# Extreme Non–Specificity in Romanian<sup>1</sup>

Donka F. Farkas UCSC

### 1. Background

In the extensive literature on the semantics of noun phrases, the most commonly encountered paramters of classification concern the semantic type of their denotation, the distinction between familiarity and novelty, meant primarily to differentiate definites from indefinites, the strong/weak distinction, or that between quantificational and non–quantificational noun phrases, as well as, most recently, that between choice–functional and non–choice–functional DPs (Reinhart 1997, Kratzer 1998, Matthewson 1999).

In this paper I will argue for the following general points. (i) There are distinctions made quite widely in natural languages that are too fine—grained to be caught in the net of these typologies, and which point to the need of enriching our semantic palette. (ii) Some of these distinctions are most naturally stated in terms of constraints imposed by various determiners on the way variables associated with DPs are to be assigned values. These constraints will be called *valuation constraints*. The approach I pursue 'deconstructs' quantification in terms of sets of instructions on value assignments, which is, in fact, what the ubiquitous universal and existential quantifiers are shorthand for. Doing away with this convenience opens the door to the finer—grained distinctions we need. The question that arises from this perspective is how to limit the variety of possible such constraints. (iii) Finally, the discussion will show, I hope, that at least some distribution peculiarities of DPs are to be accounted for as consequences of the valuation constraints imposed by various determiners.

On the empirical side, my aim is to introduce on the scene *vreun* indefinites in Romanian, whose distribution obeys somewhat peculiar restrictions. Section 2 lays out environments that allow these DPs, as well as those that do not, and attempts to account for the distributional pattern. The rest of this background section discusses basic assumptions based on a brief discussion of another special indefinite in Romanian, namely DPs whose indefinite article is preceded by the morpheme *cite*, as well as on a quick look at scales of (in)definites discussed most recently in Aissen 2000 and Farkas 2000a. It concludes with a discussion of various shades of specificity which will prove crucial in the discussion of *vreun* NPs.

#### 1.2 Cite DPs in Romanian

The three points mentioned above may be illustrated with a brief look at a special 'dependent' indefinite in Romanian, involving the morpheme *cite* that precedes the indefinite article. The contrast with ordinary indefinites is illustrated in (1) and (2). Thus, while (1) is scopally ambiguous, just like its English counterpart, (2) has only the interpretation in which professors

I am grateful to the audience of the Going Romance conference, Utrecht 2000, for useful questions and comments. This paper could not have been written without the prompt, reliable and generous help of Pavel Gartner, to whom I am particularly indebted.

co-vary with students.

- (1) Fiecare student a vorbit cu *un profesor*. every student has talked with a professor Every student talked to a professor.
- (2) Fiecare student a vorbit cu *cite un profesor*. every student has talked with C a professor. Every student talked to a professor.

Both italicised DPs have existential force (which I take to be the default quantificational force). They differ in that *un* DPs are compatible with both a narrow and a wide scope interpretation relative to the universal, while *cite* DPs require a co–varying interpretation.<sup>2</sup>

In order to state the contribution of *cite* to the interpretation of the DP in which it appears I will make the following assumptions. (i) In line with D(iscourse) R(epresentation) T(heory), argumental DPs introduce variables (aka discourse referents). (ii) In the case of descriptions, that is DPs involving an NP that is the projection of a lexical N, these variables are given values by functions from  $\langle x, A \rangle$  pairs consisting of a discourse referent x and a set A, to an element a of A. The set A, called the value set of x, is the denotation of the NP (the descriptive content of the DP). (iii) Morphemes in the 'extended D area' impose further valuation restrictions on the nature of the function.

Returning to *cite*, I propose that the constraint it contributes is that in (3):

(3) Constraint contributed by cite

The variable introduced by cite DPs must co-vary with (depend on) another variable, i.e., the functions assigning it values must extend functions assigning values to another individual or situational variable.

(See Farkas 2000b for a formalization of the equivalent constraint involving reduplicated indefinites in Hungarian.)

Once (3) is assumed, it will follow that *cite* DPs may occur only in environments that provide an appropriate variable for the *cite* DP to co–vary with. In (2) the variable in question is contributed by the DP whose D is *fiecare*, while (4) will not be grammatical because no appropriate variable is available.

(4) \*Un student a vorbit ieri cu cite un profesor. a student has talked yesterday with C a professor

I assume that DPs whose D is *fiecare* are quantificational, i.e., they involve a complex structure consisting of a Restrictor, which is given by the descriptive content of the DP, and a NS, given by the rest of the clause in which the DP occurs. The valuation constraint contributed by *fiecare* 'every/each' is given in (5).

(5) Constraint contributed by fiecare

The value assignments of the variable introduced by fiecare DPs must range conjunctively over the value set.

<sup>2</sup>Cite DPs are essentially the same as indefinites in Hungarian whose article is reduplicated, discussed in detail in Farkas 1997.

By 'range conjunctively over the value set' I mean that the variable in question is given successively all the values in the value set. As a result, the expression in the NS is evaluated relative to each element in this set. The result is the 'distributive' brand of universal force. Universal valuation necessarily involves the variable being assigned multiple values from the value set. This contrasts with existential valuation, where what is required is to find one appropriate value for *x* in A. In the case of a variable *y* that co–varies with a variable *x*, existential valuation of *y* involves finding one appropriate value for *y* in A for each relevant value of *x*.

For both universal distributive DPs such as those whose determiner is *fiecare* and for dependent indefinites such as those whose determiner is modified by *cite* one may posit a feature which requires them to occupy a particular position in an expanded syntactic tree such as that proposed by Beghelli and Stowell 1997. More specifically, *fiecare* DPs would have to go in DistP, the phrase occupied by the expression that gives the distributive key — the domain over which distributive predication ranges, while dependent DPs would necessarily occur in ShareP, the phrase that contains the scope of a distributive predication. This syntactic characterization would only be complete, however, if the features that drove these DPs to their respective positions, and the positions themselves, would be defined in semantic terms, which is what (3) and (5) attempts to do directly. Once such a definition is given, the usefulness of the special syntactic positions becomes a purely syntactic issue.

Another special indefinite that is in some sense the opposite of dependent indefinites is that of DPs in Lillooet Salish marked by the morpheme –**ti** discussed in Mathewson 1999. As Mathewson shows, these DPs cannot co–vary with another DP and cannot occur within the scope of negation, modals, conditionals or questions. In DRT these would be indefinites that must be entered in the main DRS. In the terms used in Farkas 2000b –**ti** indefinites contribute the requirement that the variable introduced by the DP must be interpreted by the input base function.<sup>3</sup> In the structural terms of Beghelli and Stowell 1997, –**ti** DPs would be constrained to occur in the highest RefP node.

