The Definite Determiner as a Modifier

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Goals of the talk

1. Propose that the definite determiner (D) performs the function of contextually restricting the domain of quantificational determiners (Q-dets). Here we examine data from Salish, Greek, Basque (Mathewson 2001, Giannakidou 2004, Etxeberria 2005, 2008, to appear).

2. Formalize the domain restricting function D_{DR} as a type-preserving function, i.e as a modifier (building on Westerståhl 1984). Crucially, D_{DR} can modify either the NP argument, or the Q-det itself. The Q-det that undergoes D_{DR} becomes referential.

3. Discuss how the domain restricting function correlates with the weak-strong distinction: only strong Q-dets undergo D_{DR} (as seen in Greek and especially Basque; Etxeberria 2005, to appear). Indefinites cannot be domain restricted via D_{DR}, or any other way.

4. Distinguish domain restriction from specificity. The former is a presupposition—thus an inference that must be met at the common ground—but the latter is only a *felicity condition* (in the sense of Ionin 2006) stemming for the speaker's knowledge only. Our focus here is on the claim (Martí to appear) that Spanish *algunos* is domain restricted.

5. Address the role of plurality in specificity marking, and connect it to associative plurals in Japanese (Nakanishi and Tomioka 2004).

Implications

1. Contextual restriction is syntactically more real than one would have expected had the phenomenon been primarily pragmatic (as in Recanati 2002, or *Relevance* theorizing).

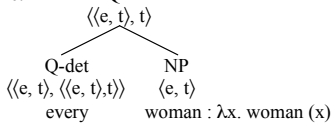
2. Second, the definite determiner crosslinguistically systematically functions as a domain restrictor. In this use, D is a modifier supplying C and can systematically apply to the Q-det itself (*pace* Stanley 2002, Stanley and Szabó 2000).

3. This result emphasizes, that the Q-det is the place where conditions on the use of variables must be stated (resonating with much recent literature: Farkas 2002, Giannakidou 1998, 2004, 2008, Matthewson 1998, Martí 2008, among others).

1 The debate: context and the domains of quantifiers

☞ Classical GQ theory (Montague 1974, Barwise & Cooper 1981, Zwarts 1986, Westerståhl 1985, Partee 1987, Keenan 1987, 1996, Keenan & Westerståhl 1997, among many others).

(1) a. [[every woman]] = $\lambda P.\ \forall x.\ \text{woman}(x) \rightarrow P(x)$
b. [[every]] = $\lambda P.\ \lambda Q.\ \forall x.\ P(x) \rightarrow Q(x)$
c.



☞ The weak-strong distinction (Milsark 1974)

(2) a. #There are **most** women in the garden.
b. #There is {**every/each**} woman in the garden.
c. #There is **the woman** in the garden.
d. There are {**three/some/few/several**} women in the garden.

☞ Domains of Q-dets are contextually restricted: e.g. by covert domain variables at LF (Partee 1989, von Fintel 1994, 1998, Stanley 2002, Stanley and Szabó 2000), or by context directly (via e.g. *free enrichment* as in Recanati 2002 and others).

(3) In the dinner party we organized last night, every student had a great time.
(4) a. $\forall x$ [$\text{student}_{f(x)}$] had a great time.
b. $\forall x$ [student_{c}] had a great time.

(5) $[\![[\text{student}_{f(x)}]]\!] = [\![\text{student}]\!] \cap \{x: x \in c(f)(c(i))\}$ (Stanley 2002: (9))
(6) no student = [no f(x)] (student) (Martí 2002: 5: (19))

☞ Westerståhl 1985: the definite article introduces a context set C

What we see in this paper provides novel evidence for the LF-based, and indeed for the claim that domain restriction is a property of the quantifier, at least in some cases.

2 St'át'imcets (SS) data (Matthewson 2001)

In SS, quantifiers in argumental phrases must always appear with a D.

(7) a. Léxlex [tákem **i** smelhmúlhats-**a**]
intelligent [all D.pl woman(pl)-D]
'all of the women are intelligent.'
b. * léxlex [tákem smelhmúlhats]

intelligent [all woman(pl)]

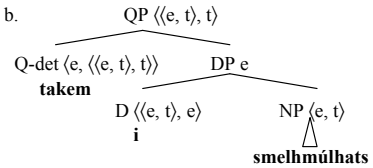
(8) a. Úm'-en-lhkan [zi7zeg' **i** sk'wemk'úk'wm'it-**a**] [ku kándi]
give-tr-1sg.subj [each D.pl child(pl)-D] [D candy]
'I gave each of the children candy.'
b. * Úm'-en-lhkan [zi7zeg' sk'wemk'úk'wm'it] [ku kándi]
give-tr-1sg.subj [each child(pl)] [D candy]

