Stability of reference and object marking in Romanian

Donka F. Farkas Klaus von Heusinger
UCSC Stuttgart University

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1.1 The problem

An empirical generalization

(1) *'Specificity' and definiteness*
In D(ifferential) O(bject) M(arking) systems across languages, 'specific' noun phrases pattern more like definites than 'non-specific' ones.

Aim: understand why (1) obtains.

1.2 Some evidence for (1) (Farkas 1978; Dobrovie-Sorin 1994, Gierling 1997, Popescu 1997 for Romanian, Leonetti 2003, Brugè and Brugger 1996, Aissen 2003 for Spanish)

DOM in R

DOM marker: preposition *pe* and clitic doubling; for post-V DOs, clitic doubling requires presence of *pe;* reverse correlation does not obtain; we focus on *pe* and post-V DOs.

DOM in R may be obligatory, optional, impossible.

Post-V, +Human, PN or def. pronoun: obligatory DOM

(2) Maria *(l)-a desenat *(pe) Matei / el.
Maria *(CL) has drawn *(PE) Matei / him
'Maria drew Matei / him.'

Post-V, +Human, definite description: optional DOM

(3) Maria (l)-a desenat (pe) bãiatul vecinului.
Maria (CL) has drawn (PE) boy.Def. neighbor.Gen
'Maria drew the neighbor's son.'

Post-V, -Human definite description: impossible DOM

(4) Maria (*l)-a desenat (*pe) trenul verde.
Maria (*CL) has drawn (*PE) train.Def green
'Maria drew the green train.'

So far: relevance of +/-Human, PN, def. pronoun/other:

(5) +Human > - Human
+PN, def. pronoun > other

post-V	PN or + Def. pronoun	Def. description
+Human	+ (see (2))	+/- (see (3))

post-V	Def. description
+ Human	+/- (see (3))
-Human	- (see (4))

Relevance of +/-Def for descriptions:
Pre-V, -Human, +Def. descriptions: optional DOM
Pre-V, -Human, -Def. descriptions: impossible DOM

(6) (Pe) casa verde am desenat-*(o) deja.
(PE) house.Def green have.I drawn.CL already
'The green house I have drawn already.'

(7) (*Pe) o casa am desenat-(*o) deja.
(*PE) a house have.I drawn.(*CL) already
'A house I have already drawn.'

(8) +Def > -Def

pre-V	+Def. description	-Def. description
-Human	+/- (see (6))	- (see (7))

Scopal specificity matters for DOM in Romanian (Dobrovie-Sorin 1994)
(i) Scope relative to intensional predicates
Post-V, +Human, -Def. description, -s-specific: impossible DOM
Post-V, +Human, -Def. description, +s-specific: optional DOM

(9) Maria (*o) cautã (*pe) o studentã care sã ştie româneşte.
Maria (*CL) look for (*PE) a student who SUBJ know Romanian
'Maria is looking for a student who knows Romanian.'

(10) Maria (o) cautã (pe) o studentã care ştie româneşte.
Maria (CL) look for (PE) a student who knows Romanian
'Maria is looking for a student who knows Romanian.'

- DO in (9) must be within the scope of *look for* (subjunctive in the relative clause) and DOM is impossible; DO in (10) is scopally ambiguous; if wide scope, DOM is possible

(ii) Scope relative to a quantificational D
Post-V, +Human, -Def. description, +s-specific: optional DOM
Post-V, +Human, -Def. description -s-specific: impossible DOM

(11) Fiecare student (l)-a vizitat (pe) un profesor.
every student (CL) has visited (PE) a professor
'Every student visited a professor.'

- presence of *anume* 'a certain' makes DOM possible with narrow scope reading:

(12) Fiecare student (l)-a visitat (pe) un anume profesor. Maria pe cel de matematicã,
every student (CL)-has visited (PE) a certain teacher. Maria PE the of math,
Ion pe cel de fizicã ...
Ion (PE) the of physics

'Each student visited a certain teacher. Maria visited the math teacher, Ion the one physics professor ...'