The point of the next subsection is that when examining the details of the rich world of (in)definites we are led to posit further distinctions which do not naturally fall under the choice functional dichotomy, nor are they accountable in terms of a particular leaf of the Beghelli–Stowell tree.

# 1.3 The (In)definiteness Scale

The DPs encountered so far come with constraints that are expressible, at least in principle, in structural terms. Distinctions within the realm of definites discussed in Farkas 2000 are not naturally reducible to such terms. The point of departure of Farkas 2000 is the definiteness scale in (6), discussed in the functional literature and most recently in Aissen 2000,

(6) Personal Pronoun > Proper Name > Definite Descriptions > Partitive, Specific indefinite descriptions > Non–specific indefinite descriptions

<sup>3</sup>Matthewson 1999 characterizes **–ti** DPs as variables that range over choice functions and explains their particular scopal properties by assuming that choice functions must be existentially bound at the highest level. This assuption is the opposite of Reinhart 1997, where choice—functional variables are assumed to be existentially bindable at any level.

The first three rungs of this scale are occupied by DP types that are notionally definite in that they form a natural class with respect to phenomena that appear to be sensitive to definiteness, such as the special marking of certain direct objects. The gist of the proposal in Farkas 2000 is that the distinction between these semantically definite DPs and semantically indefinite DPs (the rest of the scale in (6)) should be formulated in a version of the uniqueness view of definiteness based on the notion of determinacy of reference. A variable has determined reference iff there is no choice with respect to what value it has to be given. Semantically definite DPs introduce variables that have to have determined reference. In the case of descriptions, the requirement of determined reference is satisfied if the value set is singleton. Semantically indefinite DPs are not thus constrained. They may, however impose further restrictions which affect the nature of the value set. For instance, formally marked partitives are special in that their value set is the denotation of the 'domain DP' (in English, the object of the preposition of in a DP such as *one/two of the students in my class*). This restriction pertains to the nature of the value set. Ordinary indefinites (DPs whose article is a(n) in English, un/o in Romanian) impose no special valuation constraints beyond what follow from morphological number marking. The relevance of the hierarchy in (6) for present purposes is that once one assumes that its rungs are linguistically relevant, the hope of capturing them by appealing to binary oppositions or nodes in a syntactic tree appears unfounded.

Farkas 2000 focuses on the left hand side of the scale in (6). The right hand side is a rich world in itself, within which we can distinguish at least the types in (7), which may be seen as forming a scale relative to scoping possibilities:

(7) *The indefiniteness scale*Ordinary indefinite > Non–specific indefinites > Incorporated indefinite

Here the leftmost rung is occupied by indefinites whose article provides no further requirement. These indefinites are freest in terms of scoping possibilities. The rightmost rung is occupied by bare (i.e. articleless) NPs interpreted as modifying a thematic argument of a predicate.<sup>4</sup> Such nominals are most restricted with respect to scope: they cannot scope independently of their predicate. What is in the middle area of this scale depends on the interpretation of the notoriously non–specific term *specificity*, which is the topic of the next subsection. Placing these indefinites in the middle of the hierarchy is justified by the fact that their scopal properties are more restricted than those of ordinary indefinites but not tied to their predicate as in the case of incorporated nominals.

# 1.4 Specificity

In what follows I will disinguish two types of 'specificity': (a) *scopal specificity*, and (b) *quodlibetic specificity*.<sup>5</sup> The former notion concerns the issue of whether the variable introduced by the DP is 'under the influence' of some operator. If it is, the interpretation of the variable will be influenced by the operator in question. If the operator binds another variable, the result will be co–variation. If not, the result will be some sort of unselective binding or 'roofing'. *Cite* DPs are an example of the former kind: the requirement imposed by *cite* is co–variation. Various polarity items exemplify the latter.

Quodlibetic specificity involves the issue of whether there is a distinguished entity in the domain

<sup>4</sup>A further distinction here has to be made between singular and plural incorporated NPs. See de Swart and Farkas 2001for discussion.

<sup>5</sup> The term is taken from Horn 1999, who borrows it from Hamilton 1858.

meant as value for the variable in question. (The issue arises only in case the description does not narrow down the domain to a singleton.) In case there is a distinguished value the indefinite will be called *particular*, and in case there is no such value, the indefinite will be called *quodlibetic*. In the case of quodlibetic indefinites, one choice of value is as good as any other.

Ordinary indefinites (in English, marked by the article a(n), in Romanian, marked by the article un/o) are compatible with both quodlibetic and particular interpretations. There are, however, special ways of marking a DP which render it incompatible with either a particular or a quodlibetic interpretation. At least some uses of any in English have been argued to mark the DP as quodlibetic. In Romanian, the special article vreun/vreo renders the DP incompatible with a particular interpretation, as we will see in the next section. In addition, the post–nominal modifier oarecare 'whatever' in Romanian may have the effect of rendering an indefinite quodlibetic, in a way similar to French quelconque and Italian qualsiasi. Finally, there are ways of marking an indefinite for being particular, i.e., compatible only with a particular interpretation, such as the use of the modifier certain in English and anume in Romanian.

Within the class of indefinite DPs then, one can distinguish the types on the scale in (8),

(8) particular indefinites > quodlibetic indefinites

where the parameter underlying the scale is the question of latitude with respect to value choice involved in the definiteness scale in (6): quodlibetic indefinites could not in principle have determined reference while particular ones could, since the particular entity that is to serve as value could in principle be uniquely specified.

The discussion in the last two subsections raises two points that are crucial to what follows. First, in order to characterize the various rungs of the (in)definite scales in (6) – (8) one needs finer–grained distinctions than those provided by current taxonomies. Second, at least some of the distinctions one needs are expressible in terms of the properties of the function assigning values to the variable in question. Scopal specificity is a matter of dependency between functions, while quodlibetic specificity may be expressible in terms of properties of the value set. In the next section we turn to a close examination of the distribution and interpretation of *vreun* DPs in Romanian, a DP type whose distribution peculiarities, it will be argued, follow from valuation constraints imposed by the determiner.

#### 2. Vreun DPs in Romanian

This section introduces a special indefinite DP in Romanian, a DP whose article is *vreun/vreo*, a morphological variant of the ordinary singular indefinite article *un/o*. In what follows the masculine form, *vreun*, will stand for both variants.

