Handout 1: Cross-Sentential and Intra-Sentential Evidence for Decomposing Quantification and Syllabus

Seminar in Semantics: Decomposing Quantification (LING-239) Instructor: Adrian Brasoveanu

UC Santa Cruz, Fall 2008

Course Description

The seminar will examine phenomena like correlatives across domains (individuals, times & eventualities, possible worlds and degrees) and the interpretation of same/different in quantificational contexts that support the idea that natural language quantification is a composite notion, to be decomposed / analyzed in terms of discourse reference to dependencies that is multiply constrained by the various components that make up a quantifier. We will examine a variety of languages and a variety of static and dynamic approaches to these phenomena.

1 Correlatives Across Domains

Correlatives – "biclausal topic-comment structures [...] [in which] the dependent clause introduces one or more topical referents to be commented on by the matrix clause, where each topical referent must be picked up by - correlated with - an anaphoric proform." (Bittner 2001: 39).

1.1 Correlatives in the Temporal Domain: When-Clauses

- (1) When they built the 39^{th} Street bridge...
 - a. ...a local architect drew up the plans.
 - ${\rm b.}$...they used the best materials.
 - c. ...they solved most of their traffic problems.

(Moens & Steedman 1988: 15, (1))

"A when-clause behaves rather like one of those phrases that are used to explicitly change topic, such as and your father in [example (2) below] [...]. A when-clause does not require a previously established temporal focus [in the sense of: focus of attention], but rather brings into focus a novel temporal referent [...]." (Moens & Steedman 1988: 22-23)

(2) And your father, how is he? (Moens & Steedman 1988: 22, (47))

The examples in (1) above have a referential, definite interpretation – we refer to that particular time when they built the 39^{th} Street bridge. Another example of a referential when-clause is provided in (3) below, which contrasts with the quantificationally interpreted – and minimally different – when-clauses in (4) and (5).

(3) When the Smiths threw a party, they invited all their friends. (Partee $1984:\ 260,\ (18b)$)

- (4) Back in New Orleans, when the Smiths threw a party, they invited all their friends.
- (5) When the Smiths throw a party, they invite all their friends.

The question is: how can we put together the topic-comment characterization of referentially-interpreted when-clauses and the availability of quantificational interpretations for such clauses?

Other examples of quantificational when or 'when-based' clauses are provided below.

- (6) When Mary telephoned, Sam was always as leep. (Partee 1984: 246, (5b))
- (7) When John makes a phone call, he always lights up a cigarette beforehand. (Partee 1984: 273, (32))
- (8) Whenever Mary telephoned, Sam was asleep. (Partee 1984: 246, (5a))
- (9) Whenever Mary wrote a letter, Sam answered it two days later. (Partee $1984:\ 246,\ (5c)$)
- (10) Whenever John got a letter, he answered it immediately. (Partee 1984: 246, (5d))
- (11) Whenever Mary telephoned on a Friday, Sam was asleep. (Partee 1984: 246, (6d))
- (12) [If Mary telephoned on a Friday, it was (always) Peter that answered. (Partee 1984: 246, (6c))]

1.2 Correlatives in the Modal Domain: Conditionals

"[E]xplicit if-clauses may introduce some hypothetical scenario by definite reference, just as when-clauses introduce a time. Such hypotheses may be recovered for modals, within and across sentences, as shown by [(13)] (from the Brown Corpus)." (Stone 1997: 6)

(13) New York Central Railroad president Alfred E. Perlman said Tuesday his line would face the threat of bankruptcy IF the Chesapeake & Ohio and Baltimore & Ohio Railroads merge. Perlman said bankruptcy would not be an immediate effect of the merger, but COULD possibly be an ultimate effect.

(Stone 1997: 6, (20))

Just as when-clauses, if-conditionals can also be interpreted quantificationally and not only referentially: "[there are] cases where multiple instantiations of the conditional are clearly intended – for example, in any conditional interpreted generically. In such sentences, the link between alternative instantiations of the antecedent and corresponding realizations of the consequent surely reflects a bound-variable interpretation of modality. A simple illustration is provided by [(14)].

