away: Akan *-no* is not *the_{strong}*. Apart from the few cases of anaphora, there is no evidence for the claim.

2.2.3 Mandarin bare NPs are not just *Def_{weak}*, they are also anaphoric (though not *Def_{strong}*)

- Since Yang (2001): bare NPs admit definite readings. *Blocking* does not apply as there is no lexical definite to block *iota* from applying covertly.
- Jenks' claim is undercut by examples in Bremmers et al (2021) & Dayal and Jiang (2021):

16. Jiaoshi li zuo-zhe yi ge nansheng he yi ge nusheng
Classroom inside sit-prog one CLF boy and one CLF girl

nusheng zuotian yudao **nansheng**
girl yesterday meet boy

‘A girl and a boy were sitting in the classroom. The girl met the boy yesterday.’

- (16) is a minimal variant of the key example from Jenks & shows that bare NPs in subject as well as non-subject positions can be anaphoric.

Take-away: Mandarin bare N is **not** exclusively **the_{weak}**.

Mandarin na-CL-N does not have any properties that demonstratives aren't expected to have.

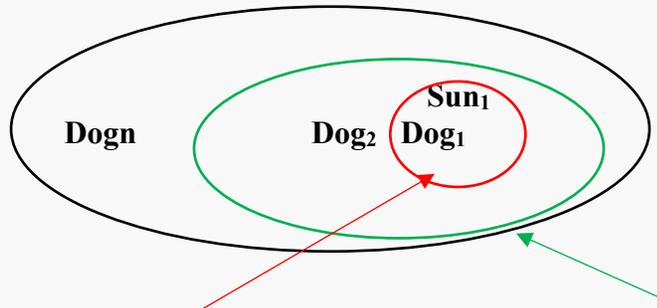
Summary so far:

Schwarz's claim of a strong-weak distinction in the article system has resonated widely and it is standardly thought that such a distinction exists universally, whether it is lexically manifested or not.

We have seen that this claim does not stand up to scrutiny as far as *English*, *Mandarin* and *Akan* are concerned.

However, it does exist in some languages: *German* and *Fering*, for example.

But the distribution of bare NPs and lexical alternatives is restricted and if the strong-weak distinction doesn't capture those restrictions, what does?



Context 1

Context 2 (2 equally salient dogs)

Demonstrative Definite Bare

Demonstrative Definite Bare

Mandarin

Dog	✓	--	✓	✓	--	X
Sun	X	--	✓	X	--	✓

English

Dog	✓	✓	X	✓	X	X
Sun	X	✓	X	X	✓	X

Akan

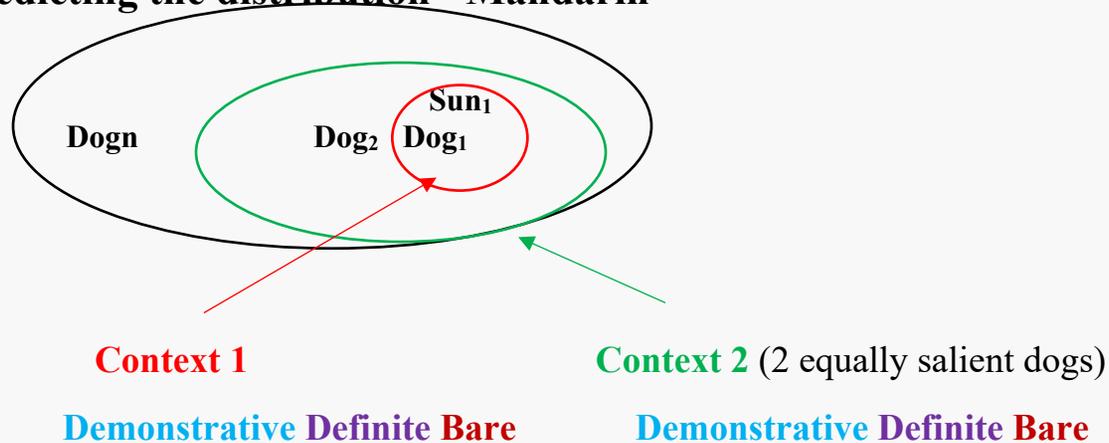
Dog	--	✓	X	--	X	X
Sun	--	X	✓	--	X	✓

Mandarin has a **2-way** lexical distinction

English has a **3-way** lexical distinction, but reduces to **2-way** wrt definite readings