- Matthewson (2001): the NP argument of the Q-dets is contextually restricted.
- Quantification in languages proceeds in two steps (≠ the standard analysis of Generalized Quantifiers; cf. Montague 1973, Barwise & Cooper 1981, Keenan & Stavi 1986):

(i) the D combines with the NP predicate to create a DP (type *e*);
(ii) the created object is taken as an argument by the Q-det of type ⟨e, ⟨⟨e, t⟩, t⟩⟩, and this combination yields a generalized quantifier ⟨⟨e, t⟩, t⟩.

(9) a. [$_{\text{Q-detP}}$ tákem **i** smelhmúlhats-**a**]
[all D.pl woman (pl)-D]

b.



D in Matthewson's account is, crucially, the regular *et,e* (iota) function:.

(10) [[smelhmúlhats (pl.)]] = [[*]] ([[smúlhats (sg.)]]) 'women'
(11) [[X … a_k]] ^{g} = λf ∈ D_{et} (g(k)) (f) (Matthweson 2001: (18))

The index of D specifies which choice function will be used; *g* is an assignment function, from indices to choice functions, thus *g(k)* is a choice function of type *et,e.*

Important:

This structure, where the argument of the Q-det is *e*, is proposed by Matthewson as universal!

Empirical problems with this (Giannakidou 2004, Etxeberria 2005):

One of the predictions of Matthewson's proposal (in (9b)) is that Q-dets should be able to combine with definites crosslinguistically. However, this prediction is not borne out.[1]

[1] Many other languages show the same behaviour, e.g. Dutch or Catalan.

English:
(12) a. * every the boy
b. * most the boys
c. * many the boys
d. * three the boys
f. all the boys

Spanish:
(13) a. * cada los chicos
lit.: 'each the boys'
b. * la majoria los chicos
lit.: 'most the boys'
c. * muchos los chicos
lit.: 'many the boys'
d. * tres los chicos
lit.: 'three the boys'
f. todos los chicos
'all the boys'

Greek:
(14) a. * kathe to aghori
lit.: 'every the boy'
b. * merika ta aghoria
lit.: 'several the boys'
c. * tria ta aghoria
lit.: 'three the boys'
d. ola ta aghoria
'all the boys'

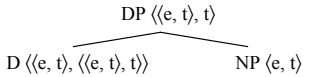
3. D as a domain restriction

3.1 Reinterpreting Salish: Giannakidou 2004

Idea:

Giannakidou (2004), building on Westerstähl: the definite article supplies a context set C!

(15)



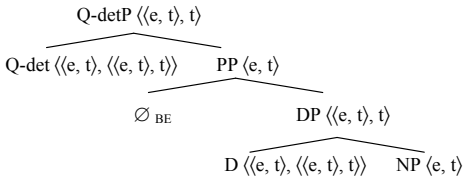
(16) [[X... a]] = λP λQ {x: C(x)=1 & P(x) =1} ⊆ {x: Q(x)=1}
(17) [[**ti** smúlhats-**a**]] = λP {x: C(x)=1 & woman (x) =1} ⊆ {x: P(x)=1}
'D woman'

D creates a generalized quantifier that contains C!

STEP 2: the DP undergoes type shifting (from ⟨⟨e, t⟩, t⟩ to ⟨e, t⟩ (applying BE)) in order to combine with the Q-det (Partee 1987).

(18) BE: ⟨⟨e, t⟩, t⟩ → ⟨e, t⟩: $\lambda P_{et,t}$ [λx [{x}∈ P]]
(Matthewson claims that there is no BE in Salish, but we maintain a uniform approach here). BE will be covert in this language.

(19)



⇒ There are no overt partitives in SS.
⇒ SS Q-detPs are **partitive structures**.
⇒ Overt type-shifters block covert shift (Chierchia 1998); languages with overt partitive prepositions *-of-* (English, Greek, Spanish, Basque, etc.) block the covert shift.

3.2 Domain restricting D as a modifier function

We propose that D functions not as an individual forming function *et,e,* but as a function that preserves the type of its argument, and modifies it by supplying the contextual restriction C.

3.2.1 When D modifies the NP argument:

(20) $[\![D_{DR}]\!] = \lambda P_{et}\, \lambda x\, P(x) \cap C(x)$

The D in SS exhibits this case. It is a type-preserving function, yielding a contextually salient set of women as the domain of *takem* 'all'.

