

## Situational semantics of demonstratives and the definiteness cycle

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**1. Intro.** This paper focuses on the evolutionary step which supposedly precedes the emergence of (weak) definite determiners, namely, the demise of the properly demonstrative semantics and its morphing into “non-deictic” determiners, also known as strong definites (in the sense of the tradition focused on modern Germanic varieties and summarized in Schwarz (2009)). The proposal is based, on the one hand, on an examination of the contrasts in the synchronic patterning of demonstratives vs. strong definites in Germanic languages, and, on the other, on the novel historical corpus evidence concerning the frequencies of various determiner forms from Classical and Late Latin and medieval French. The proposal incorporates a novel, non-presuppositional account of the “anti-uniqueness” of demonstratives (e.g. Wolter (2007), Simonenko (2014)), which we argue to be crucial in the diachronic process.

**2. The definiteness cycle.** The definiteness cycle (Greenberg 1978, Lyons 1999, Diessel 1999) is one of the most robustly attested sequences of diachronic cycles (Breitbarth et al. 2019). This project is concerned with the transition between phases I and II in the cycle in (1), which is an amended version of the original Greenberg’s cycle that assumes a strong definite phase (II).

- (1)
  - Phase I: demonstrative determiner
  - Phase II: strong definite determiner (in the sense of Schwarz 2009) or articloid (Aebischer 1948)
  - Phase III: weak definite determiner (in the sense of Schwarz 2009)
  - Phase IV: non-generic marker
  - Phase V: noun class marker

Lyons (1999) speculates that the transition from I to II is associated with the loss of deictic features, while the feature [Dem] is retained. Using formal semantics framework, we will argue that the transition involves not only the loss of deictic features, understood as anchors of the resource situation within the demonstrative DP, but also a substantial change in the reference mechanism. While demonstratives, we argue, pick up a salient group of individuals (pace Elbourne 2008), from which a unique individual is then chosen by means of a gesture/proximity function, a strong definite determiner picks up a salient individual as one of its arguments, which is then identified with the referent of the whole DP (Schwarz 2009). Before presenting the technical details of the account, we will examine distributional contrasts between demonstratives and strong definites in modern Germanic varieties. We will then show that the account of the demonstrative → strong definite transition based on these observations is compatible with the quantitative historical corpus data from Latin and French.

**3 Demonstratives vs. strong definites: patterns.** We argue that a proper characterization of the contrasts involves the factor of the Common Ground (CG), namely, whether it entails that the extension of the (possibly modified) nominal predicate in the situation of evaluation is a singleton or not (“GG with a (anti-)uniqueness entailment”).

**3.1 GG with a uniqueness entailment:** a demonstrative **may**, (2), & a strong definite **cannot** be used (a weak determiner must be used instead), (3).

(2) The simple reality is that **this** dog of yours has ruined the house.

(3) A/#di eard dräit ham a/#di san.  
DEF.WEAK/DEF.STRONG earth revolves around DEF.WEAK/DEF.STRONG sun  
“The earth revolves around the sun.”

FEHRING FRISIAN, adapted from Ebert (1970)

**3.2 GG with an anti-uniqueness entailment.** A demonstrative **must** be used, (4), & a strong definite **cannot** be used, (5).

(4) A woman<sub>i</sub> entered from stage left. Another woman<sub>j</sub> entered from stage right. **That/#the woman<sub>j</sub>** was carrying a basket of flowers. Wolter (2003), adapted from Roberts (2002)

The example (5) from Fehring Frisian is given by Ebert (1970) in the context of a possible choice among several books, with a note that it should be accompanied by a pointing gesture and that the *det* form must be stressed. We take the latter property a hallmark of a demonstrative semantics.

(5) Deest dü mi ans **dèt**/#det búk auer?  
give you me PART DEM/DEF.STRONG book over  
“Can you hand me that book?”