Akan seems to have a **3-way** lexical distinction, but has in fact a **2-way** distinction

3.2: Predicting the distribution - Mandarin



Mandarin

Dog	√	--	√	√	--	X
Sun	X	--	√	X	--	√

The NP **DEM-CL-N** (N a noun like ‘dog’) satisfies the PCP of demonstratives in both contexts:
 ⇒ deictic reading in Context 1; contrastive reading in Context 2.

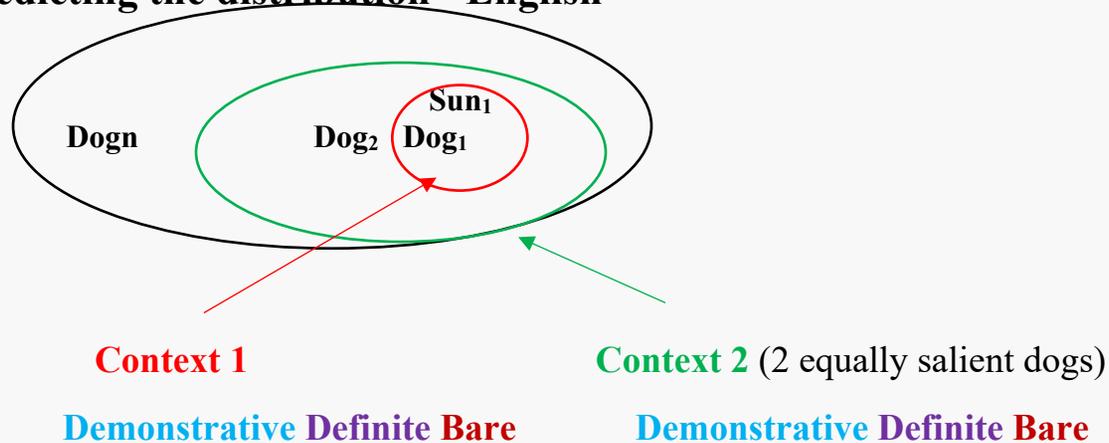
The NP **DEM-CL-N** (N a noun like ‘sun’ or ‘mayor (of this city)’) violates PCP of demonstratives in both contexts.

There is no NP **DEF-N**: no lexical definite determiner

The bare NP **N** (N a noun like ‘dog’) satisfies the PU of *iota* in context 1 but not 2.

The bare NP **N** (N a noun like ‘sun’ or ‘mayor (of this city)’) satisfies the PU of *iota* in both contexts.

3.3: Predicting the distribution - English



English

Dog	√	√	X	√	X	X
Sun	X	√	X	X	√	X

The NP **DEM-CL-N** (N a noun like ‘dog’) satisfies the PCP of demonstratives in both contexts:

⇒ deictic reading in Context 1; contrastive reading in Context 2

The NP **DEM-CL-N** (N a noun like ‘sun’ or ‘mayor (of this city)’) violates PCP of demonstratives in both contexts.

The NP **DEF-N** (N a noun like ‘dog’) satisfies the PU of *iota* only in context 1.