(21) Modifier semantics for *i…a*
$[\![$ i... a $]\!] = \lambda P_{et}\, \lambda x\, P(x) \cap C(x)$

(22) Contextual *Restrict* ([λx NP(x)], C) = λx NP(x)∧ C(x)
(Giannakidou 2004: (31), following Cheng and Ladusaw 2003)

Next, we identify another manifestation of the modifier function of the domain restricting D: restricting the Q-det itself.

3.2.2 Greek and Basque: D on the quantificational determiner

Crosslinguistically, D doesn't always appear with the nominal. It may appear with the Q-det!

St'át'imcets (Matthewson 1998, 1999, 2001):
(23) a. **i** tákem-**a** smúlhats (Matthewson 2001: 151, fn.5)
D.pl all-D woman

'all of the women'
b. **i** zí7zeg'-**a** sk'wemk'úk'wm'it (Matthewson 1999: 41c)
D.pl each-D child(pl)
'each of the children'

Greek (Giannakidou 2004):
(24) a. **o** kathe fititis
D.sg every student
'each student'
b. kathe fititis; *kathe **o** fititis
every student

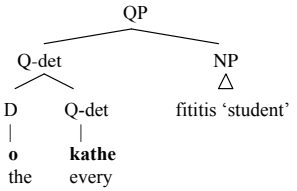
Basque (Etxeberria 2005, to appear-a):
(25) a. mutil guzti-**ak**
boy all-D.pl
'all of the boys'
b. *mutil guzti; *mutil-**ak** guzti

☞ Proposal: D attaches syntactically to the Q-det (Giannakidou 2004, Etxeberria 2005):

(26) $[\![D_{DR}]\!] = \lambda Z_{et,ett}\, \lambda P_{et}\, \lambda Q_{et}\, Z\ (P \cap C)\ (Q)$; where Z is the relation denoted by Q-det

(27) a. $[_{QP}\, o_{\ D} + kathe_{\ Q\text{-}DET}\ [_{NP}\, fititis_N]]$
b. o kathe fititis = [kathe (C)] (student) 'each student'

(28)



a. Basque: ikasle guzti-ak = (ikasle) [guzti (C)]
Greek: o kathe fititis = [(C) kathe] (fititis)
SS: i zí7zeg'-a sk'wemk'úk'wm'it = [(C) zí7zeg'] (sk'wemk'úk'wm'it)
b. [[Q-det]] = λP λQ . ∀x P(x) → Q(x)
c. [[D]] = $\lambda Z_{et,ett}\, \lambda P_{et}\, \lambda Q_{et}\, Z\ (P \cap C)\ (Q)$; Z the relation denoted by Q-det
d. [[o kathe]] = λP λQ. ∀x (P(x) ∩ C(x)) → Q(x)

D_{DR}-ing a Q-det results in a determiner that will come with a requirement that there be a non-empty domain for it to quantify over. This requirement is a presupposition!

4 The Q-det created via D is referential

(29) Presuppositionality of determiners
A determiner/quantifier δ is presuppositional iff for all A, B ⊆ D, if A = ∅ then, <A,B> ∉Dom(δ).
(based on Heim and Kratzer 1998:163)

(30) *(Non)veridicality of determiners and quantifiers* **(**Giannakidou 1999**)**
A determiner/quantifier δ is veridical iff it holds that:
$[\![\delta\ NP\ VP]\!]_c = 1 \rightarrow \exists x\ NP\ (x)$; otherwise, δ is nonveridical.
"→" means "presupposes" or "entails"

(31) Every faculty member that lives in the neighborhood got invited to the party;
which means zero, since no faculty member lives in this neighborhood!

(32) All faculty members that live in the neighborhood got invited to the party;
which means zero, since no faculty member lives in this neighborhood!

☛**Each** and **both** come out as veridical (Giannakidou 1999)!

(33) **O kathe fititis** ap' aftin tin gitonia irthe sto parti.
Diladi kanenas dhen irthe, afu den iparxun fitites edo giro.
Each student in this neighborhood came to the party;
so no students came, since there are not students in this neighborhood!

(34) **Ki i dhio fitites** ap'aftin ti gitonia irthan sto parti;
Diladi kanenas dhen irthe, afu den iparxun fitites edo giro.
Both students in this neighborhood came to the party;
so no students came, since there are not students in this neighborhood!

Notice Greek: **both** "ke i dhio" lit. 'and **the** two': again D is used!

