

Demonstratives and Kind-reference: *fel* ‘kind’ in Romanian *

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Goal: syntactic analysis and semantic composition of *acest fel de masă* ‘this kind of table’

- (i) that sheds light on the English *kind* and its crosslinguistic counterparts.
- (ii) that opens the way to analyses of the other **Det + *fel/kind*** combinations.

Generalization:

(1) Romanian *fel* (best translated as ‘kind’) does not allow reference to (sub)kinds.

Problem: (1) rules out a Carlsonian-type analysis.

Proposal:

• Syntax:

- I adopt the **pseudo-partitive hypothesis** (Wilkinson 1995)
- I propose a syntactic structure (see (2)b) different from Wilkinson’s.

(2) a. *acest fel de masă*
this kind of table

b. [_D° Ø [_{QualP} [_{Spec,Qual} **this *fel* ‘kind’**] [_{Qual}° [_{Qual}° Ø] [_{NP}(of) table]]]]

• I will provide the **semantic composition for demonstratives** based on (2)b

• Semantics:

(3) a. *Fel* ‘kind’ denotes a **second order property**.
b. **Demonstratives can apply to properties.**

1. *Acest fel de NP* ‘this kind of NP’ does not allow subkind readings

• Carlson 80: *that kind of animal* displays both subkind (4)a and existential readings (4)b:

(4) a. That kind of table is common/rare/widespread. (generic/subkind)
b. I have that kind of table at home. (exist.)

• The Romanian *fel* ‘kind’ only allows existential readings:

(5) a. ??*Acest fel de masă e rar/foarte răspândit.* (generic/subkind)
‘This FEL of table is very rare/ widespread.’

* The starting-point of this research is a presentation I made at the DFGS workshop on *The spectrum of kinds* in February 2024. Thanks go to Mara Panaitescu and Ion Giurgea for having helped me with that presentation. Since then Ion Giurgea has been helping me and arguing with me about previous stages of the formal analysis. For extremely helpful comments on the present proposal, which is new compared to those previous attempts, thanks go to Ion Giurgea and Brenda Laca. This work was supported by a grant of the Romanian Ministry of Research, Innovation and Digitization, CNCS - UEFISCDI, project number PN-III-P4-PCE-2021-0042, within PNCDI III.

- According to Ahn (2019, 2022) anaphoric and deictic uses of Dem differ regarding the semantics of the R argument.

3.1 The anaphoric use of ‘canonical’ Demonstratives

- (15) Ion a citit un **roman** si Maria a cumpărat **acel roman**.
 ‘Ion has read a **novel** and Maria has bought **that novel**.’

- For the anaphoric use **the R-argument in (15) involves an anaphoric index.**
- The denotation of **R is a set of individuals equal to the value of an assignment function:**

$$(16) \llbracket R \rrbracket = \llbracket [\text{IdxP } i] \rrbracket = \lambda_{X_e}. X = g(i)$$

The denotation of *acel roman* ‘that novel’ in (15) is obtained by saturating (14) with the denotation of R shown in (16) and with *roman* ‘novel’:

$$(17) \begin{aligned} & \text{a. } \llbracket \text{that novel } [\text{IdxP } i] \rrbracket_{\langle e, t \rangle} = \\ & = \text{b. } \llbracket [\lambda N_{\langle e, t \rangle}. \lambda J_{\langle e, t \rangle}. \iota x (N(x) \wedge J(x))] \rrbracket (\lambda_{X_e}. X = g(i) \wedge (\text{novel})x) \\ & = \text{c. } \iota x [(\lambda_{X_e}. X = g(i))(x) \wedge (\text{novel})x] \\ & = \text{d. } \iota x [x = g(i) \wedge (\text{novel})x] \end{aligned}$$

3.1.2 The anaphoric use of *this FEL/KIND₂*

- In (18) **the anaphoric relation holds between properties:** *acel fel* has *polițist* as an antecedent.

- (18) Ion a citit un **roman polițist** si Maria a cumpărat **acel fel de roman/carte/*film**.
 ‘Ion has read a **crime novel** and Maria has bought **this kind of novel/book/*movie**’

- **In view of such ex’s, the denotation of R shown in (16) needs to be extended to properties:**

$$(19) \llbracket R \rrbracket = \llbracket [\text{IdxP } i] \rrbracket = \lambda_{Q_{\langle e, t \rangle}}. Q = g(i)$$

- (19) says that the R-argument of *acel fel* in the anaphoric use is a set of properties equal to the value of an assignment function g(i).