*Vreun* DPs have restricted distribution and my ultimate aim is to characterize the environments in which they are licensed. This turns out to be a particularly hard goal to reach so I only offer here a progress report and some lessons drawn from the very fact that the task proves so difficult. Part of the difficulty lies in the fact that the distribution and interpretation of this type of DP can be understood only in the context of the other types of indefinites that exist in the language. Therefore, before turning to the environments in which *vreun* DPs may or may not occur

<sup>6</sup>Epistemic specificity (Farkas 1995) is a special case of quodlibetic specificity, where the speaker has a particular value in mind, but the information supplied by the context and the descriptive content is not sufficient to identify this value for the addressee.

(subsections 2.1 and 2.2) we will take a brief look at the relatives and competitors of vreun.

#### Ordinary indefinites

As mentioned above, the *vreun* form is related to the unmarked indefinite article in Romanian, *un* (masc.sg)/o (fem. sg). In the plural, the ordinary indefinite form is *niste*, which neutralizes the gender distinction *Vreun* lacks a plural form.

The ordinary indefinite is the most tolerant form of indefinite, being compatible with both dependent and independent readings, as well as particular and quodlibetic interpretations. I will assume here that it is the most unmarked of all determiners, its use signaling only lack of determined reference. Following Hawkins (1991), I assume that this is the result of its forming a Horn–scale with the definite article, rather than a special requirement of the indefinite. The ordinary indefinite article then brings no special valuation restrictions of its own, begyond those imposed by morphological number. This explains its scope versatility (including its generic use) and its occurrence with predicative DPs.

#### **Partitives**

In Romanian, partitives are marked by attaching the definite article -ul (masc.sg) /-a (fem.sg), -i (masc.pl) /-le (fem.pl) to the ordinary indefinite article (9a) or the special indefinite *vreun* (9b):

(9) a. Unul din copii a plecat. a–the from child.Pl has left One of the children left.

b. Ai citit *vreuna din nuvelele lui Babel?*have.II.sg read V—one of stories.Def. of Babel
Have you read a short story of Babel's?

The partitive variant of *vreun* has a slightly more liberal distribution than the basic form but we will not explore that issue further here.

Free choice existential: un NP oarecare

Romanian, just like Italian or French, has a way of signaling that an ordinary indefinite is to be interpreted as quodlibetic, i.e., that the choice of value is immaterial, namely by the use of the modifier *oarecare* 'whatever'.

(10) Vrea sa cumpere o carte oarecare despre dinosauri. wants Subj. buy a book whatever about dinosaurs He/She wants to buy any book about dinosaurs.

The use of *oarecare* here rules out the particular, scopally specific reading by ruling out implicit further requirements on the choice of value for the indefinite beyond the one imposed by the descriptive content of the DP.<sup>7</sup> Typically, this type of indefinite is used to enforce a scopally

<sup>7</sup> I am following here Zamparelli's 1995 characterization of existential *qualsiasi* in Italian, exemplified in (i).

<sup>(</sup>i) Gianni vuole vedere un qualsiasi film di Moretti. (Zamparelli's 693a, p. 265)

G. wants see. Inf a whatever film by Moretti

The *un NP oarecare* form is, as far as I can tell, the Romanian equivalent of existential *qualsiasi*. Its antonym is *anume* 'certain':

non-specific reading.

Free choice universal: orice NP

The Romanian equivalent of free choice universal *any* is the complex determiner formed by the morpheme *ori* prefixed to the interrogative pronoun *ce* 'what'. (The pronominal paradigm is formed by prefixing *ori* to the paradigm of the interrogative pronouns *cine* 'who', *ce* 'what', *care* 'which'.) The use of *orice NP* is illustrated in (11):

(11) a. S-ar insura cu orice fata din vest.

Refl.-would marry with any girl from west
He would marry any girl from the West.

b. Daca divulgi orice secret vei plati scump. if give—away.II.sg any secret will.II.sg. pay dearly If you give away any secret you will pay dearly.

This type of DP is the closest Romanian equivalent to free choice *any*.

At least n NP

Romanian has two types of DPs that translate English at least n NP (where n is a numeral):  $macar \ n$  NP and  $cel \ putin \ n$  NP.

- (12) Daca ar avea macar un prieten as fi multumita. if would have.III.Sg at least a friend, would.I.Sg be pleased. If he/she would have at least one friend I would be pleased.
- (13) Are cel putin / \*macar un prieten in orasul asta. has at least one friend in city.the this He/she has at least one friend in this city.

Cel putin n marks n as the lowest point on the numerical scale that is to be considered. Thus, alternatives compatible with the truth of (13) are those in which the number of friends I have in this city is bigger than 1. In terms of C(ontext) C(hange) S(emantics), after asserting (13), the alternatives ruled out from the context set to which (13) is added are those where I have no friends in this city. Macar, when it occurs with numerals, introduces scalar alternatives as well (in this instance alternatives where he has no friends, alternatives where he has one friend etc.) and marks n as the lowest point on scale relative to which a particular condition holds. Crucially however, macar n cannot be used to claim that there are at least n verifying entities.

Finally, note that there is an adverb, *vreo* obviously related to the determiner *vreun/vreo* which means 'approximatively':

(14) Are vreo cinci saptamini de vacanta. has about five weeks of holiday He has about five weeks of holiday.

We will not be further concerned with this adverbial use here. I turn now to the focus of this

<sup>(</sup>ii) Caut o anume carte despre Olanda. look for.I.Sg a certain book about Holland I am looking for a certain book about Holland.

paper, vreun DPs.

### 2.1 Environments where vreun DPs may occur

In (15) are listed the environments where *vreun* DPs may occur. (Examples followed by a G in parentheses are taken from a volume of short stories by Ioan Grosan.)

# (15) a. interrogatives

Ai vazut *vreun tigan* fericit? have.IIsg seen V-a gypsy happy Have you seen a / any happy gypsy?

b. antecedents in conditionals

Daca gasesti *vreo carte* despre asta, cumpara—mi—o. if find.IIsg. V—a book about this, buy—for me—it If you find a book about this, buy it for me.

Cosmin ii spusese ca daca, rar [...] profesorul ii punea *vreo intrebare*, Feri se scula in picioare si asuda. (G)

C. him told that if, rarely the teacher him pose V-a question F. Ref. raise on feet and sweated

Cosmin had told him that if, rarely, the teacher asked him a question, Feri would stand up and

sweat.

c. Restrictors of Adverbs of quantification and universal D

De cite ori s-a plins *vreun copil* a iesit cu scandal. of each time ref. has complained V-a child, has come out with trouble Each time a child complained, there was trouble.