Basque (examples from Etxeberria to appear):

(35) Akats **guzti-ak/gehien-ak** aurkitzen badituzu, sari bat emango dizut.
mistake all-D.pl.abs/most-D.pl.abs find if-aux. reward one give aux
Baina gerta liteke bat-ere akats-ik ez egotea.
but happen aux one-too mistake-part no be-nom
'If you find all of the/most of the mistakes, I'll give you a reward. # But there may be no mistakes at all.'

(36) Akats **batzuk/asko** aurkitzen badituzu, sari bat emango dizut.
mistake some/many find if-aux. reward one give aux.
Baina gerta liteke bat-ere akats-ik ez egotea.
but happen aux one-too mistake-part no be-nom
'If you find some/many mistakes, I'll give you a reward. But there may be no mistakes at all.'

Consequence:
If D-attachement to Q-dets is systematic, this means that some determiners come as "inherently" domain restricted and veridical.

5 Contextual restriction via D and the weak-strong distinction

Weak Q-dets cannot be modified via D

(37) * **o kapjios** fititis '*the some student' (Greek)
* **i meriki fitites** '*the several students'

(38) * ikasle **batzuk-ak** '*the some students' (Basque)

vs.

(39) The [three students] that came to the party
The [few students] that came to the party were very annoying.

Syntactically these are DPs, not QPs.

5.1. Asymmetries among Basque quantifiers in the co-occurrence with the D

☞ Basque strong quantifiers must appear with the D.

(40) a. [Ikasle **guzti-ak**] berandu etorri ziren.
[student all-D.pl(abs)] late come aux.past.pl
'All of the students came late.'
b. *[Ikasle **guzti**] berandu etorri ziren.

(41) a. [Ume **bakoitz-ak**] goxoki bat jan zuen.
[child each-D.sg(erg)] candy one eat aux.past.sg
'Each student ate a candy.'
b. *[Ume **bakoitz**] goxoki bat jan zuen.

☹ Weak quantifiers, on the other hand, do not appear with the D.

(42) a. [**Zenbait** politikari] berandu iritsi ziren.
[some politician] late arrive aux.pl.past
'Some politicians arrived late.'
b. *[**Zenbait**(**-ak**) politikari(**-ak**)] berandu iritsi ziren.

(43) a. [Politikari **asko**] berandu iritsi ziren.
[politician many] late arrive aux.pl.past
'Many politicians arrived late.'
b. *[Politikari(**-ak**) **asko**(**-ak**)] berandu iritsi ziren.

5.2. Existential sentences

As expected, D-modified strong quantifiers are not accepted in existential sentences.

(44) *Badira zientzilari **guzti-ak/bakoitz-a** laborategi honetan.
yes-be.pl scientist all-D.pl/each-D.sg laboratory this-in
'*There are all of the scientist/each scientist at this laboratory.'
(45) Badira zientzilari **batzuk/asko** laborategi honetan.
yes-be.pl scientist some/many laboratory this-in
'There are some/many scientists at this laboratory.'

5.3. Predicative use

Strong quantifiers cannot appear in predicative positions, but weak quantifiers can.

(46) *Gonbidatuak [neska **guzti-ak**/**den-ak**/**bakoitz-a**] ziren.
guest.D.pl [girl all-D.pl/all-D.pl/each-D.sg] be.past
'The guests were all of the girls/all of the girls/each girl.'
(47) Gonbidatuak [neska **asko/batzuk/gutxi**] ziren.
guest.D.pl [girl many/some/few] be.past
'The guests were many/some/few girls.'

Questions:

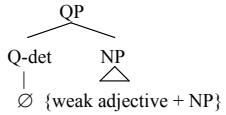
1. Why can't weak Q-dets be D-restricted?
2. What does this tell us about the nature of weak Q-dets?
3. Must contextual restriction of weak determiners be universally excluded from the grammar?

5.4 Weak determiners are NOT determiners

This is a recurring idea (e.g. Link 1984 analyzes cardinals as adjectives, see also Kamp and Reyle 1993, and others; in Greek, weak Q-dets are argued to be adjectival in Giannakidou and Merchant 1997; Etxeberria makes the case for Basque 2005, to appear).

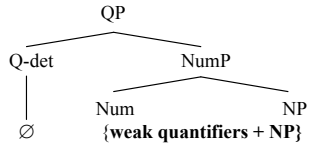
Recall: Weak Q-det can be used in predicative positions

(48)



We adopt Etxeberria's (2005, 2008, to appear) analysis that at least in Basque weak determiners are cardinality predicates:

(49)



☺ Since weak determiners are not Q-dets, they are not of the appropriate input to be modified by D_{DR}!