(14) If a concertgoer arrives late, he or she will not be permitted into the auditorium until intermission. (Stone 1997: 7, (24))

In the intended reading of [(14)], the scenarios evoked by the antecedent and described in the consequent vary across many different concertgoers.

A more complicated illustration is given in [(15)]:

(15) If a submarine cannot self-destruct if an enemy captures it, the enemy will learn its secrets.

(Stone 1997: 7, (25))

Here the antecedent contains a constituent if-clause, if an enemy captures it, that varies across submarines much like the if-clause in [(14)] varies across concertgoers. At the same time, the modal will in the consequent describes a scenario that includes this capture of the submarine. So the interpretation of the consequent varies with the interpretation of a subconstituent of the antecedent (and not simply with the interpretation of the antecedent as a whole). Because of this, the sentence may be regarded as a exemplifying an analogue of donkey anaphora for modals." (Stone 1997: 6-7)

The non-referential, non-definite interpretation of modal anaphora is also illustrated by modal subordination: "[m]odals of possibility, meanwhile, might be said to introduce a new hypothetical scenario – one where the possibility envisaged by the modal occurs – by indefinite reference. Subsequent modals may refer to such contexts, as in Roberts's [(16)], or in [(17)] from the Brown Corpus." (Stone 1997: 6).

- (16) A wolf might walk into the house. It would eat you. (based on Roberts 1989)
- (17) There may be other 1961 state committee retirements come April 18, but they will be leaving by choice of the Republican voters. (Stone 1997: 6, (21))

The referential, definite interpretation of the modal anaphora in (13) above contrast with the non-referential interpretation of (16) and (17). For example, (16) is interpreted as shown in (18) below:

- (18) The following is a possible scenario (as far as the speaker knows): a wolf walks into the house.
 - Any such possible scenario develops as follows: the wolf featuring in it (whether it's a big wolf or a small wolf, whether it's male or female, black or grey etc.) eats you.

That is, the first sentence in (16) introduces a quantificational dependency between possibilities (i.e., possible scenarios) and individuals (namely, the individuals featuring in those scenarios) – and the second sentence in (16) elaborates on this dependency.

In fact, we can use if-clauses to further elaborate on such quantificational modal dependencies:

- (19) A wolf might walk in. If you hid from it, it would not eat you. (Stone 1997: 9, (33))
- (20) a. A wolf may come in. It will eat you ...
 - b. If it enjoys you, it will eat someone else.
 - c. Luckily it will dislike the experience: had it enjoyed you, it would have eaten someone else.

(Stone 1997: 22, (64))

"In English this structural type [i.e., correlatives] is arguably instantiated by conditionals – the dependent if-clause sets up a topical possibility, which is linked to the modal anaphor then [or simply the verbal mood] in the matrix comment. Crucially, many languages allow analogous readings with topical individuals, as in the ambiguous Warlpiri correlative [(21)] (first noted by Hale 1976)." (Bittner 2001: 39)

- (21) Maliki-rli kaji-ngki yarlki-rni nyuntu ngula-ju kapi-rna luwa-rni dog-erg same.topic-3sg.2sg bite-nonpast you dem-top fut-1sg.3sg shoot-nonpast ngajulu-rlu.

 me-erg
 - A. 'As for the dog that bites you, I'll shoot it.' (individual-based)
 - B. 'If a dog bites you, then I'll shoot it.' (modal-based) (Warlpiri, Bittner 2001: 39, (7))

"The dependent clause of [(21)] – with the complementizer kaji [...] – introduces a topical referent of some type. On reading [(21A)] the topic is a contextually prominent individual, and on reading [(21B)], a prominent possibility. In either case, the topical referent is picked up in the matrix comment by a topic

oriented anaphoric demonstrative ngula-ju, which is likewise type-neutral. So depending on the context, the topic of [(21)] may be either the most prominent dog which bites the addressee or the closest possibility that a dog may bite. The correlated comment is that the speaker will shoot the topical dog, or that in every world of the topical possibility the speaker will shoot whatever dog bites there.

The fact that one and the same sentence can have both of these readings suggests that they have essentially the same semantic representation, up to logical type." (Bittner 2001: 39)

1.3 Correlatives in the Individual Domain

In contrast to Warlpiri, the Marathi correlative morphology is sensitive to type – as shown by the j (wh-items) / t(th-items, i.e., demonstratives) paradigm in (22) below.

