Adèle Hénot-Mortier. NELS 54, 2023 The French demonstrative paradigm: structurally transparent but semantically intricate

Upshot. We present data pertaining to demonstratives (adnominal, adpronominal, "bare") in French, and show they realize the unified structure posited by Ahn (2022) in a transparent way, bringing support for this theory of demonstratives. We then discuss secondary puzzles at the syntax-semantics interface posed by the DEM-pro_{strong} combination and the bare DEM case: (1) why do these 2 forms, unlike the DEM-NP form, *require* additional specification (*ci/la* or relative clause); (2) why does DEM-pro_{strong}, which contains a strong pronoun (normally +human), end up being preferably -human; (3) why are bare DEM structures often compatible with CPs in addition to restrictive relative clauses.

Data. French demonstratives form a comprehensive paradigm (already described by Kayne and Pollock (2010)), based on a determiner (**DEM**) *ce* and two suffix-like markers *ci* and *la*. These markers, which are probably derived from the adverbs *ici* ('here') and *là* ('there'), can be used with pointing, to express the proximal/distal distinction, contrastive focus, or anaphoricity. (1) shows how DEM combines with NPs. {*ci*, *la*} is optional, as well as the extra relative clause (RC).

 Marie aime ce gars ({-ci, -là}) (qui __lit un livre)_{RC}. Marie likes DEM guy ({-HERE, -THERE}) (who __reads a book)_{RC}. Marie likes this/that guy who reads a book.

DEM can also combine with strong pronouns in the sense of Cardinaletti and Starke (1999), as shown in (2). In that case, either $\{ci, la\}$ or the RC must be realized, and both can be (with a non-restrictive reading of the RC). Note that (2) is fine but DEM-pro_{strong} forms are preferable with -human referents.

(2) Marie aime **celui** $(\{-ci, -la\})$ (qui __lit un livre)_{RC}. Marie likes DEM-3.SG_{strong} ($\{-HERE, -THERE\}$) (who __reads a book)_{RC}. Marie likes this/that one who reads a book.

A more intricate picture emerges when DEM does not combine with any (overt) argument, as shown in (3)-(6). When $\{ci, la\}$ is realized ((3)/(4)), the referent is preferably eventive/propositional (~abstract) and *can* be followed by a CP (but not a RC). When $\{ci, la\}$ is not realized ((5)/(6)), the referent can be either an abstract or concrete individual, and *must* be followed by either a RC or a CP.

- (3) Marie aime ce{ci, la} (*que Jean lit _)_{RC} Marie likes DEM{HERE, THERE} (*that Jean reads _)_{RC} Intended: Marie like this/that thing that Jean is reading.
- Marie aspire à ce{ci, la} (que Jean lise)_{CP}
 Marie aspires for DEM{HERE, THERE} (that Jean read.SUBJ)_{CP}
 Marie aspires for Jean to read.
- (5) Marie aime ce *(que Jean lit _)_{RC} (6) Marie aspire à ce *(que Jean lise)_{CP}
 Marie likes DEM *(that Jean reads _)_{RC} Marie strives for DEM *(that Jean read.SUBJ)_{CP}

Marie likes the thing that Jean reads. Marie aspires for Jean to read. **Account.** Ahn (2022) develops a unified theory of demonstratives making use of a binary maximality operator (**bi-sup**) taking two arguments: a set of restrictions, and a relation (**R**), which according to Ahn can be either one of a deictic pointing, an anaphoric index, or a RC. We argue DEM (*ce*) and *ci/la* resp. fill the **bi-sup** and **R** slot. More specifically, we assume that depending on the context, *ci* and *la* behave as linguistic reflexes of pointing, or introduce bound variables. This is possible, because at a certain level of abstraction those operations are the same: they equate an individual with something located at a certain place in the actual world, or within an abstract register (*g*).

The LF of demonstratives:	Posited entries for <i>ce</i> , <i>ci</i> , <i>la</i> (building on Ahn, 2022):
$[_{DP} [_{D'} \text{ bi-sup [restrictions]}] \mathbf{R}]$	$\llbracket ce \ \rrbracket = \llbracket \mathbf{bi-sup} \ \rrbracket = \lambda P. \ \lambda R. \ tx. \ \forall y. \ P(y) \land R(y) \iff y \sqsubseteq x$
$\mathbf{R} \in \{ci, la, \mathbf{RC}\}$	$\llbracket ci \rrbracket = \lambda i. \ \lambda x. \ \text{AT-PROX}(i,x) \ \llbracket la \rrbracket = \lambda i. \ \lambda x. \ \text{AT-DIST}(i,x)$

We thus define AT-PROX(i, x) and AT-DIST(i, x) as abstract "locator" functions merging the roles of Ahn's " \rightarrow " and *idx* functions: if *i* is an index, AT-PROX(i, x) = AT-DIST(i, x) = 1 iff x = g(i); if *i* is a location, AT-PROX/DIST(i, x) = 1 iff x = THING-AT(i) and *i* is proximal/distal w.r.t. the speaker.

(7)-(9) illustrate those claims. (7) shows that *ci/la* is mandatory with pointing (which is not true for *ce*-NP constructions), and that the referent of *celui-ci/la* must match the location denoted by the pointing gesture in a one-to-one fashion. (8) shows that same thing but emphasizes the use of the *ci/la* alternation to mark contrastive focus. In that case, pointing can target abstract *loci*. (9) finally, shows how *ci/la* allow to track referents via binding (like English *the former* ... *the latter*).