Since in the languages we are looking at D cannot apply on the nominal (NP) argument, we do not expect weak quantifiers to come with these!

☺ In SS they do, as expected!

(50) cw7it i smelhmúlhats-a qwatsáts (Matthewson 1998: p.292)
many D.pl woman(pl)-D left
'Many women left'

6 "Indefinite" determiners: domain restriction and specificity

Question: Is it plausible to assume domain restriction for weak quantifiers and indefinites?

Given our analysis thus far the answer should be: NO! The consensus in the literature also seems to be that weak quantifiers can be cardinal or proportional—and it is only in the latter case that they are restricted.

6. 1 Martí's analysis of *algunos*

Example from Martí (to appear, (2)):

(51) {Teachers A and B are on an excursion with a group of children, of whom they are in charge. Teacher A comes to teacher B running:}

a. Teacher A: ¿Te has enterado? *Algunos* niños se han
cl have found.out children cl have
perdido en el bosque
gotten.lost in the forest
b. Teacher A: ¿Te has enterado? *Unos* niños se han perdido en el bosque
'Have you heard? *Unos*/*algunos* children got lost in the forest'

The *algunos* version is not compatible with the continuation below:

(52) {After a few hours, teachers A and B discover that none of the children from their group had actually gotten lost; it was children from a neighboring village:}
Teacher A: We are so fortunate that what I said turned out to be false – we don't have to give bad news to any parent!

Hence, *algunos* seems to be intepreted as a partitive.

Does this mean that it is contextually restricted? This is what Martí proposes (to appear: 26, 27): ***alg-*** contributes domain restriction.

Do we want this result? We think not!

6.2 *Alg-* does not generalize

(53) **algdos,* *a*lgmuchos*

☹ If *alg* is a domain restrictor, we predict a more general application— like our D_{DR}. The lack of systematicity is unexpected if *alg* is a domain restrictor—rather it seems to suggest that it is a lexical fact about *algunos.*

6.3 *Algunos* has unrestricted uses

In existential sentences: see Gutiérrez-Rexach's (2001: 140) and more examples:

(54) Context: Upon arriving at the school and seeing several groups of boys fighting, the principal, tired and sick of seeing the same scene every day, mumbled to himself: "What a way to begin the day!". In a panic, he realised that:

a.	...había	***algunos***	chavales	demasiado	cerca de	la carretera
	there.were	algunos	boys	too	close of	the road

b. ...había ***unos*** chavales demasiado cerca de la carretera
'there were some boys too close to the road'

In (a), the boys who are too close to the road can be some of those who are fighting, but they don't have to be.

(55) a. #There are some of the boys in the elevator.
b. #There are three/several/few of the boys in the elevator.
c. #There is each boy in the elevator.
d. #There are the boys in the elevator.

Partitives, definites, and D-linked quantifiers are all contextually restricted via D, and ruled out. *Algunos*, by contrast, is fine. This fact in itself sets *algunos* apart from the members of the contextually restricted class, and it should make us reluctant to treat it on a par.

6.4 Singular versus plural

Singular *algún* does not seem to be contextually restricted (Etxeberria to appear a):

(56) Upon arriving at the school and seeing several groups of boys fighting, the principal, tired and sick of seeing the same scene every day, mumbled to himself: "What a way to begin the day!". In a panic, he realised that…

a. … *algún*	chaval	estaba	demasiado	cerca	de	la carretera
	boy	was	too	close	of	the road
b. … *un*	chaval	estaba	demasiado	cerca	de	la carretera
	boy	was	too	close	of	the road

☹ Neither *algún chaval* nor *un chaval* make necessarily reference to one of the boys who were fighting and that the principle saw; in order for them to make reference to that set of boys, we would use the partitive –in both cases-, i.e. *alguno/uno de los chavales*.

☞ Alonso-Ovalle & Menéndez-Benito (2003: ex.5)).

(57) María está saliendo con **algún** chico del departamento de lingüística.
Mary is going out with some guy of the department of Linguistics

Equivalent to: *some guy or other; I don't who know the guy is* (epistemically non-specific use, Haspelmath 1997, Giannakidou to appear).

Conclusions:

1. *Alg* indefinites can have purely cardinal as well as specific readings.
2. The plural, and not *alg*, is responsible for making *algunos* more readily connected to a discourse salient set.