- The (im)possibility of *roman/carte* ‘novel/book’ vs. *film* ‘movie’ in (18) shows that **the NP sister of *acel fel* must be the same as or a supraordinate of the NP of the antecedent DP.**
- We capture this constraint by proposing that FEL/KIND₂ depends on a nominal property that will be supplied by the NP-complement of Qual during the derivation
- A property P is FEL(N) only if any x that satisfies P also satisfies N, see (20)b:

$$(20) \begin{aligned} & \text{a. } \llbracket \text{that } \text{FEL/KIND}_2 [\text{IdxP } i] \rrbracket_{\langle e, t \rangle} = \lambda_{N} \iota K_{\langle e, t \rangle} [(FEL/KIND_2(N))K \wedge K = g(i)] \\ & \text{b. For any property P, } (FEL/KIND_2(N))(P) \rightarrow \forall x (P(x) \rightarrow N(x)) \end{aligned}$$

3.1.3 The deictic use of ‘canonical’ Demonstratives

(21) Ieri am cumpărat această masă. (pointing at (the location of) a table)
 Yesterday (I) have bought this table

(22) The R-argument of deictic demonstratives supplies a set of individuals located at the place of pointing. (Ahn 2019,2022).

(23) $\llbracket R \rrbracket = \llbracket \rightarrow \text{Loc} \rrbracket = \lambda x. x \text{ is at Loc}$

• The denotation of *această masă* ‘this table’ in (21) is obtained by saturating (14) with *masă* ‘table’ on the one hand and with the denotation of R shown in (23) on the other hand:

(24) a. $\llbracket \text{that} [\text{table}] [\rightarrow \text{Loc}] \rrbracket_{\langle e,t \rangle} =$
 =b. $\llbracket [\lambda N_{\langle e,t \rangle}. \lambda J_{\langle e,t \rangle}. \iota x (N(x) \wedge J(x))] (\text{table})(\lambda x. x \text{ is at Loc}) \rrbracket$
 =c. $\iota x [(table)x \wedge (\lambda x. x \text{ is at Loc})(x)]$
 =d. $\iota x [(table)x \wedge x \text{ is at Loc}]$

• The uniqueness presupposition of Iota is satisfied in case there is only one entity at Loc (in which case the set in (23) is a singleton set).

3.1.4 The deictic use of *this FEL/KIND₂*

(25) Am acest fel de masă acasă. (pointing at a table)
 I have that **FEL/ KIND₂** of table at home.

• Observation: deictic relations between properties are subject to the constraint in (26), which is parallel to the constraint we observed for the anaphoric relations between properties (§ 3.1.2)

(26) When *this kind of NP* is used deictically, the entity pointed at must have the NP property.

• Problem for the deictic uses of *this FEL/KIND₂*

(27) The pointing gesture itself cannot provide a singleton set of properties because the entity pointed at (just as any entity) does not instantiate a single property.

=> The semantics of the deictic use of *this FEL/KIND₂* cannot be captured by extending Ahn’s 19,22 analysis reviewed in §3.1.3.

Proposal

We propose that **the semantic derivation relies on two free variables** that will be set in the utterance context: one for the **property** (see *i* in (28)) and one for **the individual that instantiates the property** (see *x_j* in (28)). We furthermore introduce the condition that the salient entity pointed at satisfies the salient property.

(28) $\llbracket R \rrbracket = \llbracket [\llbracket \text{Id}_{xP} \mathbf{i}(\rightarrow x_j) \rrbracket] \rrbracket = \lambda Q_{\langle e,t \rangle} (Q = g(i) \wedge Q(x_j))$

Upon uttering *this FEL/KIND₂ of table* the Speaker’s intention is to refer to a unique particular property among those instantiated by the entity pointed at (represented as $\rightarrow x_j$) and the Hearer

needs to identify that unique property. This proposal can capture possible misunderstandings between Speaker and Hearer, which arise in case the values of their respective assignment functions do not coincide:

- (29) a. Speaker: Vreau să cumpăr acest fel de masă. ‘I want to buy this kind of table’.
 b. Hearer: Adică roșie? ‘Do you mean red?’
 c. Speaker: Nu, (vreau să spun) cu trei picioare. ‘No, (I mean) three-legged’.