FEHRING FRISIAN, adapted from Ebert (1970)

**3.3 GG underspecified with respect to a (anti-)uniqueness entailment.** A demonstrative may be used, (6), & a strong definite **must** be used, (7).

- (6) A woman<sub>i</sub> entered from stage left. **That/the** woman<sub>i</sub> was carrying a basket of flowers. Wolter (2003), adapted from Roberts (2002)
- (7) Peetje hee jister **an kü** slaachtet. Jo saai, **det** **kü** wiar äi sünj.  
 Peetje has yesterday a cow slaughtered. may says DEF.STRONG cow was not healthy  
 “Peetje slaughtered a cow yesterday. They say the/that cow was not healthy.” FEHRING FRISIAN, Ebert (1970, 107)

**3.4 NPs with restrictive relative clauses.** A demonstrative **may** be used, (8), & a strong definite **must** be used, (9).

- (8) What’s wrong with Bill? Oh, **that/the** woman he went out with last night was nasty to him. (Based on Hawkins 1978)
- (9) Rooluf hee **det** klook wechsleden, wat hi faan san uatlaatj fingen hee.  
 Roluf has DEF.STRONG watch lost that he from his grandfather received has  
 “Roluf lost the watch that he had received from his grandfather.” FEHRING (Ebert, 1970, 137)

**4 Affective interpretation of demonstratives.** It is important to note that the (optional) use of demonstratives in patterns 3.1 and 3.4 is associated with an affective interpretation (Lakoff 1974 a.o.). As (10) shows, this effect also obtains in a language without definite determiners and is thus not attributable to a competition between different determiner morphemes.

- (10) Ščto meni bulo za te, ščo ja posluhav **tu** Lusju!  
 what to.me was for that comp I listened that Lucie  
 “Boy did I get punished for listening to this Lucie!” UKRAINIAN

Table 1 summarizes the patterns and associated pragmatic effects.

	COMMON GROUND			
	3.1 $  [NP]^s =1$	3.2 $  [NP]^s >1$	3.3 underspec	3.4 Rel. clause
<b>demonstrative</b>	may (affective)	must	may	may (affective)
<b>strong definite</b>	cannot	shouldn’t	must	must

Table 1

We will argue that the affective uses, attested with demonstratives but not with strong definites, are attributable to the deictic semantics inherent to the former but not to the latter.

**5 Semantics of demonstratives: promoting situations into prominence.** In intuitive terms, we propose that demonstratives are used to bring into prominence a situation, which then serves to pick a unique individual with the relevant nominal property. The said bringing into prominence occurs via general cognitive conventions, such as physical gesturing (including nodding, eye movement etc.) and proximity convention: all other factors being equal, the closest situation is treated as most prominent (such as the closest clause in the preceding discourse context). The role of the proximal/distal features is to single out situations that overlap/do not overlap, respectively, with the spatio-temporal situation of the Speaker. Formally, we propose that the central ingredient of the demonstrative semantics, absent from the semantics of strong definites, is a prominence-based choice function whose domain is the domain of situations. The role of the function is to pick the most prominent situation at the utterance time. Depending on whether a demonstrative carries a proximal or a distal feature, the choice function comes with a domain restriction limiting the choice to situations that do or do not overlap with the (current) Speaker’s situation. The Logical Form of a demonstrative morpheme is given in (11), where  $\mathbf{d}_{sp}$  denotes a **(proximal) situational choice function**. The function denoted by the relational predicate  $R_{deix}$  relates the property denoted by the NP and the situation selected by the choice function, returning a property of individuals to have the nominal property in the currently most prominent situation that overlaps with the Speaker’s situation (for proximal demonstratives). (Compositional semantics to be presented during the talk.)