- (22) ja 'which' | jevha 'when' | jithe 'where' | jər 'if' | jəri 'although' tya 'that' | tevha 'then' | tithe 'there' | tər 'then' | təri 'even so' (Andrews 1975: 98 et seqq)
- (23) ja mula-ni ja muli-ca dueš kela, tya-ni ti-la marli. which boy-INST which girl-GEN hatred did, that.one.M-INST that.one.F-DAT killed 'The boy who hated the girl killed her.'
 (Marathi, Andrews 1975: 103, (108b))
- (24) mĩ jevha alo, tevha to joplela hota.

 I.INST when came, then he sleeping was
 'When I arrived, he was sleeping.'

 (Marathi, Andrews 1975: 106, (114a))
- (25) jithe sawəli hoti, tithe Ram bəsla.
 where shade was, there Ram sat down
 'Where there was shade, Ram sat down.'
 (Marathi, Andrews 1975: 106, (115a))
- (26) jər to ithə yel, tər mi tya-la goli marin. if he here comes, then I.INST he-DA bullet kill.FUT 'If he comes here, then I'll kill him.'
 (Marathi, Andrews 1975: 107, (116a))
- (27) jəri tya-ni majha kutrya-la marlə, təri m-la to awərto. although he-INST me.GEN dog-DAT killed, even so me-DAT he likes.

 'In spite of the fact that he killed my dog, I still like him.'

 (Marathi, Andrews 1975: 107, (117a))

Multiply headed (individual-based) correlatives also occur in Classical Sanskrit.

- (28) yasya yat paitṛkam ritkam, sa tad gṛhnĭta, who.GEN what.NOM paternal.NOM inheritance.NOM, he.NOM that.ACC should get, netaraḥ.
 not another

 'If someone has something as a paternal inheritance, then he should get it and not someone else.'
 (Sanskrit, Andrews 1975: 96, (101a))
- (29) yena $y\bar{a}v\bar{a}n$ $yath\bar{a}$ 'dharma dharma veha samīhitia, saevawho.INST to what extent in what manner injustice justice or is done. he exactly tatphalam $b\bar{u}nkte$ $tath\bar{a}$ $t\bar{a}vad$ amutravai. the fruits thereof enjoy.FUT in that way to that extent in the other world indeed 'If someone does good or evil to some extent and in some way, then he shall enjoy the fruits thereof in the next world to that extent and in that way.' (Sanskrit, Andrews 1975: 96, (101b))

"If the reader, upon looking at these sentences, feels at a loss as to how to interpret them, then there is a simple algorithm for constructing a paraphrase. Replace the wh words with [some-based indefinites] and recast the relative clause as a conditional. [...]

I am informed that multiple headed relative clauses in Sanskrit characteristically have this property of being 'generic' statements of laws. One might think, therefore, to derive them from conditionals in some fashion. While this might suffice in Sanskrit, we will find Marathi examples of multiple headed and multiple wh-worded relative clauses which are not generic, but rather referential.

One might also think of associating the generic anticipatory relative clause with the anticipatory wh-ever clause of English [...] [e.g., (30) below].

(30) Whoever steals my chickens, I'll set my dogs on him. (Andrews 1975: 97, (102))

We may note, however, that the wh-ever clause of English (a) allows only one wh-ever word [and] (b) does not require a correlative definite in the matrix for every wh-ever word in the subordinate clause:

- (31) *Whoever gives whatever to Lucy, she'll thank him for it. (Andrews 1975: 97, (102))
- (32) Whoever gets the job, I'll be displeased. (Andrews 1975: 97, (102))

[(32)]-like structures are impossible with these [correlative] constructions." (Andrews 1975: 96-97)

Bittner (2001) elaborates on this observation: "[...] in a well-formed correlative each coordinate of the n-tuple of topical referents introduced by the dependent clause must be picked up by an anaphor in the matrix comment [...]. Note that the correlatives need not be one-one because split antecedents are permitted, as noted by McCawley (1992) and illustrated by the Hindi example [(33)]." (Bittner 2001: 40)

