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ITEMS DE POLARITÉ ET INDÉFINIS DÉPENDANTS EN ROUMAIN

Polarity Items and Dependent Indefinites in Romanian

Anamaria FĂLĂUŞ

THÈSE DE DOCTORAT

Soutenance le 2 octobre 2009

pour obtenir le grade de docteur en

SCIENCES DU LANGAGE

Jury

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Hamida DEMIRDACHE, Professeur, LLING EA 3827, Université de Nantes

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Familiei mele, de la Ana la Anda

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¹ Orin parle très bien français, mais comme on a toujours parlé en anglais et que les remerciements sont personnels (et pas faciles à écrire à la dernière minute), je préfère m'adresser à lui en anglais.

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ITEMS DE POLARITÉ ET INDÉFINIS DÉPENDANTS EN ROUMAIN

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Cette étude examine l'interprétation et la distribution de trois classes d'items dépendants en roumain : mots *en N*, items existentiels de libre choix et le déterminant existentiel *vreun*, en mettant l'accent sur les propriétés de ce dernier. Nous montrons que sa distribution est restreinte à deux types de contextes (polarité négative et modalité épistémique), un paradigme qui ne peut pas être facilement classifié au vu des typologies attestées des items de polarité. Alors que les contraintes sur les items de polarité négative à travers les langues sont bien documentées, la légitimation des éléments 'épistémiques' est beaucoup moins souvent recensée ou investiguée dans la littérature. Afin de déterminer précisément le facteur responsable pour la distribution de *vreun*, nous menons une étude détaillée de ses occurrences dans les contextes 'positifs', en introduisant des données nouvelles et en montrant que l'on peut les regrouper sous une notion qui s'apparente à la modalité épistémique. Plus précisément, nous identifions une contrainte de légitimation sémantique, qui met en relation la distribution de l'item de polarité *vreun* avec le type d'alternatives considérées par l'agent épistémique. A partir de données issues d'autres langues (le français et l'espagnol), nous mettons en évidence l'existence d'une classe d'items de polarité épistémiques. En adoptant la théorie unifiée de la polarité proposée par Chierchia (2006), nous défendons l'hypothèse que tous les items de polarité entraînent obligatoirement un élargissement du domaine de quantification. Dans cette approche, la distribution restreinte de ces éléments est déterminée par les inférences que les locuteurs font sur la base des alternatives introduites par l'item de polarité, alternatives qui doivent conduire à un renforcement de sens. Nous montrons également l'importance de considérer dans sa globalité le système de la polarité dans une langue donnée, afin de comprendre d'une part les contraintes de légitimation des items de polarité, et d'autre part les paramètres qui sous-tendent la variation linguistique.

Dans ce qui suit nous résumons les propriétés de deux des classes d'éléments dépendants étudiées dans cette thèse, le déterminant *vreun* et les mots *en N*.

1 Introduction

En prenant comme point de départ le système de la polarité en roumain, le premier chapitre cherche à définir les enjeux empiriques et théoriques qui sous-tendent l'étude du phénomène de polarité.

Les items de polarité sont des éléments dont la distribution et l'interprétation dépendent du contexte de réalisation. Ils sont traditionnellement définis comme des éléments « exclus d'énoncés épisodiques » (Giannakidou 2009 :1), comme l'illustre l'agrammaticalité des exemples ci-dessous, avec l'item de polarité *anybody* en anglais (1) ou *qui que ce soit* en français (2):

- (1) * Paul called *anybody*.
- (2) * Paul a vu *qui que ce soit*.

Dans les premières études consacrées aux restrictions responsables pour l'agrammaticalité de ces énoncés (voir par exemple Klima 1964, Baker 1970, Horn 1972, Fauconnier 1975), il a été établi que certains éléments sont sensibles à la *polarité* d'une assertion, selon qu'il s'agit d'une assertion positive ou négative. Plus précisément, certains éléments requièrent un contexte négatif (également appelé 'affectif'), comme par exemple *qui que ce soit*, dans la phrase ci-dessous:

(3) Paul n'a pas vu *qui que ce soit*.