Post-V, +Human, +Def. descr. within the scope of a quantificational D: optional DOM:

(13) Fiecare student a invitat-(o) (pe) fata de vis a vis.
each student has invited (CL) (PE) girl.Def from opposite
'Each student invited the girl opposite him.'

post-V +Human	+s-specific	-s-specific
-Def. descr	+/- (see (9),(13))	- (unless *anume*) (see (10), (12))

Conclusion
Scales of DOM triggering strength:

(14) +Def. > -Def
+s-spec > -s-spec
+Human > -Human
PN , def. pronoun > other

Scopal specificity matters in Spanish:
DOM marker in Spanish: preposition *a* (and perhaps clitic doubling)
Leonetti (2003): absence of DOM results in necessarily narrow scope readings; presence of DOM does not exclude narrow scope readings (Leonetti (2003), (2c): 71)

Post-V,+Human ,-Def. description: if no DOM, then –s-specific

(15) a. Busca a un médico/Busca un médico.
looksfor A a doctor/looks for a doctor
'He/She is looking for a doctor.'

b. Todos los encuestados vieron (a) una persona sospechose.
all the interrogated persons saw (A) a person suspicious
'Everybody who was interrogated saw a suspicious person.'

No DOM requires narrow scope reading of indef.

- Scopal non-specificity is DOM inhibiting in Spanish.

Aissen's (2003) prominence scales:

(16) Definiteness scale
Personal pronoun > Proper noun > Def. NP > Indef. spec. NP > Non-spec. NP

(17) Animacy scale
Human > Animate > Inanimate

Questions we start from
(i) What semantic dimension underlies (16)?
(ii) What makes 'specific' noun phrases more like definites than non-specific ones?

(iii) What is common to the varieties of specificity identified in previous work (scopal, partitive, epistemic)

Preview

- Section 2 answers these questions by introducing the notion of *referential stability* and some of its guises. Main claims: (i) rungs in (16) are distinguished by relative referential stability; (ii) at least some varieties of specificity involve referential stability distinctions as well; (iii) referential stability is one of the measures of prominence DOM is sensitive to.
- Section 3 revisits DOM in Romanian. Main claim: capturing the complexities of this phenomenon requires the consideration of several prominence scales simultaneously as in Aissen (2003) but more prominence measures have to be identified.

2. Referential stability

- Core common denominator underlying the definiteness scale as well as various types of specificity: stability/instability of reference.

variable with stable reference: constant (invariant) value assignments
variable with nonstable reference: variable value assignments
Parameters along which assignments may vary give subtypes of referential stability.
Subtypes of referential stability: (i)dynamic stability (see 2.1); (ii) static stability (see 2.2): potential stability (see 2.3)

2.1 Dynamic referential stability and the definiteness scale

Background assumptions:

(i) semantic interpretation involves building semantic representations and connecting these representations to a model M
(ii) contribution of argumental DPs to semantic representation: variables and conditions on them
(iii) semantic representation connected to M via assignment functions
f: < x, w > → D

(18) Definiteness scale (version 2)
PN, Def. pronouns > +Def DPs > -Def DPs

Claims:

- The semantic parameter underlying the scale in (18) is dynamic referential stability (answer to (i)).
- Sensitivity of DOM to (18) is proof of sensitivity of DOM to referential stability.

Dynamic referential stability: matter of relative stability of value choice for the variable at the point of discourse update with the variable in question (cf.determinacy of reference in Farkas 2002a, uniqueness condition in Kadmon 1990).
Question of latitude in choosing a value for *x* at the point of update.

(19) Dynamic stability
A variable *x* that updates a function *f* relative to a model M is dynamically stable iff all updates *f', f"* of *f* on *x* that meet the conditions imposed on *x* are such that *f'(x,w) = f"(x,w).*

(20) DRT version
Let K' be the DRS obtained by merging the input DRS K with the DRS K_1 and let *x* be in the universe of K_1 but not in that of K. The variable *x* is

dynamically stable iff for every *f* that embeds K, for every *f'*, *f"* that extend *f* and embed K', *f'(x,w) = f"(x,w).*

2.1.1 Unconditional dynamic stability

DP types that are referentially stable in virtue of the type of condition they contribute

(i) *Proper names:* dynamically stable relative to M and w_0, because of special way of assigning values to proper names.