Fiecare fata care a dansat cu *vreun student* va fi chemata la directiune. every girl who has danced with V-a student will be called to office Every girl who danced with a student will be called to the principal's office.

d. frequentative imperfective

Din cind in cind trenul ... se oprea in *vreo halta* si cite un navetist deschidea ... un ochi ...(G)

from when in when the train Ref. stopped in V-a station and C-a commuter opened an eye Form time to time the train would stop in some station and a commuter would open an eye.

"Buletin de stiri" facea el ridicind [...] un deget spre *vreun puradeu* care se misca imprudent. (G)

buletin of news said he raising a finger toward V-a kid who Ref. budged imprudently "News buletin" he would say, raising a finger toward a kid who stirred imprudently.

e. hypothetical

In balta din spatele cantonului, ceva plescai scurt, *vreun peste* sau *vreo rata*. (G) in the pond from the back the station.gen., something splashed briefly, V-a fish or V-a duck

In the pond behind the station something splashed briefely, some fish or some duck.

E posibil ca Maria sa se fi intilnit cu *vreun prieten* si sa fi ramas cu el in oras. is possible that M. Subj. refl. be meet with V-un friend and Subj. be remain with him in town

Maria might have met a friend and might have stayed with him in town.

f. scope of negative expressions

A plecat fara sa vorbeasca cu *vreun profesor*. has left without Subj. speak with V-a teacher She left without speaking with a teacher.

Nu cunosc *vreun /nici un medicament care sa-l ajute*. not know.Isg V-a medicine that Subj. him help I don't know of any medicine that can help him.

As exemplified in (15a), *vreun* DPs may occur in interrogatives. Note, however, that interrogatives license the occurrence of these DPs only if the existence of an entity that satisfies all the requirements imposed by the sentence (in this case being a happy gypsy that the addressee has seen) is part of what is called into question. Thus, in (15) *vreun* is not felicitous even under the most natural reading where the indefinite is understood non–specifically:

(16) Cind pleaca un / \*vreun tren la Frankfurt? when leaves a / \*V-a train to Frankfurt When is there a train to Frankfurt?

The environment labeled here *frequentative imperfective* in (15d) is one where *vreun* DPs occur quite frequently in narratives. The imperfective here signals that its clause refers to a series of events that recurred over a period of time and the use of *vreun* signals that the value given to the indefinite is not necessarily constant over these situations, and that the parings of situation and entity denoted by the indefinite is random. The imperfective may also be used to refer to a single on–going event or situation. In such cases the use of *vreun* is not possible.

In (15e) the *vreun* DP occurs as part of a hypothesis. In the first example, the supposition concerns what the referent of the *vreun* DP might be. In the second, the indefinite occurs within the scope of an epistemic possibility operator. Finally, with respect to negative environments, illustrated in (15f), one has to distinguish cases like the first sentence, where the negative particle *nu* does not negate the predicate of the clause in which the indefinite occurs, from the case illustrated by the second sentence, where it does. In the first instance *vreun* competes with ordinary indefinites, and the choice of *vreun* unambiguously marks the indefinite as being within the scope of the negative expression *fara* 'without'. In the latter case the *nici* variant is possible as well. The choice of *vreun* over *nici* appears to mark a less categorical statement. We return to this matter below.

# 2.2 Environments where vreun DPs may not occur

The environments in which *vreun* may not occur are listed in (17):

- (17) a. ordinary affirmative sentences
  - \*Am *vreo prietena* la Utrecht. have.Isg V-a friend in U. I have a friend in Utrecht.
  - b. ordinary negatives (competition with nici)
  - \*Nu am *vreo prietena* la Utrecht. not have.Isg V-a friend in U. I don't have any friend in Utrecht.
    - c. generics (competition with un)
  - \*Vreun lup maninca carne. V-a wolf eats meat. A wolf eats meat.
  - d. imperatives (competition with orice)
  - \*Ia *vreun mar*. / Ia un /orice mar. take V—an apple / take a / any apple
  - e. affirmative existential statements
  - \*Exista *vreun dinosaur*. not exist V-a dinosaur
  - f. scope of intensional predicates
  - \* Vreau sa cumpar *vreo carte* despre Olanda. want.I.sg SUBJ buy V-a book about Holland I want to buy a book about Holland.
  - g. consequents of conditionals
  - \*Daca ar fi aici ar recita *vreo poezie*.

    if would be here would recite V-a poem

    If he/she were here he/she would recite a poem.
  - h. Nuclear Scope of universals (cite is possible)
  - \*Fiecare fata a dansat cu *vreun baiat*. each girl has danced with V-a boy
  - *i. object of negative predicate* ( competition with minimizer *orice* )

\*Ii lipseste *vreun simt al umorului*. him lacks V-a sense of humor.GEN He lacks a sense of humor.

j. comparatives (competition with orice)

\*Ana e mai inteligenta decit *vreun coleg de-al ei*. A. is more intelligent than V-a classmate of hers Ana is more intelligent than any classmate of hers.

We are now ready to start addressing the question of what the contribution of the determiner *vreun* is. The first step in this direction is to eliminate some obvious contenders.

#### 2.3 What vreun DPs are not

Clearly, *vreun* is not a simple negative polarity item, in the sense of having to occur within the scope of a negative morpheme. Such a marker is *nici*, which must co–occur with a clause–mate negative marker.

(18) Nu a plecat nici un student. not has left NICI a student No student left.

Nici DPs are closest to 'n-words' such as nessuno or personne, which express negation, in Ladusaw's 1992 terms. As exemplified in (17b), vreun DPs are not felicitous in cases where nici DPs are most natural. As exemplified in (16f), however, vreun DPs are felicitous in negative contexts where such a particle is absent and therefore nici cannot occur, as well as in some instances where a negative particle is present. In such cases there is a subtle difference between the vreun version and the nici version: the former is less emphatic and categorical than the latter. Thus, vreun is natural in the presence of a clause-mate negation in examples like (18), where it is less likely that the truth of the statement can be checked by verifying all relevant values.

(19) Nu gasesti *vreun european care sa lucreze in saptamina de Craciun*. not find.II.sg V–a European who Subj. work in week of Christmas You don't find a European who would work during the week of Christmas.