• By saturating the N argument of (14) with *FEL* and the J argument with (28) we get (30):

$$(14) \quad \llbracket \text{Dem} \rrbracket = \lambda N_{\langle \langle e, t \rangle, t \rangle} . \lambda J_{\langle \langle e, t \rangle, t \rangle} . \iota K_{\langle e, t \rangle} (N(K) \wedge J(K))$$

$$(30) \quad \llbracket \text{Dem } FEL/KIND_2 \llbracket \text{IdxP } \dot{i}(-x_j) \rrbracket \rrbracket_{\langle e, t \rangle} = \lambda N . \iota K_{\langle e, t \rangle} [(FEL/KIND_2(N))(K) \wedge K = g(i) \wedge K(x_j)]$$

In words, ‘a function from properties N into the unique property that is *FEL/KIND₂(N)* and is equal to g(i) (the property picked up by the Speaker/Hearer) and g(i) is instantiated by x_j.

4. The semantics of *Qual*^o

Let us now go back to our syntactic proposal, repeated below

$$(9) \quad [D^o \emptyset [_{\text{QualP}} [_{\text{Spec,Qual}} \text{ this kind}] [_{\text{Qual}^o} [_{\text{Qual}^o \emptyset} [_{\text{NP}(\text{of})} \text{ table}]]]]]$$

The *Qual* head takes the NP-property as its first argument and the denotation of $[_{\text{Spec,Qual}} [\text{Dem} + \text{FEL}]]$ as its second argument. The result is a property of individuals:

$$(31) \text{ a. } \llbracket \text{Qual}^o \rrbracket = \lambda N_{\langle e, t \rangle} . \lambda P_{\langle et, et \rangle} . \lambda x . (P(N))(x)$$

$$\text{ b. } \llbracket [_{\text{Qual}^o} \text{Qual}^o \text{ table}] \rrbracket = \lambda P_{\langle et, et \rangle} . \lambda x . (P(\text{table}))(x)$$

$$\text{ c. } \llbracket \text{QualP} \rrbracket = (\lambda P_{\langle et, et \rangle} . \lambda x . (P(\text{table}))(x)) (\llbracket \text{Dem } FEL/KIND_2 \rrbracket)$$

$$\text{ d. } \llbracket \text{QualP} \rrbracket = \lambda x . (\iota K_{\langle e, t \rangle} [(FEL/KIND_2(\text{table}))(K) \wedge K = g(i) \wedge K(x_j)])(x)$$

- The DP shown in (9) is obtained by embedding *QualP* under a null *D*^o.
- For the rest of the semantic composition various options are possible, among which we do not need to choose here:

- (32) (i) $[D^o \emptyset]$ contributes an existential Q;
 (ii) existential closure at the sentential level (Heim 82, Diesing 92);
 (iii) the null *D*^o is meaningless, the DP is property-denoting and combines with an ‘existential predicate’ (van Geenhoven 96, McNally 98, a.o.).

5. Determiners that can(not) combine with adnominal¹ *fel*

- Carlsonian analysis

(33) a. *Kind* is the lexical head of N_{max}.
b. [*Kind of* NP] denotes a set of abstract entities (sub-kinds).

- Given (33)a-b, we do not expect any constraint on the Det's with which *fel* combines.
- In §5.1 I observe that the analysis of *fel* proposed here predicts restrictions on the Det's *fel* can combine with and I show that the prediction is verified.
- In §5.2 I give a (non-exhaustive) list of the Det's that can combine with *fel*. I will leave for further research the task of providing the semantic derivations for those DPs.

5.1 Det's that cannot combine with adnominal *fel*

- **Our main syntactic hypothesis**, the structure in (9), can be described as follows:

(9) [D° Ø [QualP [Spec, Qual that FEL/KIND₂] [Qual' [Qual° Ø] [NP(of) table]]]]

(34) a. *Fel* does not take the lexical NP as a complement.
b. [**Det *fel***] sits in the Spec of a dedicated functional head Qual°.
c. A null D° heads the overall DP.

- **Question: are there any constraints that FEL imposes on the Det's with which it combines?**

- **Determiners form a rather mixed syntactic class.** Under this label are grouped various non-lexical and semi-lexical elements that in many languages precede the head N
- **Articles** are known to have elusive semantic meaning. The difference between indefinite and definite articles is sometimes difficult to pin down. **The main role of articles thus seems to be essentially syntactic: they close off nominal projections, which means that they can only be inserted in the highest D° of the maximal projection of a lexical N.**
- Necessarily quantificational Det's denote functions from the property denoted by their sister NP into a Generalized Quantifier. As such, necessarily quantificational Det's, e.g., *each*, need to be inserted in **the highest D° of the maximal projection of a lexical N.**

- Hypothesis:

(35) Articles and necessarily quantificational Det's (*fiecare* 'each') can only be merged in the highest D° of the maximal projection of a lexical N.