M = <D, I, N, W> where D is the domain of individuals, I is a function assigning extensions to predicate-world pairs, N is a function from worlds and Proper Names to D.
Condition introduced by a proper name *P:*

(21) $x = P$

Effect of (21):

(22) An assignment function *g* meets (21) at some world *w'* iff $g(x,w') = N(P,w_0)$.

PN: individual constants whose world of evaluation is fixed to the context of the speech act. Modal rigidity follows from world parameter of *N* being fixed to w_0; PNs are necessarily referentially stable throughout a discourse.

(ii) *Definite pronouns*: dynamically stable because of their anaphoric/deictic nature

Condition introduced by a definite pronoun:

(23) $x = y$
x is the variable introduced by the pronoun; *y* is a variable present in the universe of the input context

(24) The condition in (23) is met iff $f'(x,w) = f(y,w)$, where *f* is the input function and *f'* is the updated function.

Further presupposed conditions introduced by the morphological features of the pronoun.
Cases of pronoun resolution: multiple semantic representations, one per possible anaphoric link. (Blutner 2000).

- Common to PNs and def. pronouns: unconditional dynamic stability (dynamic stability insured by the fact that the type of condition contributed by such DPs identifies a value).
- Difference between PNs and def. pronouns: def. pronouns must be discourse old; PNs need not be; reference of PNs is stable throughout the discourse, that of def. pronouns need not be.

2.1.2 Conditional dynamic stability

Condition contributed by ordinary descriptions:

(25) $Q(x)$
Q is the descriptive content

(26) *f'* meets (25) iff $f'(x,w) \in I(Q,w)$

(Issue whether *w* must be the same on both sides in (26) is immaterial for now.)

- *Q(x):* predicative condition; describes the value to be given to *x*

- *x* in (25) is dynamically stable iff *Q* is a singleton; this depends on content of *Q* (superlative descriptions are singleton if not empty), properties of M, and properties of the input context

- PNs and definite pronouns involve conditions that supply the referent (value of the variable); ordinary descriptions describe it; dynamic stability of descriptions depends on content of description, context, particulars of M.

Definite article: signals dynamic stability; denotation of *Q* must be a singleton relative to M and the context.
Indefinite article: elsewhere form

- +Def descriptions are dynamically stable because of particular properties of the description, the context, M.

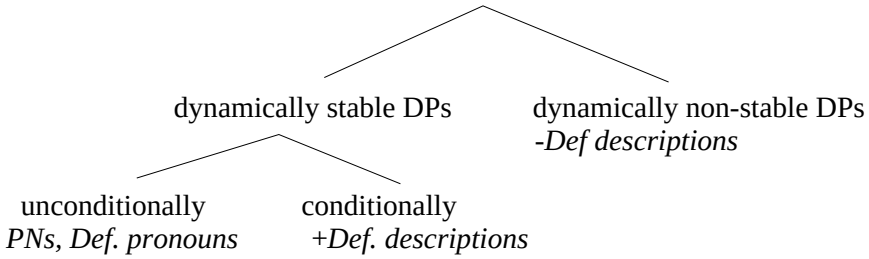
Assuming that conditional stability is a weaker form of stability than unconditional one:

(27) Definiteness scale as dynamic stability scale (cf. (16))
PN, definite pronouns > +Def DPs > -Def DPs

- A DP is dynamically non-stable iff the variable it introduces is not required to be dynamically stable.
- A DP is unconditionally stable iff the variable it introduces is dynamically stable in virtue of the type of condition the DP contributes.
- A DP is conditionally stable iff the variable it introduces is required to be stable and its stability depends on particularities of the condition, context or the model.