There are interesting contrasts between *nici* and *vreun* DPs with respect to word order and grammatical function: *nici* DPs may occur as preverbal subjects; *vreun* DPs on the other hand are unacceptable in pre–verbal position and may occur as subjects only in the absence of a clause–mate negative, and therefore only in case the conditions for using *nici* are not met:

- (20) *Nici un student* / \*vreun student nu a picat. not a student / \*V-a student not has failed No student from my class failed.
- (21) Nu e adevarat ca ar fi picat *vreun* / \**nici un student*. not is true that would be failed V-a / \*not a student It is not true that any student failed.

The empirical generalization appears to be that *vreun* in negative contexts is possible in subject position only if *nici* is not. A possible optimality theoretic account could allow *vreun* in subject position but impose a preference of *nici* over *vreun* when subject, possibly relying on the assumption that *vreun* DPs are more indefinite than *nici* DPs and making use of the independently motivated avoidance of indefinite subjects.

For our present purposes it is sufficient to conclude that *vreun* may occur in negative environments (under certain conditions) both in the presence and absence of the negative marker *nu* but that it cannot be seen as a strict NPI. I leave open for now the issue of the choice between *nici* and *vreun* in contexts in which both are possible.

These observations lead to the next hyopethesis, namely that *vreun* is a non-veridical item in the sense of Giannakidou 1998. Roughly speaking, non-veridical items are expressions whose occurrence is restricted to environments which do not entail the truth of the clause in which the item occurs. Extending this definition to Restrictors of quantifiers, frequentative imperfective and the like is not a trivial matter but I will not pursue the issue further because it is evident from looking at the non-licensing contexts in (17) that non-veridicality is not enough to explain why *vreun* cannot be used in imperatives or in complements of intensional predicates. The non-veridicality parameter by itself is not sufficient to distinguish between *vreun* and *orice*.

Note next that the pattern of occurrence of *vreun* DPs would not adequately be characterized by imposing the requirement that they be dependent, i.e., by requiring the variable the DP introduces to co-vary with some other variable, as proposed for *cite*. The non-occurrence of *vreun* in the Nuclear Scope of universal quantifiers or in consequents of conditionals would remain unexplained, as well as its occurrence in negative or interrogative contexts.

Analyzing *vreun* DPs as free—choice items along the lines of Giannakidou (to appear) and Horn 1999 turns out not to be sufficient either. The non—occurrence of such DPs in imperatives and comparatives distinguishes them from free—choice *any*, part of whose job is done by the determiner *orice/orcine* 'whatever/whoever' in Romanian. Note also that *vreun* DPs do not display the type of scalar behavior typical of free—choice items. Just like ordinary indefinites, they do not occur with 'exceptive' expressions or *almost* or *absolutely* type adverbs.

(22)\*Ai absolut/aproape *vreo carte de Penelope Fitzgerald?* have.II.sg absoultely/almost V—a book by P.F.

Another hypothesis that is at least insufficient is to assume that *vreun* marks the DP as being necessarily property denoting.<sup>8</sup> We have seen that *vreun* DPs are unacceptable as pivots of positive existentials, a context typical for property–type DPs. Nor are they acceptable as prediate nominals, even under negation or in an interrogative, as shown in (23).

(23) a.\*Maria (nu) e *vreun doctor care intelege pacientii*. M. is/isn't V-a doctor who understands patients.def

<sup>8</sup> This would be a plausible hypothesis if we followed van Geenhoven's suggestion that 'narrow scope only' DPs are always property denoting. Note that under that assumption we would still be faced with the task of differentiating between *cite* DPs (which must be co–varying), *vreun* DPs which obey a different restriction, and bare plural nominals, which, just like their counterparts elsewhere, have 'local' scope only, i.e., they scope wherever their predicate does.

b.\*E Maria *vreun doctor care intelege pacientii?* is M. V–a doctor who understands patients.def

The fact that *vreun* DPs in predicative position do not become grammatical in negative or interrogative contexts shows that these DPs cannot be analyzed as simply requiring a structural licenser since in (23) they would be both in the syntactic and semantic scope of a negative or interrogative operator, which elsewhere is responsible for licensing *vreun*.

# 2.4 What vreun DPs might be

Having seen what *vreun* DPs are not, it is time to turn to attempting to characterize them positively. The questions this characterization should help answer are listed in (24):

- (24) a. Why are *vreun* DPs limited in distribution?
  - b. Why are vreun DPs licensed in the environments where we find them and only there?
  - c. What is the difference between vreun, orice, oarecare and nici un?

I will take as starting poin the generalization in (25):

(25) Vreun DPs are quodlibetic.

According to (25), vreun DPs differ from their ordinary un sisters in that they are necessarily quodlibetic, i.e., incompatible with an interpretation which imposes the existence of a particular, distinguished choice among the elements of the value set. In other words, when a variable introduced by a quodlibetic DP is assigned values, the domain from which these values are chosen must be homogeneous. This characterization would explain why vreun DPs may not have epistemically specific interpretations, and may also help explain why they may not have scope over conditionals or modal operators, though the details of how the explanation would go are far from clear. The immediate problem with (25) is that it is too broad because it is not sufficient to explain why vreun DPs cannot occur in the scope of intensional predicates or imperatives. The DP type that comes closest to simply marking quodlibetic reference is un NP oarecare, and its Italian counterpart, un NP qualsiasi. Zamparelli's suggestion that qualsiasi signals the absence of further relevant properties of the intended referent amounts to signaling that no further narrowing down of the value domain is relevant, and therefore the members of the set identified by the Descriptive Content of the DP are not to be further distinguished.

The crucial property that distinguishes *vreun* DPs from *orice* and *fiecare* DPs is their quantificational force. *Vreun* DPs are compatible only with an existential interpretation, while, as we saw above, *fiecare* DPs must be interpreted as a conjunctive universal. The issue of characterizing the interpretation requirement imposed by *orice* DPs is much too complex to be handled here. I will suggest that such DPs require a type of interpretation that I call 'disjunctive universal', i.e., where either element of the value set is a possible value choice. The quodlibetic character of these DPs is a consequence of this interpretation requirement. These DPs must occur in a modal environment that allows alternative valuations ranging over the value set, chosen successively and disjunctively from the elements of the domain. The variable introduced by such DPs ranges over the value set: each element in this set must be a verifying value. This property

<sup>9</sup> A closely related use is the disparraging *oarecare* or *qualsiasi* whose counterpart is the disparraging use of *just any* discussed in Horn 1997, exemplified in sentences like *Eu nu sint o profesoara oarecare ci directoarea scolii*. 'I am not just any teacher, but the headmistress of the school.' *Vreun* DPs do not have such uses.

gives *orice* DPs their universal flavor. *Vreun* DPs, on the other hand, must receive an existential interpretation. This requirement could be captured by assuming that the determiner contributes an existential quantifier and therefore that these DPs are quantificational in DRT terms, contributing a 'box–splitting' structure, just like other quantificational DPs except that the quantifier would be existential.<sup>10</sup>

(26) Vreun DPs introduce existentially quantified variables.