(33) Jo laRkii jis laRke-se baat kar rahii hai, ve dost haiN. which girl which boy-INST talk do PROG is, those friends are 'As for the girl and the boy she is talking to, they are friends.' (Hindi, Bittner 2001: 40, (10))

"What is not permitted are dangling topical referents in the dependent clause which the matrix comment fails to address. Hence the ill-formedness of [(34)], where the comment fails to say anything about the topical boy. The minimally contrasting [(35)] is good again because the offending topical j-determiner, jis, is replaced with ek one. With this referent removed from the center of attention, the matrix comment is now properly about the j-marked topic." (Bittner 2001: 40-41)

- (34) *Jo laRkii jis laRke-se baat kar rahii hai, vo lambii hai. which girl which boy-INST talk do PROG is, that one tall.SG.F is 'As for the girl and the boy she's talking to, she is tall.'
 (Hindi, Bittner 2001: 41, (11a))
- (35) Jo laRkii ek laRke-se baat kar rahii hai, vo lambii hai. which girl one boy-INST talk do PROG is, that one tall.SG.F is 'As for the girl who's talking to a boy, she is tall.'
 (Hindi, Bittner 2001: 41, (11b))

The constraint that every *wh*-topic has to be anaphorically picked up and commented on by the matrix clause becomes obvious only with individual-based correlatives because there always is a temporal or modal anaphor in the matrix clause of temporal / modal correlatives: it's the tense / mood morphology.

The contrast between referential and quantificational interpretations of individual-based correlatives is overtly marked in Hindi by the absence vs. presence of habitual morphology, as shown in (36) and (37) below.

- (36) jo laRkii lambii hai, vo khaRii hai.
 which girl tall is, that one standing is
 'The one girl that is tall is standing.'
 (Hindi, Brasoveanu 2008a: 48, (1), based on an example in Dayal (1996))
- (37) jo laRkii lambii ho-tii hai, vo khaRii ho-tii hai. which girl tall be-HAB.F is, that one standing be-HAB.F is 'A tall girl (generally) stands (e.g., in buses with very little leg room between seats).' (Hindi, Brasoveanu 2008a: 50, (7))

The contrast between the two interpretations is not morphologically realized in Romanian, as shown in (38) and (39) below. This is very similar to the contrast between the referential and quantificational interpretations of *when*-clauses in English, which is not (necessarily) morphologically realized either, as shown in (3) vs. (4) and (5) above.

- (38) Care fată şi = a = uitat ieri haina, pe aceea o = Which girl her.DAT = HAS = forgotten yesterday coat.the, PE that one her.ACC = caută tatăl ei. look for father.the her.GEN
 'The father of the girl that forgot her coat yesterday is looking for her.'
 (Romanian, Brasoveanu 2008a: 48, (2))
- (39) PecareinterogatSecuritatea, $\hat{i}n$ acelamaiPEwhich person him.ACC = interrogated security.the, in that one not anymore HAS =amîncredere. have.1.sg trust 'I do not trust any person (whatsoever) that the secret police interrogated.' (Romanian, Brasoveanu 2008a: 48, (3))

1.4 Correlatives in the Degree Domain: Comparative Correlatives

We see the same variation between a referential and a quantificational (conditional-like) interpretation in comparative correlatives: compare the referential (40) and the quantificational (41) and (42) below.

- (40) Cuemai*înalt* fratele decît sora, With $_{\mathrm{tall}}$ brother.the than sister.the, (also) with that much is how much is more înalt tatăl decît mama. maifather.the than mother.the 'The brother is taller than the sister by a certain amount and the father is taller than the mother by the same amount. (Romanian, Brasoveanu 2008b)
- (41) Cu cît e un avocat mai agresiv, cu atît e mai eficient. With how much is a lawyer more aggressive, with that much is more efficient 'The more aggressive a lawyer is, the more efficient s/he is.'
 (Romanian, Brasoveanu 2008b)
- (42) Cu $c\hat{\imath}t$ un $num \ddot{a}r$ natural mai mare decît altul. (#tot)cuWith how much is a number $_{
 m natural}$ more great than another, (#also) luimare decît pătratul $at\hat{i}t$ e pătratul maiceluilalt. that much is square.the it.GEN more great than square.the other.one.GEN 'The greater one natural number is (than another), the greater its square is (than the square of the other one). (Romanian, Brasoveanu 2008b)

Intuitively, sentence (40) is true iff (i) the brother is taller than the sister and the father is taller than the mother, that is, there is no conditionality (no 'if the brother is taller than the sister ...' kind of interpretation), and (ii) the difference in height between the brother and the sister is the same as the difference in height between the father and the mother, that is, the correlative equates the two differentials under consideration (this is particularly clear if the particle tot is present).