Unconditionally stable DPs: PN, def. pronoun
Conditionally stable DPs: +Def descriptions
Dynamically non-stable DPs: -Def descriptions

Typology of dynamic stability (version 1):



Where should partitives go?
2.1.3 Restricted dynamic nonstability
Overt partitives:

(28) a. one of George's students
b. un-ul din studenţii lui Gheorghe
a.Def from student.Pl.Def of G

domain nominal: *George's students*

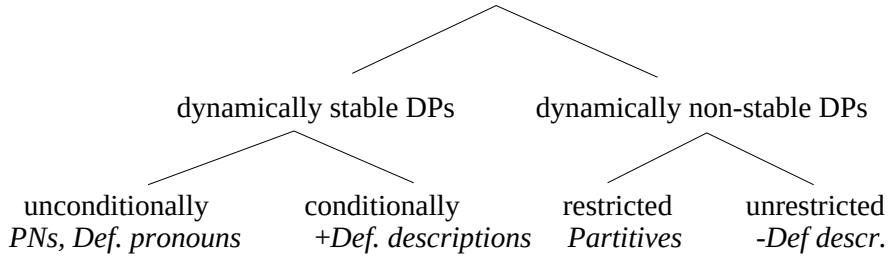
- Overt partitives are dynamically non-stable: domain nominal may (must) denote a non-singleton set.

Condition contributed by partitives:

(29) $x \in y$
x is the variable contributed by the Part DP; *y* is the variable contributed bu the domain DP.

- Non-stability of partitives is *contextually restricted* to the elements of the set given as value to the variable introduced by the domain nominal; ordinary indefinites are not thus restricted.

Typology of dynamic stability (final version):



(30) Definiteness scale as dynamic stability scale
PN, +Def pronouns > +Def. DPs > Part > -Def DPs

(31) *Correlation of DOM with dynamic stability*
The more dynamically stable a DO is the stronger DOM trigger it is.

(32) *Consequence with respect to DOM*
If a DP type T outranks a DP type T' on (30) T should be at least as strong a DOM trigger as T' (within a language, as well as cross-linguistically).

Data from Romanian in support of (31) and (32)
Within the category of post-V, +Human nominals:
(a) PNs, +Def pronouns: stronger DOM triggers than all the other DP types in (30)
- +Human PNs and +Def pronouns are obligatory DOM triggers; the others are optional DOM triggers (see (2) and (3)).

Special case: eponymous reference: author's name used to refer to work:

(33) Ion (îl) citeşte (pe) Eminescu.
Ion (CL) reads (PE) Eminescu
'Ion is reading Eminescu.'

Note: eponymous reference nominals form a class of their own.

(b) Part DPs are stronger DOM triggers than -Def DPs:
In the scope of imperatives: +Human, -Def: impossible DOM; +Human Part: optional DOM.

(34) a. Trimite-mi-(*l) (*pe) un student.
send me-(*CL) (*PE) a student
'Send me a student.'

b. Trimite-mi-(l) (pe) unul din studenţii lui Gheorghe.
send-mi-(CL) (PE) one.Def of students.Def of G.
'Send me one of Gheorghe's studenst.'

(c) Difference between definites and partitives:
Stronger preference for DOM with the former; lack of DOM with definites referring to humans usually associated with presence of special factors.

Interim conclusions

- The definiteness scale in (30) can be seen as a scale of relative dynamic referential stability.
- DOM in Romanian is sensitive to it: the higher a DP is on (30) the stronger DOM trigger it is. (See Aissen 2003 for further data from other languages.)
- The position of partitives on (30) is motivated in terms of dynamic stability.

We have answered question (i) and provided a partial answer to (ii).

2.2 Static referential stability and scope

Aim: account for the correlation of scopal specificity and definiteness manifested in DOM.
Claim: semantics of narrow scope involves referential instability (variation) of values assigned to a variable within the process of evaluation: in the process of evaluation of an expression *a* relative to some possibility <*w*,*f*> widest scope variables in *a* -- those that occur in the main DRS -- are given a single value; variables that occur within the scope of a quantifier, negation or modal operator are given a series of values.
Evaluation parameters
The evaluation parameters of a variable *x* occurring in an expression *a:* the set of world-function pairs that give values to *x* in the course of the evaluation of *a* relative to some possibility <*w*,*f*>.
If the evaluation parameters of a variable *x* in *a* is a singleton set, *x* is given a single value relative to each <*w*,*f*>. This happens when *x* has widest scope and therefore its evaluation parameter is <*w*,*f*> itself. Such a variable is *statically stable*.
If the evaluation parameters of *x* in *a* is a non-singleton set, *x* is *statically non-stable*: relative to a particular possibility, *x* the values *x* receives vary.