Le contraste entre (2)-(3) montre que *qui que ce soit* doit obligatoirement apparaître dans un énoncé négatif, et donc il appartient à la classe des items dits de *polarité négative* (IPNs). Parallèlement à cela, on a identifié une classe d'éléments dits de *polarité positive* (IPPs) qui sont exclus de la portée de la négation, et doivent apparaître dans un énoncé positif, comme l'illustre le contraste suivant avec l'élément *aimerait mieux* :

(4) Paul *aimerait mieux* dormir.

(5) *Paul n'*aimerait pas mieux* dormir.

La classification en termes de polarité négative par rapport à polarité positive s'est rapidement avérée insuffisante pour rendre compte de la variation empirique attestée, et a dû être complétée avec d'autres catégories. Parmi elles, la modalité semble jouer un rôle important dans la distribution des items dits de *libre choix* (ILC), comme c'est le cas pour l'élément *n'importe quelle* dans les exemples ci-dessous, qui montrent qu'il est agrammatical en l'absence d'un modal :

(6) *Elle a appris *n'importe quelle* chanson.

(7) Elle **peut** apprendre *n'importe quelle* chanson.

La conclusion qui émerge des études empiriques sur la polarité est la grande diversité des paradigmes attestés à travers les langues, d'une part et des facteurs responsables pour la distribution des différents éléments dépendants, d'autre part.

Une des principales problématiques dans l'étude de la polarité concerne le phénomène de 'double usage'. Plus précisément, dans certaines langues un seul et même paradigme couvre des usages pour lesquels d'autres langues emploient des paradigmes différents. L'exemple canonique de ce 'double usage' est *any* en anglais (Vendler 1967, Ladusaw 1979, Carlson 1980, Kadmon & Landman 1993, Horn 2000) (voir (7) ci-dessous).

Cette stratégie est très courante à travers les langues, comme l'atteste l'étude typologique de Haspelmath (1997), selon laquelle la moitié des 40 langues investiguées montrent des cas de paradigme à double usage. Cette situation soulève deux questions fondamentales. Premièrement, d'un point de vue empirique, quels sont les paradigmes de double usage attestés à travers les langues, et jusqu'à quel point sont-ils systématiques ? Et deuxièmement, quelle est la source de ce double emploi ? Plus précisément, est-ce qu'il s'agit d'ambiguïté lexicale (qui serait donc massivement présente à travers les langues), ou bien, ce double usage est-il le reflet d'une propriété inhérente de l'élément de polarité, qui lui permet d'apparaître dans différents types de contextes de polarité ?

Afin de répondre à ces questions, nous prenons comme point de départ la typologie des items de polarité sur laquelle est basée l'analyse de la polarité développée dans Chierchia (2006). Il distingue plusieurs classes d'éléments qui apparaissent dans des contextes de polarité négative et dans des environnements modalisés. Ainsi, il existe des éléments de polarité comme *any*, qui peut apparaître à la fois dans des contextes de polarité négative, en tant qu'IPN, comme en (7)a, et dans des contextes modaux, en tant qu'item de libre choix (ILC), comme en (7)b :

- (8) a. I haven't attended **any** conference this semester.
 'Je n'ai *pas* participé à **de** conférence ce semestre.'
 b. You *can* visit **any** museum for free on Sundays.
 'On *peut* visiter visiter gratuitement **n'importe quel** musée le dimanche.'

Tous les items de polarité ne permettent pas ce type de double usage. Ainsi, certains éléments peuvent apparaître seulement dans les contextes de polarité négative, et sont donc exclus des contextes modaux, comme c'est le cas pour les items *yet* ou *ever*, appelés des IPNs 'purs', dont la distribution est illustrée en (9) :

- (9) a. I haven't **ever** been to Barcelona.
 'Je ne suis **jamais** allée à Barcelone.'
 b. *I *can* **ever** go Barcelona.
 'Je peux jamais aller à Barcelone.'