Differentials, e.g., 2 cm in the comparative Gabby is 2 cm taller than Linus, specify the difference between two measures, e.g., between Gabby's and Linus's heights.

Intuitively, sentence (41) has two salient interpretations – it can be paraphrased by either the conditional in (43a) or the one in (43b) below. These two interpretations are not necessarily two distinct readings, since (43b) is ultimately just a refinement of (43a) that examines the aggressiveness and efficiency of lawyers at various times as opposed to a single, contextually salient temporal interval.

- (43) a. If a lawyer x is more aggressive than a lawyer y by a certain amount, then x is more efficient than y by a corresponding amount.
 - b. If a lawyer x is more aggressive at time t than at time t' by a certain amount, then x is more efficient at t than at t' by a corresponding amount.

The interpretation of sentence (42) when the particle tot is present provides the strongest argument in favor of differential-based truth conditions for conditional (i.e., quantificationally-interpreted) comparative correlatives: (42) with tot is true iff, for any two natural numbers m and n such that m is greater than n, the difference m-n is identical to the difference between their squares m^2-n^2 . In contrast, (42) without tot is intuitively true because it just says that, for any natural numbers m and n such that m > n, their positive difference m-n corresponds to a positive difference between their squares m^2-n^2 .

See Andrews (1975: 217 et seqq and 237 et seqq), McCawley (1988) and Beck (1997) (among others) for more examples of comparative correlatives in English, German and Chinese.

2 Sentence-External and Sentence-Internal Readings of Same and Different

We turn now to an intra-sentential / intra-clausal phenomenon that supports the idea that natural language quantification is a composite notion.

- (44) a. Mary recited The Raven.
 - b. Then, Linus recited a different poem. (deictic / sentence-external: different from *The Raven*)
- (45) a. Mary recited The Raven.
 - b. Then, every boy recited a different poem. (deictic / sentence-external: different from *The Raven*)
- (46) Every boy recited a different poem.

(sentence-internal: for any two boys a and b, a's poem is different from b's poem)

The interpretation of different in (44b)/(45b) is sentence-external in the sense that it is anaphoric to the referent of the proper name *The Raven* in the previous sentence (44a)/(45a): in (44)/(45), different relates two DPs and requires their referents / semantic values be distinct.

The interpretation of *different* in (46) is sentence-internal in the sense that it relates the values of only one DP – the narrow-scope indefinite *a different poem* is in fact ambiguous between a sentence-internal and a deictic / sentence-external reading, as sentences (45b) and (46) show. These values, i.e., the recited poems, covary with the values of the universal quantifier *every boy* – and *different* requires the poems to be distinct relative to distinct boys.

Sentence-internal readings are licensed in English by distributive expressions, as Carlson (1987) observes. In particular, they are licensed by distributive quantifiers, e.g., *every boy* in (46) above, or by distributively interpreted plurals, e.g., *the boys* in (47) below – but not by singular DPs or collectively interpreted plurals, as (48) and (49) below show.

- (47) The boys recited different poems. (Carlson 1987)
- (48) #Mary recited a different poem. (no sentence-internal readings with singulars)
- (49) #The boys gathered around different fires. (no sentence-internal readings with coll. plurals)

Cross-linguistically, the morphological realization and the distribution of **same** and **different** are not completely parallel, although they are largely similar. Let's ignore this additional complication and focus on **different** and its counterparts in other languages.