(35) Let *x* be a variable that occurs in a formula *a.* The variable *x* is statically stable in *a* iff the evaluation parameter set of *x* in *a* is a singleton; *x* is statically non-stable in *a* iff the evaluation parameter set of *x* in *a* is a non-singleton set.

Generalization we capture: wide scope involves keeping a fixed value during the process of evaluation, while narrow scope involves varying values.

DPs introducing statically stable variables in an expression *a* will be said to be statically stable in *a*. DPs introducing statically non-stable variables in *a* will be said to be statically non-stable in *a*.
Types of static non-stability
Statically nonstable variables in *a* have evaluation parameter sets whose elements are pairs <*w'*, *f'*> which differ from one another with respect to the function component, the world component, or both.

Variables within the scope of a quantifier over individuals or bound by such a quantifier: evaluation parameter sets differing on the function component of the pair.

Variables within the scope of modal operators: evaluation parameter sets that differ from one another on the world member of the pair.

The variable introduced by the indefinite in (36) and the variable introduced by the indefinite in (37) under the wide scope reading are satically stable:

(36) A student$_y$ came in.

(37) Every student$_y$ read a paper$_x$ about specificity.

The variable *y* in (37) is statically non-stable; its evaluation parameter set is made up of <*w*,*f*'> pairs whose functional component extends *f* on *y*.
Under the narrow scope reading of the indefinite in (37), *x* is statically non-stable too: its evaluation parameter set is made up of <*w*,*f*''> where *f*'' extends *f*' on *x*. Here *x* co-varies with *y* because every pair <*w*,*f*'> in the evaluation parameter set of *y* has a corresponding <*w*,*f*''> pair in the evaluation parameter set of *x* where *f*'' extends *f*' on *x*.

Evaluation parameter set of *x* under narrow scope reading of (38) relative to some possibility <*f*, *w*>: world function pairs whose world element ranges over worlds deontically accessible to *w*.

(38) John must read a paper$_x$ on specificity.

In the case of the optimistic (39), under the narrow scope reading of both the universally quantifierd phrase and the indefinite,

(39) It is possible that every jobless person finds a job.

the relevant individual variables are referentially nonstable and their evaluation parameters vary both with respect to their functional and world components.

Dynamic stability: single value vs multiple values across possible updates (<*f*',*w*>, <*f*",*w*>).
Static stability: single value vs multiple values relative to a single possibility <*f*,*w*>..

Static non-stability is compatible with dynamic stability:

(40) Every boy$_y$ invited the girl$_x$ sitting opposite himy.

x co-varies with *y;* the indefinite is statically non-stable.
x is dynamically stable: *x* updates a set of functions *F'* each assigning a different value for *y*. For every *f*' in *F'* there is a single way of updating it on *x* so as to meet the condition imposed by the DP.

PNs are both statically and dynamically stable.
+Def descriptions, +Def pronouns: dynamically stable; static stability depends on context.
Scopally specific -Def. descriptions: dynamically non-stable; statically stable.
Scopally non-specific -Def. descriptions: statically and dynamically non-stable

Referential stability: umbrella notion subsuming both dynamic and static subtypes. What is common: contrast involving stable value vs varying values. What is different: what stability/nonstability are computed relative to.

Dynamic stability: stability relative to range of values across possibilities.
Static stability: stability relative to a particular possibility.

common thread between definiteness and scopal specificity: referential stability
scopally non-specific DPs are less stable than their widest scope counterparts.
Generalization of (31):

(41) *Referential stability and DOM*
Referential stability is a DOM inducing factor; referential non-stability is a DOM inhibiting factor.

Consequence of (41)
scopal specificity is DOM inducing because it entails static stability
scopal nonspecificity is DOM inhibiting because it entails (possible) static non-stability
definiteness is DOM inducing because it entails dynamic stability
indefiniteness is DOM inhibiting because it entails (possible) dynamic non-stability

Stability and DOM triggering scales:

(42) a. +Def > -Def
b. PN > other DPs
c. +s-spec > -s-spec
d. +Part > -Def

Referential stability provides the needed connection between definiteness, partitivity and scopal specificity.