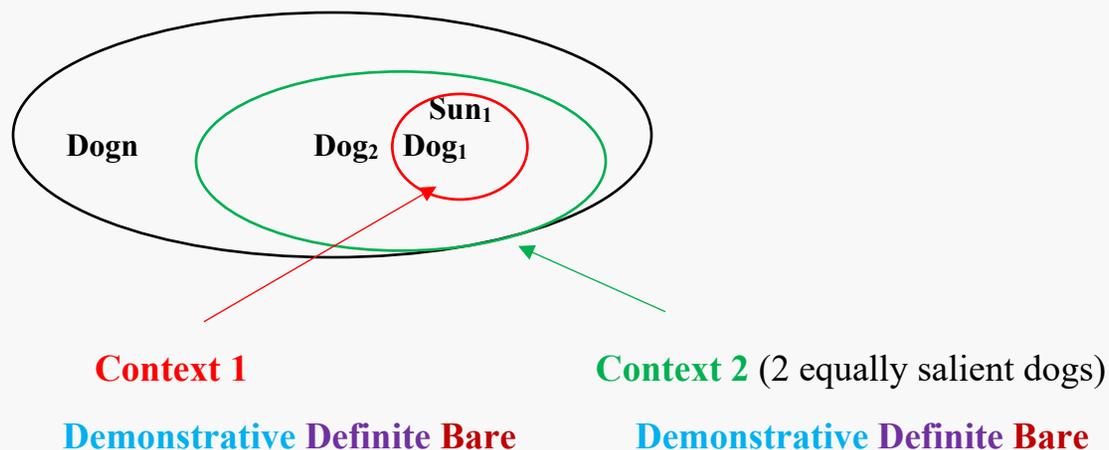
Context 2: √[the [dog there₁] is black] but [the [dog there₂] is white]

The NP **DEF-N** (N a noun like ‘sun’ or ‘mayor (of this city)’) satisfies the PU of *iota* in both contexts.

The bare NP **N** (N a noun like ‘dog’) satisfies the PU of *iota* in context 1 but not 2
but the bare N is blocked by the lexical exponent *the* for def readings.

The bare NP **N** (N a noun like ‘sun’ or ‘mayor (of this city)’) is similarly blocked by the lexical exponent *the*.

3.4: Predicting the distribution - Akan



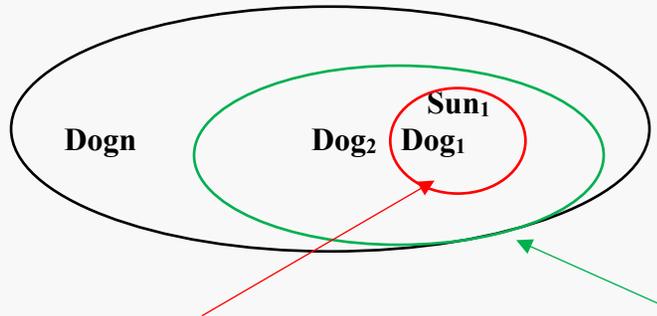
Akan

Dog	--	√	X	--	X	X
Sun	--	X	√	--	X	√

Claims: There is no demonstrative determiner in Akan.
 The lexical definite determiner has 2 presuppositions: CP (contrast) & Uniqueness
 The bare NP has only one, the presupposition of Uniqueness and it is not blocked by the lexical determiner *-no* because *-no* is not the lexicalization of *iota*.

There is no NP DEM-N: no lexical demonstrative determiner

The NP DEF-N (N a noun like ‘dog’) satisfies PCP & PU but only in context 1.
 The NP DEF-N (N a noun like ‘sun’ or ‘mayor (of this city)’) satisfies the PU of *iota* in both contexts but does not satisfy the PPC in either context.



Context 1

Context 2 (2 equally salient dogs)

Demonstrative **Definite** **Bare**

Demonstrative **Definite** **Bare**

Akan

Dog	--	√	X	--	X	X
Sun	--	X	√	--	X	√

The bare NP **N** (N a noun like ‘dog’) satisfies the PU of *iota* in context 1 but not 2.

Context 1: Maximize Presupposition favors **DEF-N**.

Context 2: A locational modifier is needed to express the contrastive reading: [the [dog there₁] is black].

The bare NP **N** (N a noun like ‘sun’ or ‘mayor (of this city)’) satisfies the PU of *iota* in both contexts. Since **DEF-N** incurs a PCP violation and is ruled out, the bare noun is the available option in both contexts.

Akan: has an apparent 3-way lexical distinction – bare NPs, definites and demonstratives (*putatively a close kin of German-Fering pattern*)

- Akan bare NPs are kind terms and must be used for globally unique nouns.

17a.