6.5 Our proposal: *algunos* as a specificity marker

☞ Specificity: **targeted speaker** reference
☞ Definiteness and D_{DR}: **speaker and hearer** reference

(58) [[*algunos* NP VP]] is defined in a context *c* only if the felicity condition (i) is fulfilled:

i. [[*algunos* NP]] is intended by the speaker (s_c) in a context c to refer to some non-singleton set P_c of individuals in c.
ii. If this condition is met, [[*algunos* NP VP]] expresses a proposition $\exists x$ [P(x) ∧ NP(x) ∧ VP(x)] that is true if the assignment function *g* assigns at least one value for *x* that maps the sentence onto TRUE, and false otherwise.

☺ Happy results:

1. *Algunos* is added to the repertory of specificity markers that we find in various languages.
2. The choice between *algunos* and *unos* thus is speaker regulated, and the specificity analysis of *algunos* can help us understand why *unos* is "doomed" to the non-specific realm.

6.6 Why the plural?

Why doesn't the specific/non-specific distinction surface in the singular between *un* and *algún*?

Proposal: Because the Spanish plural has associative use!

☞Associative plurals in Japanese (discussion from Nakanishi and Tomioka 2004: 128-130):

(59) Taro-**tati-**wa moo kaetta.
Taro-TATI-Top already went home
'The group of people represented by Taro went home already'; or
'Taro *and the others associated with him* went home.'

An associative plural allows association of Taro with other individuals that are not Taro, but have some contextually determined relation to him.

(60) Otokonoko-tati-ga asonde-iru.
boy-TATI-Nom play-Prog
'(The) boys are playing.'
The set *boys-tati* can include non-boys associated with the boys.

(61) a. **boy-*tati*** = λY. |Y| ≥2 & boy′ represents Y <e,t>
b. ∃: <e,t> → GQ ∃X = λP∃y[X(y) & P(y)]
c. **boy-*tati*** = λP. ∃Y [|Y| ≥2 & boy′ represents Y & P(Y)] <<e,t>,t>
d. **boy-*tati* + be playing** = ∃Y [|Y| ≥2 & boy′ represents Y & be.playing′(Y)]
e. There is Y such that the cardinality of Y is two or more and boy′ represents Y and Y is playing.

☺ This association is the effect of the plural, and not of *alg*. In the singular pair *algún-un* there is no specificity effect because there is no plural.

7 Conclusions

1. Contextual restriction of a quantifier is grammatically encoded. The means identified here is the definite determiner, and its equivalents across languages.

2. D can restrict either the NP argument or the Q-det itself. Only strong Q-dets can be D-restricted.

3. Caution is advised in navigating the subtle, yet real, difference between specificity and contextual domain restriction. The former concerns speaker reference only, whereas the latter draws from *familiar,* i.e. common ground, speaker *and* hearer reference.

4. From this perspective, contextual domain restriction—which relies on a presupposition of a contextually salient domain—is *not* a property that indefinites and existential (weak) quantifiers as a class are expected to have, since these, even in the specific use, simply assert existence. It is then no surprise that the domain restricting function of D applies only to strong quantifiers.

References:

Adams, N. (2005). *Quantification and partitivity in Zulu*. Ms. University of Chicago.
Alonso-Ovalle, L. & P. Menendez-Benito (2003). 'Some Epistemic Indefinites', in Makoto K. & S. Kawahara (eds.), Proceedings of the NELS, 33. Amherst, MA: GLSA, 1–12.
Artiagoitia, X. (1998). 'Determinatzaile Sintagmaren Hipotesia Euskal Gramatikan', in *Uztaro* 27. 33-61.
---- (2002). 'The Functional Structure of Basque Noun Phrases', in Artiagoitia, X. et al. (eds.), *Erramu Boneta: Festschrift for Rudolf P. G. de Rijk*, Vitoria-Gasteiz: ASJU (EHU-UPV). 73-90.
---- (2003). 'Oharrak determinatzaileen inguruan: *Oro*-k dioena', in J. M. Makatzaga & B. Oyharçabal (eds.), *Euskal Gramatikari eta Literaturari Buruzko Ikerketak XXI. Mendearen Atarian Iker 14 (1)*.
Barwise, J. & Cooper, R. (1981). 'Generalized quantifiers and natural language', *L&P* 4: 159-219.
Beghelli, F. & T. Stowell (1997). 'Distributivity and Negation', in Szabolcsi, A. (ed.), *Ways of Scope Taking*, Dordrecht: Kluwer. 71-107.
Bosque, I. (ed.) (1996) *El Sustantivo sin Determinación. La Ausencia de Determinante en la Lengua Española*. Madrid: Visor Libros.
Cheng, L. (to appear). 'On *every* type of quantificational expression in Chinese', in Giannakidou, A. & M. Rathert (eds.), *QP Structure, Nominalizations, and the Role of DP*, Oxford: Oxford University Press. Oxford Studies in Theoretical Linguistics Series.
Chierchia, G. (1998). 'Plurality of mass nouns and the notion of 'semantic parameter'', in S. Rothstein (ed.), *Events and Grammar*. Dordrecht: Kluwer, 53-103.
Chung, S. & B. Ladusaw (2003). *Restriction and Saturation*, Cambridge, MA: MIT Press.
Endriss, C., S. Hinterwimmer, and Sophie Repp. (2007). Specific indefinites as topics. Presentation at the *Workshop on Funny Indefinites,* ZAS Berlin 2007.
Etxeberria, U. (2005). *Quantification and Domain Restriction in Basque*, Doctoral dissertation. University of the Basque Country (UPV-EHU).
---- (2007). 'Existentially interpreted definites', in Puig-Waldmuüller, E. (eds.), *Proceedings of Sinn und Bedeutung 11*. Barcelona: Universitat Pompeu Fabra. 229-243.
---- (2008). 'On quantification in Basque and on how some languages restrict their quantificational domain overtly', in Matthewson, L. (ed.), *Quantification: A crosslinguistic perspective*. Emerald. 225-276.
---- (to appear). 'Contextually restricted quantification in Basque', in Giannakidou, A. & M. Rathert (eds.), *QP Structure, Nominalizations, and the Role of DP*, Oxford: Oxford University Press. Oxford Studies in Theoretical Linguistics Series.
Farkas, D. (2002). 'Varieties of Indefinites', in *Proceedings of SALT 12*, Ithaca, NY: CLC Publications, Cornell University.
von Fintel, K. (1994). *Restrictions on Quantifier Domains*. Doctoral dissertation, UMass.
---- (1998). *The semantics and pragmatics of quantifier domains*. Ms. MIT.
Giannakidou, A. (1998). *Polarity Sensitivity as (Non)veridical Dependency*, John Benjamins.
---- (1999). 'Affective dependencies', *Linguistics & Philosophy* 22: 367-421.
---- (2004). 'Domain restriction and the arguments of quantificational determiners', in *Proceedings of SALT 14*. Dept. of Modern Languages, Cornell University, Ithaca, NY, 110-128.