If we were to implement the program advocated here of deconstructing quantifiers into valuation instructions, the constraint in (26) would involve the requirement of selecting one verifying value for variable in question for every relevant input function. Exactly how this is to be implemented so as to allow these DPs to co-vary as well as to occur within the scope of negation but not to occur within the scope of generics is not a simple matter. For the time being I assume that these DPs contribute an existential quantifier and therefore are not 'free variables' in terms of DRT or CCS. As a result, they cannot be unselectively bound or 'roofed' by negation or generic operators, the way ordinary indefinites can. The contrast between ordinary indefinites and *vreun* DPs shows the need for both 'free variable' indefinites and existentially quantified ones. The versatility of interpretation of ordinary indefinites can best be captured by treating them as free variables; *vreun* indefinites on the other hand, are compatible only with interpretations that would call for an existential quantifier in standard terms.

The generalization in (26), together with the assumption about *orice* according to which the variables contributed by an *orice* DP has to range over the value set, explains why *orice* DPs, just like free—choice *any*, are compatible with *absolutely*—type adverbs and exceptive constructions, while *vreun* DPs are not, and why *orice* but not *vreun* DPs may occur in comparative contexts and may have minimizing interpretations. (For discussion, see Horn 1999 and Giannakidou (to appear).) The fact that in imperatives of the type exemplified in (17d) it is *orice* rather than *vreun* that gets used to signal blanket permission is also explainable in terms of the successive disjunctive valuation involved in this type of permission. The existential requirement on *vreun* DPs also explains the non—occurrence of these DPs in generic contexts. One difference then between *un* and *vreun* is that the former is compatible with existential force while the latter requires it.

The characterization of *vreun* DPs given so far is still not sufficient to provide full answers to the questions in (24b) and (24c). The existential valuation requirement does not explain the contrast between antecedents and Restrictors, where *vreun* DPs may occur, and consequents and NSs, where they may not. Equally unexplained is the non–occurrence of these DPs in affirmative sentences. In order to account for these restrictions, I suggest that *vreun* DPs are subject to the further constraint in (27).

(27) Vreun marks weak existential commitment.

By 'weak existential commitment' I mean that there must be doubt as to the existence of a verifying value for the variable introduced by the DP within the context in which the variable

<sup>10</sup> Interestingly, vreun DPs may occur as pivots in interrogative existential there sentences:

<sup>(</sup>i) E vreo carte pe masa?

is V-a book on table

Is there a book on the table?

If *vreun* DPs are treated as bringing their own existential quantifier, the existential construction may not be assumed to provide an existential binder for the free variable constributed by the pivot.

occurs. (A verifying value is an entity that meets all the requirements imposed on the variable in question.) Making these suggestions more precise is beyond the scope of what I can do here. In the rest of this paper I offer further suggestions in support of the claim that the intuition expressed in (27) is correct.

'Doubtful existence', in whatever way one formalizes it, should be incompatible with cases where existence of a verifying value is asserted or presupposed. In CCS terms, it must be the case that the non–existence of a verifying value remains a live option in the relevant context set after the expression containing the *vreun* DP has been added to it (and should have been a live option before the expression performs its context change potential on the context set, assuming that discourse proceeds monotonically). By 'live option' I mean that the context set should be compatible with the possibility of non–existence of verifying values, i.e., the context set should contain alternatives in which no entity *a* exists such that *a* satisfies all requirements imposed on *x*, where *x* is the variable contributed by the *vreun* DP.

The data in (28)provide supporting evidence for the claim just made:

(28) Copiilor li s–a distribuit cite o carte sau un balon. children.DAT to them REFL have distributed C a book or C a balloon The children were given a book or a balloon each.

Fiecare copil care a primit un /\*vreun balon a fost multumit. each child who has received a /\*V-a ballloon was pleased Each child who received a balloon was pleased.

Although *vreun* DPs are acceptable in the NS of universal quantifiers, using such a DP in case the previous discourse has established that the domain over which the quantifier ranges is non–empty is not felicitous. *Vreun* DPs in the NS of universal quantifiers are felicitous only when the domain over which the quantifier ranges is open and the possibility of not finding values for *y* for which an *x* exists is open

(where *y* is the variable introduced by the universal, and *x* is the variable introduced by the *vreun* DP).

The suggestion above would throw light on why *vreun* DPs occur in antecedents and Restrictors but not in consequents or in the NS of quantifiers. In CCS terms, the role of the antecedent of a conditional or the Restrictor of a quantificational expression is to set up the derived context relative to which the antecedent or the expression in the NS is asserted. Given the non–assertive nature of *vreun* DPs hypothesised above, it is not surprising that these DPs occur in expressions whose function is to set up derived contexts but do not occur in expressions whose context change potential is 'assertive' relative to those derived contexts.<sup>11</sup>

The occurrence of *vreun* DPs in questions is readily explained. Whatever the effect of a yes/no question is on the context it is uttered in, it cannot be that of eliminating from the context set worlds in which the propositional content of the sentence does not hold. Note also that the requirement of weak existential commitment explains why *vreun* DPs are acceptable in questions only if the DP is 'within the scope' of the question operator, i.e., only if part of what is called under discussion is the existence of a verifying value. The occurrence of these DPs in hypotheticals would also be explained under the assumption that crucial to hypotheticals is that

<sup>11</sup> An expression has 'assertive' context change potential iff its effect on its input context is to eliminate worlds or situations in which it does not hold.

they do not exclude from the context relative to which they are uttered alternatives in which the hypothesis is false.