N-kraman ho a-yɛ na.
PL-dog PERF-do extinct
'Dogs are extinct.'

Owusu (2022: 187)

b. Owusu (2022: 4)

ɔsram a-yera, me-n-hu – bio.
moon PERF-be.lost 1SG-NEG-see again
'The moon has vanished, I see it no more.'

(Korsah, 2017, p. 29)

- Akan *-no* is a definite determiner that is required for anaphoricity (bare NP unacceptable).

Ama hu-u ɔkyerekyerɛni bi ne sogyani bi. ɔ-kyea-a
Ama see-PST teacher INDEF CONJ soldier INDEF 3SG.SUBJ-greet-PST
sogyani nɔ.

18a. teacher DEF

'Ama saw a teacher and soldier. He greeted the soldier.'

- But (like English/Mandarin) anaphora respects the status of the antecedent: bare NPs are required for anaphora with uniquely denoting nouns, *no* for others.

19a. Owusu (2022: 35)

Kwame maame ne ne nua ba-a ha...
 Kwame mother CONJ 3SG.POSS sibling come-PST here
 ‘Kwame’s mother and his sister/brother came here.’

b.
 Na ne maame (*nó) ye tumtum.
 PRT 3SG.POSS mother DEF COP. dark.skin
 ‘His mother was dark-skinned’

b’.
 Na ne nua nó ye tumtum.
 PRT 3SG.POSS sibling DEF COP. dark.skin
 ‘His sibling was dark-skinned.’

- Contrastive readings are not possible with *N-no*, only with *saa-N-no*.

20a/b. Akan (Owusu 2022: 22-23)

#Me-pe car nó nanso me-m-pe car nó .
 1SG-like car DEF but 1SG-NEG-like car DEF
 ‘I like that car [pointing at Audi] but I don’t like that car [pointing at Renault].’

(Bombi, 2018, p. 152)

Saa abofra nó nim adee paa ena saa abofra nó abon.
 DEM child DEM know thing INT. CONJ DEM child DEM not.smart
 ‘That child is very intelligent and that child is not smart.’

Owusu’s conclusions: *no* is not a strong definite – it has the anti-uniqueness presupposition.
no is not a Det; *iota* applies independently of *no*.
saa is in D & narrows down the domain of quantification

Translating Owusu's analysis into the terms introduced here and departing slightly:

Akan bare nouns:	$\lambda x_K: {}^u x_C = 1. \iota y [{}^u x_C(y)]$	<i>kind based definite reading</i>
Akan <i>-no</i> :	$\lambda P: P_C = 1 \wedge P_W > 1. \iota x [P_C(x)]$	<i>uniqueness in context & contrast potential</i>
Akan <i>saa-</i> :	$\lambda P. \lambda x [P(x) \wedge \text{loc-n}(x)]$	a locational modifier like English 'there', introducing a subdomain of the context of evaluation.

- Wrt to the specific ingredients contributed by *-no* and *saa-* I more or less follow Owusu (2022) but see Owusu for motivations for composing the pieces differently.

Evidence for the locative demonstrative analysis of Akan *saa*

- *Saa* is optional, *no* is not -- the structure of *saa-N-no* is the one in (21c).

21. Owusu pg. 54-56 – (21a) also Owusu (p.c.)

a. *saa* car *(*no*) ye Toyota

DEM car DEF COP Toyota

That car is a Toyota.

b. (*saa*) car *no* ye Toyota

DEM car DEF COP Toyota

“That/the car is a Toyota”.

c. [DP [NP (*saa*) [NP N]] *no*] similar to English [DP the [NP N there]]

Note: *Saa-* is prenominal, while *no*, like other determiners, is post-nominal. However, this does not say anything about its status as a modifier because adjectives are also post-nominal.

22a. [DP [NP *saa* [child] *no*]

Saa abofra *nó* nim adee paa ena *saa* abofra *nó* abon.