2.3 Potential referential stability and identifiability
Semantic properties of scopally non-specific nominals depend on what they are in the scope of: scope of nominal quantifiers vs. scope of deontic modals, imperatives, intensional predicates such as *look for, want* (different from epistemics).

Identifiability (Farkas 2002b)

(43) *x* is identified in *c*: all possibilities in *c* agree on the value for *x*.

(44)*x* is identifiable in *c* iff *x* is not identified in *c* and there is a *c'* ∈ R(c) such that *x* is identified in *c'*, where R(c) is the set of informationally accessible contexts of *c*.

R(c): set of contexts containing more information than *c*. (see Gunlogson 2001's *projection set.*)
Alternative: existence of a non-trivial identifying property (see Farkas 2002c).
- nominals in the scope of quantificational Ds are identifiable; nominals in the scope of non-epistemic intensional predicates, imperatives are non-identifiable

(45)Send me a student. Anyone would do.

(46)For this class we have to read a Shakespeare play. Any play would do.

- *a certain* signals identifiability

(47)Send me a certain student. *Anyone would do.

(48)For this class we have to read a certain Shakespeare play. *Any play would do.

- Identifiability distinction belongs in the referential stability family; identifiable variables are potentially stable relative to R(c); unidentifiable variables are potentially non-stable.

(49)Potential stability
A variable *x* is potentially stable in *c* iff *x* is identifiable in *c.*

Identifiable variables have stable reference across possibilities in some $c' \in R(c)$.
Unidentifiable variables have non-stable reference across possibilities in all $c' \in R(c)$.

Further relevant distinction:

(50)+Identifiable > -Identifiable

Extending referential stability to encompass potential stability as well:

(51)Potential non-stability is a DOM inhibiting factor; potential stability is a DOM triggering factor.

A certain indefinites should be at least as strong DOM triggers than unmarked indefinites.
Data from R confirming (51):
- DOM is impossible with indefinites within the scope of non-epistemic predicates
- adding *un/o anume* 'a certain' makes the nominal a possible DOM trigger in co-varying cases

(52) Fiecare student (l)-a vizitat (pe) un anume profesor.
every student (CL) has visited (PE) a (certain) professor
'Every student visited a (certain) professor.'

(53)Trimite-mi-(*l) (*pe) un student.
send-mi-(*CL) (*PE) a student
'Send me a student.'

Epistemic specificity: speaker knows / does not know who the verifying value of the indefinite is; if she does: possibilities in her epistemic space agree on value assigned to the relevant variable; if she doesn't, there is variation; referential stability across speaker's epistemic possibilities in the former case; instability in the latter.

2.4 Conclusion and summary

(i) The gradable notion of referential stability is the common denominator of several types of specificity.

(ii) DOM is sensitive to referential stability; high stability is DOM triggering; low stability is DOM inhibiting; in contrasts involving referential stability, the stable member will be at least as strong a DOM trigger as the nonstable member.

(iii) Connection with prominence:

(54)The more referential stable a nominal the more prominent.

(55) The more prominent a nominal is the stronger DOM trigger it is.

Further questions:
- Where would further DP types (necessarily quantificational DPs, demonstratives, incorporated nominals) fit on the definiteness scale?
- Are there further flavors of referential stability?
- Is referential stability involved in other distinctions (referential/attributive)?
- What other measures of prominence are there? Animacy is crucial but there are candidates: Topicality, degree of discourse activation (Gundel et al. 1993).
- Is referential stability the major DOM trigger in R/cross-linguistically?

3. DOM details in Romanian

Aim: answer the last question negatively for Romanian while maintaining the connection between DOM and referential stability established above. View of DOM as sensitive to a variety of factors taken into account simultaneously.