The question of accounting for the distribution of *vreun* DPs in various types of modal environments is complicated because, on the one hand, the facts are complex, and, on the other, our understanding of the semantics of these environments is not as deep as one would want. Recall that *vreun* DPs are not acceptable in complements of intensional predicates such as *a vrea* 'to want'. Below we see that they are acceptable within the scope of epistemic modal operators or operators expressing prohibition, but not elsewhere:

- (29) a. Trebuie sa—mi cumpar o/\*vreo carte despre Utrecht. must SUBJ—me buy a/\*V book abiut Utrecht I must buy myself a book about Utrecht.
  - b. Bine ca si—a cumparat o/\*vreo carte despre Utrecht. good that himself—has bought a/\*V book about Utrecht It's good that she bought herself a book about Utrecht.
  - c. Poate ca si—a cumparat o/vreo carte despre Utrecht. perhaps that herself—has bought a/V book about Utrecht. Perhaps she bought herself a book about Utrecht
  - d. Mi–a interzis sa–mi cumpar o/vreo carte despre Utrecht. me–has forbidden that me buy a/V–a book about Utrecht She forbade me to buy myself a book about Utrecht.

The non-occurrence of *vreun* DPs in 'emotive factive' contexts exemplified in (29b) is to be expected if (27) is true, because of the factive nature of the complement. The question of the existence of a verifying value (a book about Utrecht that she bought for herself) is settled even before (29b) is uttered. The status of interdictions, such as (29d) is similar to that of negative assertions. Here the relevant derived contexts with respect to which existence of a verifying value matter are deontic alternatives. Within these alternatives, the non-existence of a verifying value (a book about Utrecht that I buy for myself) is not only a live option, it is the only option. The same is true for existential indefinites within the scope of negation. In sentences such as (15f), the context to which the negative is added is the discourse context. After the addition of the negative sentence, the non-existence of a verifying value for the variable introduced by the *vreun* DP is the only option. We thus predict that *vreun* DPs may occur within the scope of negation.

The non-occurrence of *vreun* DPs in deontic statements such as (29a) or within the complement of intensional predicates could be explained under the assumption that these expressions are 'asserted' relative to a derived context introduced by the operator or predicate: the contexts compatible with the relevant deontic code, or the contexts compatible with what the subject wants. While this suggestion is workable in the case of deontic operators, there is reason to doubt it in the case of intensional predicates such as *want*. The most recent analysis of these predicates, in Heim 1992, takes them to involve an ordering on epistemic alternatives of the subject's, and claiming that alternatives in which the complement holds are ordered higher than alternatives in which it does not. This approach could be made compatible with the suggestion concerning *vreun* under the assumption that what is involved in interpreting the proposition expressed by the complement of *want* is imposing an ordering on a set of contextually established epistemic alternatives of the subject's and asserting the proposition in the

complement of *want* relative to the context set made up of the highly valued alternatives in this set. An interesting and complex problem arises at this point, namely the interaction of predicates that license the subjunctive mood in their complements, and the possibility of using *vreun* in these complements.

The distinction between antecedents and Restrictors on the one hand, and consequents and expressions in the NS on the other that I have been assuming here involves the distinction between setting up a derived context set, which is the job of Restrictors and antecedents, and asserting something relative to it, which is the job of consequents and expressions in the NS. While the distinction is intuitive making it precise is a complex matter that I cannot attempt here.

The effect of the operator *poate* 'perhaps' on the context set, just as in the case of hypotheticals, is to create a derived context set by enlarging the current one so as to include both alternatives in which the proposition in its scope is true (in which case a verifying value for the *vreun* DP exists) and alternatives in which it isn't (in which case there is no verifying value). Intuitively, this effect is compatible with the weak existential commitment associated with *vreun* DPs.

The assumption that *vreun* DPs crucially involve weak existential commitment helps in understanding the quodlibetic nature of these DPs. Uncertain existence is incompatible with particular reference. The latter presupposes the existence of a verifying value different from other potential choices. The requirement of uncertain existence on the other hand, excludes the possibility of particular reference and is, therefore, an extreme case of non–specificity.

The non-occurrence of *vreun* DPs in imperatives follows from the constraints discussed above. We would not expect such a DP to have wide scope over an imperative (under the reading of *Take an apple!* where there is a particular apple that you are allowed or permitted to take) because of the weak existential commitment constraint. A narrow scope reading is ruled out by both the existential force requirement and the weak existential commitment constraint. The former rules out a blanket permission reading (enforced were we to use an *orice* DP in this context). The latter could also be invoked since a felicity condition on imperatives would entail the existence of verifying values.

The question that arises at this point is whether the quodlibetic requirement in (25) is still needed, and, if so, how it interacts with the other two constraints. The environment that is relevant here is that of frequenative imperfectives, which licenses vreun quite freely. Indefinites in these environments are problematic because they are existential and the existence of a verifying values is entailed. We could look for an explanation that relies on the claim that the frequentative imperfective does not require the proposition in its scope to hold in all relevant situations, and therefore, that the weak existential commitment requirement is met. The data, however, seem to point toward the relevance of the quodlibetic nature of vreun DPs in these environments. In frequentative imperfective sentences, the choice of determiner reduces to that between ordinary indefinites, cite and vreun. Chosing one of the latter two removes the possibility of a wide scope reading. Chosing vreun over cite appears to stress the randomness of the pairing of relevant occasions and verifying values for the indefinite. If (25) were irrelevant, and (26) were what would license vreun here, we would expect the choice of vreun to emphasize the possibility of having situations where there is no verifying value for the indefinite. It appears then, that in frequentative imperfectives the requirement of weak existential commitment is not the crucial factor, and what comes into play is the quodlibetic nature of vreun DPs. I will assume for the time being that all three constraints are needed, and that vreun DPs require existential interpretation and impose a requirement of extreme non-specificity met by an interaction of

weak existential commitmeent and random choice associated with the quodlibetic nature of these DPs.

The discussion of *vreun* indefinites in Romanian shows that in order to understand the full range of indefinites in this language we need to make room for both indefinites that introduce free variables, as postulated in DRT, and indefinites that intorduce existentially bound ones, as assumed before the advent of DRT and File Change Semantics. Furthermore, determiners appear to impose constraints of a complex sort concerning the way the variable is assigned values and what properties these values have.

#### 3. Conclusion

The answers to the questions in (24) that we have been exploring here rely on the claim that crucial to *vreun* DPs is that their interpretation has to satisfy three related constraints: (25), which requires the value set to be uniform with respect to value choice, (26), which imposes existential force, and (27), which limits their distribution to environments which neither assert nor presuppose the existence of a verifying value in the relevant context. The first requirement distinguishes these DPs from other special indefinites such as *un anume*, and makes them similar to 'free choice' disjunctive indefinites whose D is *orice*. The second requirement distinguishes *vreun* DPs from ordinary indefinites, for whom simple existential force is the default but not the only type of interpretation they are compatible with, as well as from DPs whose determiner is *orice*, which come with interpretation constraints that require them to range over the value set. The requirement in (27) is what brings *vreun* DPs close to *macar n* DPs, which are also incompatible with asserting that there are n verifying values. The weak existential commitment in (27) results in limited distribution because its fulfillment relies crucially on features of the environment of the DP rather than on what the DP itself contributes. This contrasts with the requirement contributed by *fiecare*, which is satisfied within the DP.