DEM child DEM know thing INT. CONJ DEM child DEM not.smart

‘That child is very intelligent and that child is not smart.’

b. [[*saa*₁ abofra] -*no*]

c. t_x [child(x) \wedge in-location₁ (x)] |*child*_C| ≥ 1 ; |*child-in-loc*₁| = 1

Conclusion: Akan has only a **2-way** distinction: NP-*no* & bare NP (*saa-* is not a true demonstrative in D, it is a locational demonstrative that can modify NPs)

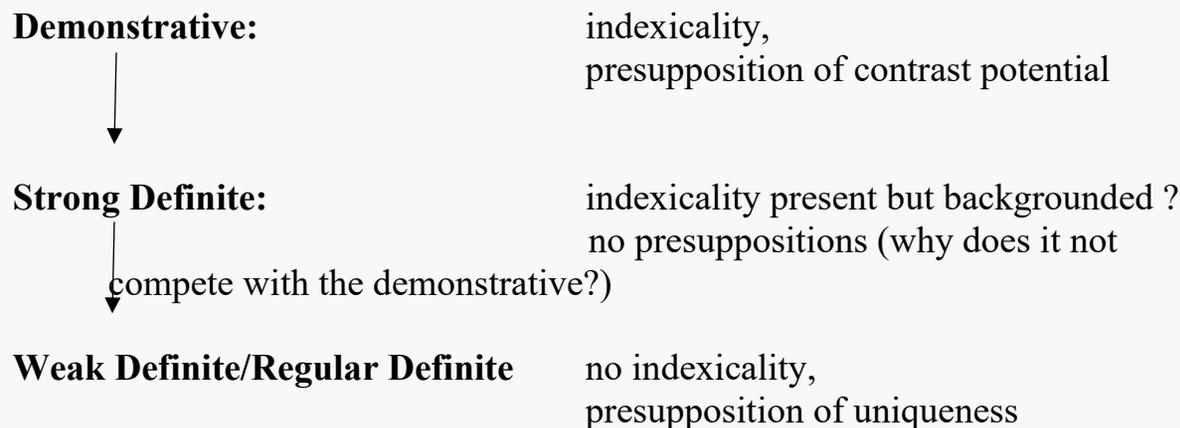
3.5: Predicting the distribution - German

$[[\text{Def}_{\text{weak}}]] = \lambda P: |P_C| = 1. \iota x [P(x)]$ *same as English 'the'*

$[[\text{Def}_{\text{strong}}]] = \lambda P. \iota x [P(x) \wedge R(x)]$ *tentative*

$[[\text{Demonstrative}]] = \lambda i \lambda P: \exists j [j \neq i \wedge \iota x [P(x) \wedge f(i, x)] \neq \iota x [P(x) \wedge f(j, x)]]$. *PCP*
 $\iota x [P(x) \wedge f(i, x)]$ *indexicality*

Diachronic development: Demonstrative \rightarrow Def_{strong} \rightarrow Def_{weak/regular}
Pace Lyons 1999: 329



Given that the difference in meaning between a strong article definite and a demonstrative is so slight, it ceases to be surprising that strong articles are not pervasive across the world's languages (contrary to the claim in Schwarz 2009 and much work inspired by his discussion of the German strong-weak article system).

Consequences:

(i) Maximize Presupposition will favor Def_{weak} in contexts where uniqueness is guaranteed: superlatives like **(23)** and many others from Schwarz (2009).

23a. Hans tanzt am besten.
Hans dances on-the_{weak} best (Schwarz 2009:21)

b. Sie ging $\sqrt{\text{zum}}$ / $\#$ zu dem / $\#$ zu diesem höchsten Berg
She went to-the_{weak} to the_{strong} to that tallest Mountain

(ii) The strong article does not have uniqueness presuppositions, at least qua P, so it can occur with predicates denoting singleton sets **(24)** or with predicates denoting non-singleton sets **(25a)**.