The cross-linguistic generalizations about the morphological realization of sentence-internal and sentence-external readings of *different* are the following (see Brasoveanu (2008c) for the data):

- if a language has a lexical item that can have sentence-internal readings under quantifiers like every/each boy that are morphologically singular and semantically distributive, then that item can also have sentence-external readings, e.g., the English different or the German anders. Some languages, e.g., Russian, do not have such lexical items, so they express sentence-internal readings by means of an item like own.
 - a language can have a lexical item that allows only for sentence-external readings, e.g., the English other / another, the French autre or the Russian drugoe.
 - a language can have a lexical item that can be used with morphologically plural DPs like *the boys* that have a distributive interpretation, but not with morphologically singular and semantically distributive quantifiers. When used with such plural distributive DPs, the item can have sentence-internal readings, e.g., the German *verschieden*.

Thus, cross-linguistically, sentence-internal readings under morphologically singular and semantically distributive quantifiers pattern together with sentence-external readings, but not with sentence-internal readings under morphologically plural and semantically distributive DPs. Moreover, we have the following implicational universal: if a language has a lexical item that can have sentence-internal readings under singular and distributive quantifiers, then that item can also have sentence-external readings. The converse implication, however, does not hold – there are lexical items that can only have sentence-external readings even when they occur under singular and distributive quantifiers.

These generalizations, in particular, the implicational universal, indicate that we need a semantics for sentence-external and sentence-internal different that (i) assigns them a common meaning core and, at same time, (ii) 'constructs' sentence-internal readings out of this common core plus some additional meaning component(s).

Moreover, it seems that natural language quantifiers are composite notions – and the various components that make up their denotations conspire to create inside the quantification over boys in sentence (46), for example, an interpretational context that is very similar to the cross-sentential context created by discourse (44).

3 Tentative Schedule

The readings are available on the WebCT page for the course (log into WebCT and add LING-239 Seminar in Semantics, #23723 to your list of courses; let me know if you have problems accessing the page).

Topic 1: Intro to Compositional Dynamic Semantics (Weeks 1-2)

- Intro to DPL [ADRIAN]
- Intro to CDRT [ADRIAN]
- Groenendijk & Stokhof (1991) (DPL) [ADRIAN]
- Muskens (1996) (CDRT) [ADRIAN]

Topic 2: Temporal Anaphora and When-Clauses (Weeks 3-5)

- Moens & Steedman (1988) [STUDENT PRESENTATION]
- Webber (1988) [STUDENT PRESENTATION] [optional: Intro to Centering Theory background reading for Webber 1988]
- Kamp & Reyle (1993), Ch. 5 [ADRIAN]
- Muskens 1995 [ADRIAN]
- [optional: Nelken & Francez (1997)] [A 6 page summary of Nelken & Francez (1997) is available as Nelken & Francez (1995)]

Topic 3: Modal Anaphora and Conditionals (Week 6)

- Roberts (1989) [STUDENT PRESENTATION]
- Stone (1999) [ADRIAN]
- [optional: Stone (1997)]
- [optional: Brasoveanu (2007), Ch. 7]

[optional: Topic 3 1/2: Individual-Based Correlatives]

- [optional: Dayal (1996), Ch. 6]
- [optional: Bittner (2001)]
- [optional: Brasoveanu (2008a)]

Topic 4: Comparative Correlatives (Week 7)

- Beck (1997) [STUDENT PRESENTATION]
- Brasoveanu (2008b) [ADRIAN]

Topic 5: Same & Different in Quantificational Contexts (Weeks 8-9)

- Carlson (1987) [STUDENT PRESENTATION]
- Barker (2007) [STUDENT PRESENTATION]
- Brasoveanu (2008c) [ADRIAN]

[Week 8: Registered students hand in the 2-page abstracts for their final papers.]

[Week 10: Registered students present their final papers.]

4 Evaluation

- an in-class presentation (possibly two) of one of the the six papers available for student presentation:
 - prepare a handout / slides (you should aim for a 50 minute presentation)
 - the handout / slides of the presentation(s) will be posted on the WebCT page for the course
- a final paper on a topic related to the material covered in the course:

- a 2-page abstract should be handed in by the end of the 8th week of classes, i.e., by Nov 23 2008;
 follow the Sinn und Bedeutung (SuB) guidelines available here:
 http://www.zas.gwz-berlin.de/events/sub/call.html
- an in-class presentation of the final paper on Dec 1 2008 (the last class): 30 minutes (20 minute presentations followed by 10 minutes of discussion), with a handout or slides
- submission of the final paper by Dec 11 2008; the submission should strictly adhere to the SuB guidelines available here:

http://www.zas.gwz-berlin.de/events/sub/proceedings.html

There will be no incompletes in this class.