- (7) Je veux celui*(-ci) $_{\rightarrow_1}$, celui*(-ci) $_{\ast\rightarrow_1/\rightarrow_2}$, et celui*(-la) $_{\ast\rightarrow_1/\ast\rightarrow_2/\rightarrow_3}$. I want DEM-him*(-HERE), DEM-him*(-HERE), et DEM-him*(-THERE)
- (8) Celui*(-ci) $_{\rightarrow_1}$ est grand, alors que celui*(-la) $_{\rightarrow_2}$ est petit. DEM-him*(-HERE) is big, while COMP DEM-him*(-THERE) is small.
- (9) Chaque fois que je vois un chien₁ et un chat₂, celui*(-ci₁) chasse celui*(-la₂).
 Each time C I see a dog and a cat, DEM-him*(-HERE) chases DEM-him*(-THERE).

Turning to the [restrictions] slot, it can be a full NP (1), a strong pronoun (2) or (we assume) a set of features with no overt exponent, consistent with Ahn's view and the intuition expressed by Kayne and Pollock (2010) that bare *ce* constructions take a covert THING argument. French crucially realizes these 3 options *transparently*, using the same *ce*-{*ci*,*la*} "wrapper" structure, unlike English which uses synthetic DEMs like *this/that* or pronouns like *these/those*. In the following we outline some limitations of this model and sketch some solutions.

Puzzle 1: *ce***-NP** is standalone, while *ce+pro* structures require an overt realization of **R**. This might be explained by the fact that the denotation of NPs is usually more specific than that of pronouns (*e.g. a man*, as opposed to *him* has human singular masculine features, but is also an adult). This might make the use of an overt R less useful to delineate the referent in the NP case as opposed to pronominal cases. More generally this suggests a division of labor between the restriction slot and the R slot.

Puzzle 2: DEM-pro_{strong} (e.g. *celui*), contrary to the bare $\text{pro}_{\text{strong}}$ (e.g. *lui*), is preferably -human. DEM-pro_{strong} distributes like a strong element w.r.t. topicalization, coordination, short answers and its object position. We take this as evidence that neither DEM-pro_{strong} nor pro_{strong} are lexically specified for \pm human, and that pro_{strong} *acquires* the (sharp) +human specification by competition, due to (i) pro_{strong} being structurally simpler and (ii) strong forms being empirically more likely to refer to humans. As a consequence of this, DEM-pro_{strong} ends up *preferably* denoting -human entities.

Puzzle 3. The distribution of *ce(cilla*) w.r.t RCs and CPs (cf. (3)-(6)). We claim that *ce* combines with a null *pro* denoting either a concrete -human individual (as in (3)/(5)), or an abstract "individual with propositional content" in the sense of Moulton (2015) (as in (4)/(6)). Note that the second interpretation is overall preferred, which can be explained by the fact that (i) there is no overt *pro* referring to abstract entities in French (ii) concrete entities can already be referred to using DEM-pro_{strong}. Starting with (5)/(6), we assume that the CP in (6) is encapsulated within a covert predicational RC: [RCwhich______is [CPthat Jean read.SUBJ]]. This makes the CP "compatible" with the R slot and renders (6) analog to (5). The necessity of an RC in both structures was the topic of Puzzle 1. Turning to the contrast (3)/(4), we suggest that (4) results from extraposition, so that the demonstrative and the CP are coindexed (made possible by *ci/la*). Why (3) disallows an extra non-restrictive RC is a bit unclear, but may be traced back to the featural underspecification of the demonstrative.

Conclusion. We showed how the French demonstrative paradigm could fit into the unified account of Ahn (2022), by providing a "fused" semantics for *ci* and *la*, seen as higher-level "locators" in the realm of space/variable assignments. The French data share some similarities with Afrikaans, as well as colloquial Swedish and Norwegian which also use HERE and THERE particles (Leu, 2007), although within potentially smaller paradigms. Remaining puzzles include: (1) why is the distribution of *ce(ci)*+CP restricted to prepositional verbs such as *aspirer/viser* \hat{a} , *consister/résider en*, *dériver/découler de* etc.? (2) What about $P_{loc}+\{ci,la\}$ compounds, with $P_{loc}=par$ ('through') or *de* ('from')? (3) What about the free-relative reading of *ce que*, for which Ahn suggests DEM combines with no restriction? (4) What about the availability of subject bare *ce* in predicative sentences (discussed by Kayne and Pollock (2010))?

References. Ahn, D. (2022). Indirectly direct: An account of demonstratives and pointing. *L&P*. Bernstein, J. B. (1997). Demonstratives and reinforcers in romance and germanic languages. *Lingua*. Cardinaletti, A., & Starke, M. (1999). The typology of structural deficiency: A case study of the three classes of pronouns. In *Clitics in the languages of europe*. Kayne, R. S., & Pollock, J.-Y. (2010). Notes on french and english demonstratives. In *Linguistik aktuell/linguistics today*. Leu, T. (2007). These here demonstratives. *Proceedings of the 30th Annual Penn Linguistics Colloquium*. McCool, G. J. (1993). The french demonstrative system: From old to modern french. *WORD*. Moulton, K. (2015). Cps: Copies and compositionality. *LI*.