24a. They asked me what I thought of the color red/ $\#$ that color red.

b. $\sqrt{\text{Zur}}$ / $\sqrt{\text{zu der}}$ Farbe rot Fällt mir nichte ein
For--the_{weak} for the_{strong} color red ...
“As for the color red, nothing comes to mind.” (Schwarz 2009:70)

c. $\#$ Zu dieser Farbe rot fällt mir nichte ein
“As for this color red, nothing comes to mind.” (Ross 2022)

25a. Hans ist in [**dem**]_F **Auto** [*pointing at car 1*] gekommen,
Hans is in the_{strong} car come

nicht in [**dem**]_F **Auto** [*pointing to car 2*]
not in the_{strong} car (Schwarz 2009)

b. *acceptable without prosodic emphasis with demonstratives.*

- There is no sustained discussion of the differences between strong article definites and demonstratives in Schwarz (2009), see Ross (2022).

German contd.

[[Def_{weak}]] = $\lambda P: |P_C| = 1. \iota x [P(x)]$

same as English 'the'

[[Def_{strong}]] = $\lambda P. \iota x [P(x) \wedge R(x)]$

tentative

[[Demonstrative]] = $\lambda i \lambda P: \exists j [j \neq i \wedge \iota x [P(x) \wedge f(i, x)] \neq \iota x [P(x) \wedge f(j, x)]] \wedge \iota x [P(x) \wedge f(i, x)]$ no competition with Def_{strong}

Consequences:

(i) Maximize Presupposition favors Def_{weak} in contexts where uniqueness is guaranteed: superlatives like (23) and many others from Schwarz (2009).

(ii) The strong article does not have uniqueness presuppositions, at least qua P, it can occur with P denoting singleton sets (24) or non-singleton sets (25).

(iii) The strong article has a supplementary property, an indexical for example, that is part of its not-at-issue content, a backgrounded part of the proffered content. Prosodic emphasis evokes alternatives that are not-at-issue needed for contrast(24).

(iv) The demonstrative and the strong article are not in a relation that is adjudicated by Maximize Presupposition or Blocking, leading to near but not full synonymy.

25a. Hans ist in [**dem**]_F **Auto** [*pointing at car 1*] gekommen,

Hans is in the_{strong} car come

nicht in [**dem**]_F **Auto** [*pointing to car 2*]

not in the_{strong} car

(Schwarz 2009)

Standard definites cannot yield contrastive statements (noted by Schwarz 2009):

26a. * I came in [**the**]_F car, not in [**the**]_F car.

b. * Mary kai che, bu shi che

Mary drove car not copula car

Literally: “Mary drove car, not car.”

Yuyang Liu (p.c.)

Note: the problem is not related to the possibility of focusing, at least in English, Prosodic focus evokes alternatives related to the presupposition of uniqueness:

27a. I spoke to [THE person in charge], not to [A person in charge]. $|P| = 1$

b. I spoke to [A person in charge], not [THE person in charge]. $|P| \geq 1$

IV. What about the diagnostic of *Anaphora*?

The diagnostics of *global-uniqueness/proper names, deixis, and contrast* define types of definites in terms of presupposition of uniqueness and/or presupposition of contrast potential.

Distribution reveals categorical choices, based on Maximize Presupposition and Blocking of Covert Type-shifts.

The diagnostic of *anaphora* does not test for the *nature of the definite*. It can only reveal preferences between otherwise acceptable definites.

Anaphoric contexts do not override constraints on definite readings.

28. Maria went to see **the_{weak} mayor** and the county executive. She received a warm welcome from $\sqrt{\text{the}_{\text{weak}}}$ / $\# \text{the}_{\text{strong}}$ mayor. Schwarz (2009:54)

28'a. **The earth** revolves around **the sun**. It takes $\# \text{that}$ / **the earth** 365 days to do it.

b. Mary bought some books and some pens. $*Iota(N_{PL})$
She had read $\sqrt{\text{those books}}$ / $\sqrt{\text{the books}}$ / $*\text{books}$ earlier. $the \approx that?$
She put $\sqrt{\text{those books}}$ / $\sqrt{\text{the books}}$ / $*\text{books}$ in her bag. $the > that?$

29a. **Zongtong** zhengzai **yi ge** **buzhang** shuohua $\sqrt{Iota(N_{PL})}$
President Prog-with one CL minister talk
Buzhang wen ($\# \text{na ge}$) **zontong**...
Minister ask that CL president

“The President was talking to a minister. The minister was asking the/ $*\text{that}$ president...”

b. Jiaoshi li zuo-zhe yi ge nansheng he yi ge nusheng
Classroom inside sit-prog one CLF boy and one CLF girl
nusheng zuotian yudao (na-liang) nansheng $\emptyset > \textit{that?}$
girl yesterday meet that-CLF boy $\emptyset \approx \textit{that?}$

“A girl and boy were in the classroom. The girl met that/the boy yesterday.”