DOM in R cannot be seen as marking the DP as referentially stable: personal pronouns that must refer to humans are obligatory marked (with *pe* but without clitic doubling) even if not referentially stable; even in existential sentences:

(56)a. Ion (*l)-a văzut *(pe) cineva.
Ion (*CL) has seen *(PE) somebody.
'Ion saw somebody.'

b. Ion nu (*l)-a văzut *(pe) nimeni.
Ion not (*CL) has seen *(PE) nobody.
'Ion saw nobody.'

c. (*Il) caut *(pe) cineva care să mă ajute.
(*CL) look-for *(PE) somebody who SUBJ me help
'I am looking for someone who would help me.'

d. (*Il) am *(pe) cineva care să mă ajute.
(*CL) have *(PE) somebody who SUBJ me help
'I have someone to help me.'

e. Nu (*il) am *(pe) nimeni care să mă ajute.
not (*CL) have *(PE) nobody who SUBJ me help
'I have noone to help me.'

+Human non-pronominal DPs would not tolerate DOM in (54c) and would not require it in (54a, b) even if +Def.

DOM in R cannot be seen as marking the DP as 'topical': somebody and *nobody* in examples such as (54) cannot be high in 'topicality'.

DOM in R and S is sensitive to both referential stability and topicality:
- see Leonetti 2003 for relevance of topicality for DOM in Spanish
- relevance of topicality in R: relevance of Animacy scale and of pre-/post- V position

(see Aissen (2003) for details)

Complexities of DOM in Romanian

Multiplicity of factors involved:

(i) Animacy scale
- non-pronominal DPs:

(57)Human > Animate > Inanimate

- pronouns: possibility (necessity) of having human reference in DO position (crucial)

Morphological animacy scale (interacts with definiteness scale) :

(58)+ H > +/- H > - H

+ H: *cineva* 'somebody', *nimeni* 'nobody'; *el* 'he', *ea* 'she' (when DO; may be - H when objects of prepositions)
+/-H *asta* 'this'
- H: *ceva* 'something', *nimic* 'nothing'

Further distinction that is relevant: pronominal/non-pronominal (discourse activation):

(59)a. Invitã-*(l) *(pe) ãsta.
invite-*(CL) *(PE) this
'Invite this one.'

b. Invitã-(l) (pe) copilul ãsta.
invite-(CL) (PE) child.Def this
'Invite this child.'

(ii) Referential stability
- pronouns:

(60)+Def > +Part > -Def

Definite: *el* 'he', *asta* 'this'
Partitive: *unul* 'one'
- full DPs

(61)PN > +Def > +Part > -Def

(62)Scopally specific > Scopally non-specific

(63)+Identif > -Identif.

- for +Human +Def descriptions: individual reference vs. property denotation; no DOM with definite human denoting descriptions when referring to role (Gierling 1997); referential/attributive (attributive definites are weaker DOM triggers than referential ones); existential commitment (lack of it may render DOM impossible)
- for +Human -Def descriptions: no DOM in existential statements (cross-linguistically)

(iii) Syntactic prominence

(64)pre-V > post-V (crucial to clitic doubling in R)

-Human +Def DP is not DOM marked in post-V position; obligatorily clitic doubled (but

without *pe*) in pre-V position:

(65)Ion a cumpărat-(*o) (*pe) cămaşa verde.
Ion has bought (*CL) (*PE) shirt.Def green
'Ion bought the green shirt.'

(66) (*Pe) Cămaşa verde a cumpărat-*(o).
(*PE) shirt.Def green has bought *(CL)

- Clitic doubling and *pe* marking have to be separated; the former is more sensitive to referential stability and topicality than the latter.

Solution (Aissen 2003)
Aissen's approach: DOM is sensitive to a series of scalar factors; alignment: the higher a DO on these scales the more likely it is to be marked; the lower it is, the less likely. Two scales and their cross-product define a space: high region: obligatory, middle region: optional, low region: impossible. Cross-linguistic and language internal predictions concerning possible/impossible DOM patterns:

(67)If DP_1 and DP_2 differ only in that DP_1 is higher on some prominence scale *s* than DP_2, DP_1 will be at least as strong a DOM trigger as DP_2.