You will be evaluated based on what you (fail to) present and hand in by Dec 11 2008.

Office hours: Wed 2:00 pm - 3:00 pm & by appointment

email: abrsvn@gmail.com

Link to the official university policy on academic integrity for graduate students:

http://www.ucsc.edu/academics/academic_integrity/graduate_students/

References

Andrews, A. (1975). Studies in the Syntax of Relative and Comparative Clauses. PhD dissertation, MIT. [Published by New York: Garland, 1985.]

Barker, C. (2007). Parasitic Scope. In Linguistics and Philosophy 30, 407-444.

Beck, S. (1997). On the Semantics of Comparative Conditionals. In Linguistics and Philosophy, 20, 229-271.

Bittner, M. (2001). Topical Referents for Individuals and Possibilities. In the *Proceedings of SALT XI*, R. Hastings et al (eds.), Ithaca: CLC, 36-55.

Brasoveanu, A. (2007). Structured Nominal and Modal Reference. PhD dissertation, Rutgers University.

Brasoveanu, A. (2008a). Uniqueness Effects in Correlatives. In the *Proceedings of Sinn und Bedeutung 12*, Grønn, A. (ed.), ILOS, 47-65.

Brasoveanu, A. (2008b). Comparative Correlatives as Anaphora to Differentials. To appear in the *Proceedings* of SALT XVIII.

Brasoveanu, A. (2008c). Sentence-Internal Readings of Same/Different as Quantifier-Internal Anaphora. To appear in the Proceedings of WCCFL XXVII.

Carlson, G. (1987). Same and Different: Some Consequences for Syntax and Semantics. In Linguistics and Philosophy 10.4, 531-565.

Dayal, V. (1996). Locality in WH Quantification: Questions and Relative Clauses in Hindi. Dordrecht: Kluwer.

Groenendijk, J. & M. Stokhof (1991). Dynamic Predicate Logic. In Linguistics and Philosophy 14, 39-100.

Hale, K. (1976). The Adjoined Relative Clause in Australia. In Grammatical Categories in Australian Languages, R. Dixon (ed.), Canberra: Australian Institute of Aboriginal Studies, 78-105.

Kamp, H. & U. Reyle (1993). From Discourse to Logic. Introduction to Model-Theoretic Semantics of Natural Language, Formal Logic and Discourse Representation Theory, Dordrecht: Kluwer.

McCawley, J. (1988). The Comparative Conditional Construction in English, German and Chinese. In Proceedings of BLS 14, 176-187.

McCawley, J. (1992). Remarks on Adsentential, Adnominal and Extraposed Relative Clauses in Hindi. Presented at *South Asian Languages Analysis*, Stanford University.

Moens, M. & M. Steedman (1988). Temporal Ontology and Temporal Reference. In *Computational Linguistics* 14, 15-28.

- Muskens, R. (1996). Combining Montague Semantics and Discourse Representation. In *Linguistics and Philosophy* 19, 143-186.
- Nelken, R. & N. Francez (1995). Splitting the Reference Time: Temporal Anaphora and Quantification in DRT. In Proceedings of the 7th Conference of the European Chapter of the Association for Computational Linguistics, 261-266.
- Nelken, R. & N. Francez (1997). Splitting the Reference Time: The Analogy between Nominal and Temporal Anaphora Revisited. In *Journal of Semantics* 14, 369-416.
- Partee, B. (1984). Nominal and Temporal Anaphora. In Linguistics and Philosophy 7, 243-286.
- Roberts, C. (1989). Modal Subordination and Pronominal Anaphora in Discourse. In *Linguistics and Philosophy* 12, 683-721.
- Stone, M. (1997). The Anaphoric Parallel between Modality and Tense. IRCS Report 97–06, University of Pennsylvania, Philadelphia.
- Stone, M. (1999). Reference to Possible Worlds. RuCCS Report 49, Rutgers University, New Brunswick.
- Webber, B. (1988). Tense as Discourse Anaphor. In Computational Linguistics 14, 61-73.