- Taken together, (35) and (34)c make the following prediction:

(36) *Fel* can combine neither with articles nor with necessarily quantificational Det's.

- **The prediction in (36) is confirmed for the definite article**, see (37)a.

¹ *Fel* is also used in non-adnominal positions, e.g., (i) with infinitival complements, where it translates as 'way' or (ii) in combination with *la* 'at', *la fel* 'alike', 'in the same way'; or (iii) in equatives. All of these cases, which involve various types of grammaticalization, are irrelevant for the adnominal use of *fel*, which is the only one where it translates as 'kind'.

- Note that *tip* ‘type’ contrasts with *fel*, see (37)b.
- Note that a relative clause is necessary in order to avoid an anti-uniqueness presupposition (see Zamparelli 1998):

- (37) a. ??Felul de rochie pe care a cumpărat-o Monica îmi vine bine.
 FEL-THE of dress PE which has bought-it Monica me_{Dat} fits. well
- b. Tipul de rochie pe care a cumpărat-o Monica îmi vine bine.
 type-THE of dress PE which has bought-it Monica me_{Dat} fits. Well
 The type of dress Monica bought fits me.

• **The contrast between (37)a and (37)b is syntactic: *type* denotes an abstract entity and as such it can head N_{max} and combine with the definite article, which sits in the D° that governs N_{max}.**

• Note that the English counterpart of (37)a, built with *kind*, is also fully acceptable, which is expected, since *kind* is ambiguous, allowing for reference to abstract entities (KIND1).

• Examples of the type in (37)a are (marginally) accepted by some speakers (who rate the relevant examples with ? or ??). Such speakers use *fel* as a variant of *tip*. We have started a corpus research (conducted by Béatrice Pahontu, Brenda Laca and Achille Falaise) that is meant to evaluate statistically this use of *fel*.

• Let me note that I do not see any way of explaining the contrast in (37)a vs. (37)b as being due to the semantics. The semantic derivation of (37)b is quite a complex task, which is not directly relevant here (we are interested in *fel*, not in *tip*) and as such will be left for another occasion.

• **The prediction in (36) is confirmed for the plural indefinite article *niște* ‘some’:**

- (38) a. *Ion a cumpărat **niște feluri** de rochii pe care nu le mai văzusem
 Ion has bought some-PL FEL-PL of dresses that I had not seen before
- b. Ion a cumpărat **niște modele/genuri** de rochii pe care nu le mai văzusem
 Ion has bought some-PL models/sorts of dresses that I had not seen before’.

• Note that the version of (38)b built with *tipuri* ‘types’ is not fully acceptable. This cannot be explained by our syntactic constraint, but can be attributed to the lexical-selection properties of *tipuri* ‘types’ (see Umbach (2023) on the difference between *Art* and *Typ* in German). The full acceptability of the version of (38)b built with *modele* ‘models’ supports this line of explanation.

• **The singular indefinite article induces a shift in meaning**

- (39) a. Ion a cumpărat **un fel** de rochie.
 Ion has bought a FEL/KIND₂ of dress
- b. Ion a cumpărat **un tip/model** de rochie.
 Ion has bought a FEL/KIND₂ of dress
- c. Ion a cumpărat **un tip/model/ ??fel** de rochie pe care nu-l mai văzusem.
 Ion has bought a FEL/KIND₂ of dress

• The special modalized meaning illustrated in (39) can also be observed in Engl. *a kind of table* or Fr. *une sorte/un genre de table* ‘a table of sorts, something which might be called a table’.

• This shift in meaning arguably indicates some coercion mechanism induced by a **syntactic configuration that clashes with FEL/KIND₂**.

• **The prediction in (36) is confirmed for *fiecare* ‘each’**

(40) **Ion a cumpărat fiecare fel de rochie*
Ion has bought each kind of dress

5.2 Det’s that can combine with adnominal *fel*

• **wh-det.**

(41) *Ce fel de carte ai cumpărat?*
‘What kind of book have you bought?’)

• ***alt* ‘(an)other’**

• **plural det’s:** *mai multe* ‘several’ *cîteva* ‘some, several’.

• We will show that the syntax in (9) underlies all of the DPs that embed *FEL/KIND₂*.
• The semantics will vary depending on the various Det’s with which *FEL/KIND₂* combines.

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