- (11)  $[DP\ D\ [RP_{deix}\ \mathbf{d}_{sp}\ [RP_{deix}\ R_{deix}\ [NP\ N]]]]$  LF of a demonstrative

The LF in (11) contrasts with the LF of a strong definite determiner in (12), which we adopt from Simonenko (2014) who follows Schwarz (2009) in assuming that strong definite determiners involve a silent pronoun over individuals which is assigned a contextually available referent. In (12), the relational predicate  $R$  denotes a function that takes a property denoted by the noun, an individual denoted by the silent pronoun, and returns a property of individuals to have the nominal property and to be identical to the referent of the pronoun.

The affective uses are generated by the proposed semantics of demonstratives if we assume that, informally speaking, “placing” an individual into the currently most prominent situation gives rise to an implicature that this has been done in order to highlight some of its properties, since in the case of uniquely denoting NPs such placement could not have been done for the reasons of identifying a referent (as in it happens in default cases with non-singleton denoting NPs).

**6 Demonstrative to strong definite: the loss of proximal/distal.** We take the proximal/distal distinction to be a hallmark of the presence of a situational choice function in the semantics of a morpheme, and thus a hallmark of a demonstrative semantics (rather than a strong definite semantics). We therefore expect to see this distinction disappearing as a demonstrative morpheme is reanalyzed as a strong definite. We present two novel case studies which focus on the *demonstrative*  $\rightarrow$  *strong definite* transition in the history of Latin and French. The first study is concerned with the evolution of the Latin distal demonstrative *ille* into a strong definite determiner in Old French. We show that, as expected, *ille* gradually takes up the distributional space of a neutral anaphoric determiner *is*, which we consider to be a blueprint of the disappearance of the distal feature, Figure 1 (left). In the second study, we look at the transition from Old French proximal *cist* demonstrative and distal *cil* demonstrative to the neutral anaphoric determiner *ce*. Again, as predicted, the two deictic forms are both replaced with *ce*, collapsing the proximal/distal distinction, Figure 1 (right).

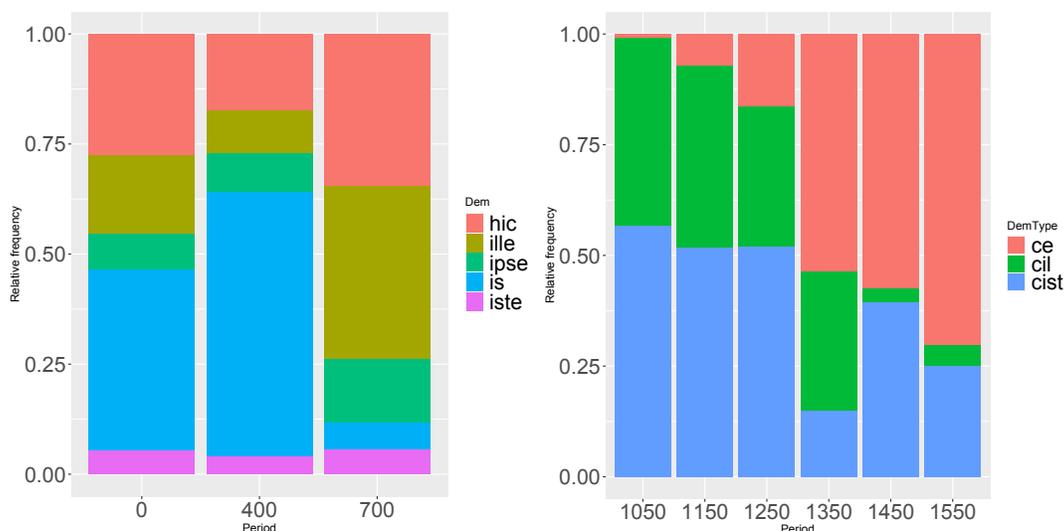


Figure 1

For the Latin data, treebanks of Perseus and PROIEL (until 400 A.D) and PaLaFra (450–900 A.D) projects have been used. For the French data, we relied on the treebank of Kroch and Santorini (2021).

In the presentation, we will also discuss possible game-theoretic scenarios of the use of demonstratives that may lead to the reanalysis.

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