---- (to appear). Negative polarity and positive polarity: licensing, variation, and compostionality. To appear in von Heisinger, Maienborn, and Portner (ed.), *The Handbook of Natural Language Meaning (second edition)*. Mouton de Gruyter.
Giannakidou, A. and L. Cheng. 2006. (In)definiteness, polarity, and the role of wh-morphology in free choice. *Journal of Semantics* 23:135-183.
Giannakidou, A. & J. Merchant (1997). 'On the interpretation of null indefinite objects in Greek', in *Studies in Greek Linguistics* 18: 141-154. Thessaloniki: University of Thessaloniki.
Giannakidou, A. & M. Rathert (to appear). *QP Structure, Nominalizations, and the Role of D*, Oxford: Oxford University Press.
Gutierrez-Rexach, J. (2001). 'The Semantics of Spanish Plural Existential Determiners and the Dynamics of Judgment Types', in *Probus* 13. 113-154.
Haspelmath, M. (1997). *Indefinite pronouns*, Oxford: Oxford University Press.
Heim, I. (1982). *Semantics of Definite and Indefinite Noun Phrases*, Doctoral dissertation, MIT.
Heim, I. & A. Kratzer (1998). *Semantics in Generative Grammar*, London: Blackwell.
de Hoop, H. (1995). 'On the Characterization of the Weak-Strong Distinction', in Bach, E., E. Jelinek, A. Kratzer & B. H. Partee (eds.), *Quantification in Natural Language*, Dordrecht: Kluwer. 421-450.
Horn, L. R. (1997). 'All John's children are as Bald as the King of France: Existential import and the geometry of opposition', in *Chicago Linguistics Society* 33: 155-179.
Ionin, T. (2006). '*This* is definitely specific: Specificity and definiteness in article systems', in *NLS* 14: 175-234.
Kamp, H. (1981). 'A theory of truth and semantic representation', in Groenendijk et al. (eds), *Formal Methods in the Study of Language*. Amsterdam: Mathematical Center. 1-41.
Kamp, H. & Reyle U. (1993). *From Discourse to Logic: Introduction to Model Theoretic Semantics of Natural Language, Formal Logic and Discourse Representation*, Kluwer.
Keenan, E. L. (1987). 'A Semantic Definition of "Indefinite NP"', in Reuland, E. & A. G. B. ter Meulen (eds.), *In the Representation of (in)definiteness*, Cambridge, MA: MIT Press. 286-317.
---- (1996). 'The Semantics of Determiners', in Lappin, S. (ed.), *The Handbook of Contemporary Semantic Theory*, Oxford: Blackwell Publishers. 41-63.
Keenan, E. L. & Stavi, J. (1986). 'A semantic characterization of natural language quantifiers', *Linguistics & Philosophy* 9: 253-326.
Keenan, E. L. & D. Westerståhl (1997). 'Generalized Quantifiers in Linguistics and Logic', in van Benthem, J. & A. G. B. ter Meulen (eds.), *Handbook of Logic and Language*, Elsevier. 839-893.
Kleiber, G. (1990). *L'article LE Générique. La Généricité sur le Mode Massif*, Genève-Paris: Droz.
Ladusaw, W. (1982). 'Semantic constraints on the English partitive construction', in D. Flickinger et al. (eds.), *Proceedings of WCCFL* 1, 231-242.
Landman, F. (2002). 'Predicate-argument mismatches and the adjectival theory of indefinites', in M. Coene & Y. D'Hulst (eds.), *From NP to DP*.
Link, G. (1984). 'The Logical Analysis of Plurals and Mass Terms: A Lattice Theoretical Approach', in Bäuerle et al. (eds.), *Meaning, Use, and Interpretation of Language*,Walter de Gruyter. 302-323.
Martí, L. (2003). *Contextual Variables*. Doctoral dissertation, UConn.
Martí, L. (2008). 'Restoring Indefinites to Normalcy: An Experimental Study on the Scope of Spanish *Algunos*', in *Journal of Semantics* 24(1): 1-25.
Martí, L. (to appear). 'Contextual restriction on indefinites', in Giannakidou, A. & M. Rathert (eds.), *QP Structure, Nominalizations, and the Role of DP*, Oxford: Oxford University Press.
Matthewson, L. (1998). *Determiner Systems and Quantificational Strategies: Evidence from Salish*, The Hague: Holland Academic Graphics.
---- (1999). 'On the interpretation of wide-scope indefinites', *NLS* 7: 79-134.
---- (2001). 'Quantification and the nature of crosslinguistic variation', *NLS* 9: 145-79.
---- (2008). *Quantification: A crosslinguistic perspective*. Emerald.
McNally, L. (to appear). 'Existential sentences', in Maienborn, C., K. von Heusinger & P. Portner, (eds). *Semantics: An International Handbook of Natural Language Meaning*. Berlin: de Gruyter.

Milsark, G. (1977). 'Toward an Explanation of Certain Peculiarities of the Existential Construction in English', in *Linguistic Analysis* 3-1. 1-28.
Montague, R. (1974). 'The proper treatment of quantification in ordinary English', in Hintikka J., J. Moravcsik, & P. Suppes (eds.), *Approaches to Natural Language*. Dordrecht: D. Reidel.
Nakanishi, Kimiko, and Satoshi Tomioka. 2004. Japanese plurals are exceptional. *Journal of East Asian Linguistics* **13**, 113–140.
Partee, B. H. (1987). 'Noun phrase interpretation and type-shifting principles', in Groenendijk J., D. de Jongh, & M. Stokhof (eds.), *Studies in Discourse Representation Theory and the Theory of Generalized Quantifiers*. Dordrecht: Foris, 115-43.
---- (1988). 'Many quantifiers', in Powers J. & K. de Jong (eds), *Proceedings of Fifth ESCOL*. The Ohio State University, Columbus, 383-402.
Recanati, F. (1996). 'Domains of discourse. *Linguistics & Philosophy* 19:5. 445-475.
---- (2002). 'Unarticulated Constituents', in *Linguistics & Philosophy* 25. 299-345.
Stanley, J. (2002). 'Nominal restriction', in G. Peters & G. Preyer (eds.), *Logical Form and Language*. Cambridge, MA: Oxford University Press, 365-88.
Stanley, J. & Szabó, Z. G. (2000). 'On quantifier domain restriction', *Mind & Language* 15: 219-61.
Westerståhl, D. (1984). 'Determiners and context sets' In van Benthem, J. and A. ter Meulen (eds), *Generalized quantifiers in Natural Language,* Foris, Dordrecht. 45-71.
Zwarts, J. (1986). *Categoriale Grammatica en Algebraische Semantiek. Een studie naar negatie en polariteit in het Nederlands.* PhD thesis, University of Groningen.