The Novelty-Familiarity Aspect of (In)definiteness



Alex and Chris are both looking at the picture. Alex asks Chris to describe it:

- 30a.** Alex: Describe **the animal/√an animal* in this picture. $|\text{animal}| > 1$
b. Describe *√the animals/*animals* in this picture.

- 31a.** Chris I see *a bird* sitting on *an elephant*. $|\text{bird}| = 1; |\text{elephant}| = 1$.
b. I see *a bird* sitting on *the elephant*.

- c.** *√The elephant/√that elephant/*An elephant* has a trunk.

Alex's instructions must respect the requirements for definiteness.

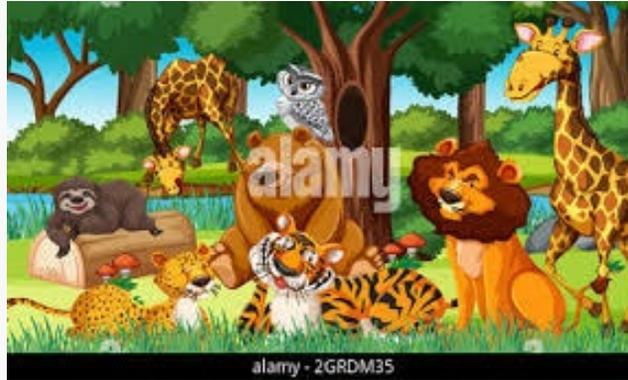
Chris can respond using (31a) or (31b) though arguably, (31a) is better than (31b) even though the context satisfies the presuppositions of *the*. Novelty-Familiarity must play a role here: the determiner *the* requires familiarity, the satisfaction of which involves accommodation. The choice of *a* respects novelty and is consistent with uniqueness.



- 31a.** Chris I see a bird sitting on an elephant. $|bird| = 1; |elephant| = 1.$
b. I see a bird sitting on the elephant.
c. $\sqrt{\text{The elephant}}/\sqrt{\text{that elephant}}/*\text{An elephant}$ has a trunk.

Chris's follow-up in **(31c)** is now an anaphoric context, where **(31a)/(31b)** removes the need for accommodation. This makes it possible for those definite expressions that are otherwise allowed in the context to be interpreted as +familiar, while the indefinite is ruled out due to the *novelty* requirement.

Any definite noun that is acceptable in the context (wrt presuppositions, for example) can be used anaphorically, with discourse sensitive factors mediating preferences.



An anaphoric context can also provide the conditions for satisfying the presuppositions of a definite that might otherwise be infelicitous:

$|\text{giraffe}| = 2$

32a. #[The giraffe](#) is smiling.

b. There is a giraffe next to the lion. [The giraffe](#) is smiling.

The antecedent sentence makes one of the giraffes salient and in the updated context, uniqueness is satisfied:

$|\text{giraffe next to lion}| = 1$.

Genuine cases of an anaphoric definite that defy uniqueness are hard to find.

Schwarz (2009:244) notes the relative improvement as ‘salience’ enters the picture. *These judgments are for definite NPs, not pronouns (cf. If a bishop meets a bishop, he blesses him):*

- 33a.** If a bishop meets a bishop, the bishop blesses the bishop. *
- b.** If a bishop meets another bishop, the bishop blesses the bishop. ??
- c.** If a bishop meets another bishop, the bishop blesses the other bishop. ?

Take-away:

To divide up the set of definite determiners in terms of uniqueness-based and anaphora-based does not seem to be on the right track.

THANK YOU!