The environments in which *vreun* DPs may occur overlap with those in which we find *cite* DPs. Recall that *cite* requires co-variation, and *vreun* is not averse to it. The crucial distinction is that *cite* DPs are compatible with a non-random (non-quodlibetic) association of values for the two variables involved, while *vreun* DPs impose the randomness requirement.

In order to answer fully the question of why *vreun* DPs are licensed in exactly the environments in which we find them and not in those we do not, each type of context should be shown to be compatible (or incompatible) with the valuation requirements imposed by *vreun*. In some cases this is easier to do than in others. Under the assumption that the requirements associated with *vreun* involve a ban against affecting a context by excluding from it alternatives which do not provide a verifying value for the variable in question, the occurrence of these DPs in interrogative, hypothetical and negative contexts is not surprising. Under the assumption that antecedents of conditionals and expressions in the Restrictor set up derived contexts against which consequents and expressions in the NS are asserted, the occurrence of *vreun* DPs in the former and their ban from the latter is not surprising either. The requirement of weak existential commitment predicts straightforwardly that ordinary affirmative statements, existential statements, consequents and expressions in the NS are environments that do not licence *vreun* DPs. How one accounts for their non–occurrence within the scope of intensional predicates and intensional operators depends crucially on the details of the semantics of these operators and predicates.

The non-occurrence of vreun DPs as generics, as objects of negative predicates, and within

comparatives, on the other hand, can be accounted for by the existential force requirement in (26). This is particularly relevant to excluding generics, which have been argued not to involve existential commitment. The requirement in (25) concerning random value choice, on the other hand, had to be invoked in order to understand the effect of the use of *vreun* DPs in the scope of frequenative imperfectives. Further work on the nature of the relevant linguistic environments as well as on the details of the distribution and interpretation of the relevant DPs may allow us to collapse these three constraints into a single more general one or at least understand better the connections between them.

The general moral that this discussion leads to is that looking at the details of the distribution and interpretation of particular DP types reveals the usefulness of some distinctions drawn in the literature, but not necessarily the ones that we would expect. In particular, understanding the distribution and interpretation of *vreun* DPs shows that they do not fit in any of the existent DP categories that have been recognized in the vast recent literature on indefinites. Distinctions drawn in CCS on the other hand, concerning the way various expressions affect the context to which they are added seem to be relevant to accounting for the distribution and interpretation of particular DPs. I have suggested here that understanding the full range of DPs one finds even within a single language, let alone across languages, requires fine—grained distinctions involving ways in which the variable in question is to be assigned values as well as subtle properties of those values.

#### References

- Aissen, J. 1999, Differential case marking: iconicity vs. economy, paper presented at the Joint Stanford/UCSC Optimal Typology Workshop, Santa Cruz.
- Beghelli, F., and T. Stowell, 1997, Distributivity and Negation: The Syntax of *Each* and *Every*, in A. Szabolcsi (ed.), *Ways of Scope Taking*, Kluwer, Dordrecht, pp. 71–107.
- Farkas, D. F., 1995, Specificity and sope, in Nash, L. and G. Tsoulas (eds.), *Langues et Grammaire 1*, Paris, pp. 119–137.
- Farkas, D.F., 1997, Dependent indefinites, in F. Corblin, D. Godard and J.–M. Marandin (eds.), *Empirical Issues in Fromal Syntax and Semantics*, Peter Lang Publishers, pp. 243–268.
- Farkas, D. F., 2000a, Varieties of definites, paper presented at the conference on the Syntax, Semantics and Pragmatics of Noun Phrases, Antwerp.
- Farkas, D. F., 2000b, Scope matters, in von Heusinger, K. and U. Egli, *Reference and Anaphoric Relations*, Kluwer, Dordrecht, pp. 79–108.
- Giannakidou, A., 1998, *Polarity Sensitivity as (Non)–Veridical Dependency*, John Benjamins.
- Giannakidou, A. (to appear), The meaning of free choice, to appear in *Linguistics and Philosophy*.
- van Geenhoven, V., 1996, Semantic Incorporation and Indefinite Descriptions: Semantic and Syntactic Aspects of Noun Incorporation in West Greenlandic, Ph.D. dissertation, University of Tubingen.
- Hamilton, Sir William, 1858, *Discussions on Philosophy and Literature*, Harper and Brothers, New York.
- Hawkins, J., 1991, On (in)definite articles: implicatures and (un)grammaticality prediction, in *Journal of Linguistics* 27, pp. 405–442.
- Heim, I., 1992, Presupposition projection and the semantics of attitude verbs, in *Journal of Semantics* 9, pp. 183–221.
- Horn, L. R., 1997, Pick a theory (not just *any* theory): Indiscriminatives and free-choice indefinite.

  To appear in Horn, L. and Y. Kato (eds.), *Studies in Negation and Polarity*,

Oxford University Press.

Horn, L. R., 1999, any and (-)ever: Free choice and free relatives, ms, June 17, 1999.

Kadmon, N. and F. Landman, 1993, Any, in *Linguistics and Philosophy* 16, pp. 353–422.

Kratzer, A., 1998, Scope or Pseudo–scope? Are there Wide Scope Indefinites, in S. Rothstein (ed.), *Events in Grammar*, Kluwer, Dordrecht, pp. 163–196.

Ladusaw, W., 1992, Expressing negation, in *Proceedings of the Second Conference on Semantics and Linguistic Theory*, Barker, C. and D. Dpwty (eds.), Columbus, Ohio, pp. 237–259.

Matthewson, L., 1999, On the interpretation of wide–scope indefinites, in *Natural Language Semantics* 7, pp. 79–134.

Reinhart, T., 1997, Quantifier Scope: How Labor is Divided Between QR and Choice–Functions, in *Linguistics and Philosophy 20*, pp. 335–397.

de Swart, H. and D. F. Farkas, 2001, Bare nominals in the typology of indefinites, ms. Zamparelli, R., 1995, *Layers in the Determiner Phrase*, Ph.D. dissertation, University of Rochester.