DOM as a *prominence* marker
- prominence measured along several scalar dimensions
- actual picture is more complex than in Aissen (2003) because there are more prominence measures
- harmonic alignment based account: sets of ordered constraints whose relative order depends on prominence scales
- because of the complexity of the data involved, instead of a multi-dimensional lattice structure, we present DOM as an increasing function of the value of a DP on the relevant hierarchies; the increasing nature of the function captures the generalization that the higher the DP is on the hierarchies the stronger DOM trigger it is
- weighted constraints rather than ordered ones might be more appropriate

Postverbal non-pronominal DPs in Romanian
Relevant scales: animacy, definiteness, identifiability
Syntactic prominence is irrelevant for Human; becomes relevant from Animate down:

Table 1: post-V non-pronominal DPs

Animacy	**Dynamic stability**	**Potential stability**	**DOM (*pe* and CD)**
Human	PN		+
Human	+Def	+Identif	+/-
Human	+Def	-Identif	+/-
Human	Part	+Identif	+/-
Human	Part	-Identif	+/-
Human	-Def	+Identif	+/-
Human	-Def	- Identif	-
Animate	PN		+
Animate	-PN		-
Inanimate			-

Data for last three rows (*Grivei* is the Romanian equivalent of *Fido*):

(68)*(L)-am vãzut *(pe) Grivei.
*(CL)-have seen *(PE) Grivei
'I have seen Grivei.'

(69) (*L)-am vãzut (*pe) cîinele vecinului.
(*CL)-have seen (*PE) dog.def neighbor.Def.Poss
'I saw the neighbor's dog.'

(70) Maria (*l)-a desenat (*pe) trenul verde.
Maria (*CL) has drawn (*PE) train.Def green
'Maria drew the green train.'

Definites, partitives and identifable indefinites are identical in the table. In fact, they are not. DOM with definites is preferable, its absence is preferable for indefinites and its is truly optional for partitives; making a good case for this would require going into more detail than we can now.

Syntactic prominence becomes relevant in the non-Human part of the hierarchy, and therefore the Animate side has to be extended as in Table 2. Clitic doubling and *pe* marking differ when the DO is pre-verbal. Now we can have clitic doubling and no *pe*
(whereas in post-V position, presence of clitic requires presence of *pe*.)

Table 2: Pre-V -Human DPs

Animacy	**Dynamic stability**	***pe***	**Clitic**
-Animate	+Def	+/-	+
-Animate	Part	+/-	+/-
-Animate	-Def	-	-

(71) a. (Pe) casa vecinului am fotografiat-*(o) deja.
(PE) house.Def neighbor.Def.Gen have.I photographed-*(CL) already
'The neighbour's house I have photographed already.'

b. (Pe) una din casele vecinului *(le)-am fotografiat.
(PE) a.Def of house.Pl.Def neighbor.Def.Gen *(CL) have.I photographed
'One of the neighbor's houses I have photographed.'

c. (*Pe) o casã am fotografiat-(*o) deja.
(*Pe) a house have.I photographed-(*Cl) already
'A house I have already photographed.

Notes: +Animate PNs: obligatory DOM already in post-V position. Otherwise, distinction between -Human +Animate and -Animate is slight; *pe* is possible with -Animate pre-V DPs only if modified, even in the case of PNs.
Open issues
- facts for pronouns and for other types of DPs
- relation between clitic doubling (agreement) and *pe* marking: former more sensitivie to topicality; latter more sensitive to animacy hierarchy; for post-V DPs no clitic without *pe; pe* without the possibility of clitic; for pre-V DPs, the other way around; for post-V DPs, presence of clitic as secondary marking; for pre-V DPs, presence of *pe* as secondary marking
- cross-linguistic ban on DOM in existential constructions (overridden by requirement of

DOM with +H pronouns)

Lessons from the intricacies of the data:

(i) No one 'meaning' for DOM in Romanian; no single major parameter either.

(ii) Aissen's vague prominence is the right notion; should be deconstructed in terms of a series of parameters.

(iii) Accounting for presence of DOM in scalar terms, as Aissen does, is the right approach; what we have is interaction of various scales with varying importance; such a scalar approach makes important predictions (intra- and cross- linguistically)

(iv) Referential stability scales are among the scales that measure prominence.

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