Parallèlement, il existe des items de libre choix 'purs', dont la distribution est restreinte aux contextes modaux, et qui ne peuvent donc pas apparaître dans des contextes négatifs, comme par exemple le déterminant *qualunque* en italien, donné dans le paradigme ci-dessous :

- (10) *Puoi* prendre **qualunque** mela.
 peux.2SG prendre n'importe quelle pomme
 'Tu peux prendre n'importe quelle pomme.'
 (11) ??*Non* ho visto **qualunque** studente.
 NEG avoir.1SG vu n'importe quel étudiant
 'Je n'ai pas vu n'importe quel étudiant.'

Si un item de libre choix de ce type apparaît dans un contexte négatif, il ne peut être accepté que sous une lecture dite 'rhétorique', que l'on peut paraphraser comme 'pas n'importe quel étudiant, mais un étudiant spécial'.

Une dernière classe d'éléments considérés par Chierchia dans son analyse, et qui sont directement liés à notre étude, est celle des items de libre choix existentiels, tels *un N qualsiasi* en italien ou *un N quelconque* en français (Jayez & Tovenà (2006)). Contrairement aux items de libre choix comme *any* ou *qualunque*, qui acquièrent la plupart du temps une lecture universelle, comme en (12), les ILCs existentiels ne permettent pas de lecture universelle. Ils ont donc à la fois des propriétés typiques des items de libre choix, comme par exemple la restriction aux contextes modaux, et des indéfinis, qui ont une lecture existentielle. Les exemples suivants (empruntés à Chierchia (2006)) illustrent ces propriétés :

- (12) ??*Ieri* ho parlato con **un qualsiasi** filosofo.
 'Hier j'ai parlé à un philosophe quelconque'
 (13) *Domani* interroghero **qualsiasi** studente che mi capiterà a tiro.
 'Demain je vais interroger n'importe quel étudiant que je croise.'
 (14) *Domani* parlerò con **un** studente **qualunque**.
 'Demain je vais parler à un étudiant quelconque.'

Enfin, certains ILCs existentiels peuvent également apparaître dans des contextes de polarité négative, ayant ainsi un double usage similaire à celui que nous avons vu pour *any*, en (7) ci-

dessus. Les exemples suivants illustrent les deux types d'ILCs existentiels qui diffèrent selon leur distribution en contexte négatif :

- (15) *Niemand* musste ***irgendjemand*** einladen. ✓LECTURE RHETORIQUE/✓IPN
 Personne devait une personne quelconque inviter
 'Personne ne devait inviter qui que ce soit/ une personne quelconque'

- (16) *Nessuno* è costretto ad invitare ***una*** persona ***qualsiasi***. ✓LECTURE RHETORIQUE/*IPN
 Personne devait une personne quelconque inviter
 'Personne ne devait inviter une personne quelconque (mais quelqu'un de spécial).'

Selon Kratzer & Shimoyama (2002), l'énoncé en (15) peut avoir à la fois une lecture où *irgendein* est interprété comme en IPN (équivalent à *qui que ce soit*) et, moins souvent, une interprétation rhétorique (*pas n'importe quelle personne*). En revanche, l'ILC existentiel *un N qualsiasi* en (16) permet seulement la lecture rhétorique; autrement dit, *un N qualsiasi* ne permet pas d'usage d'IPN.

La typologie qui sert de référence pour le reste de notre étude est donc celle en (16) :

- (17) IPNs purs (*ever*)
 IPN/ILC (*any*)
 ILC purs (*qualunque/qualsiasi*)
 ILC existentiel (*un N qualsiasi*)
 IPN/ILC existentiel (*irgendein*)

Cette typologie met en évidence la diversité des paradigmes de polarité attestés : les éléments en (16) diffèrent à la fois selon leur interprétation (universelle ou existentielle) et selon leur distribution (contexte négatif ou modal). Et surtout, cette typologie illustre la fréquence des paradigmes qui remplissent une double fonction, un phénomène que toute approche de la polarité doit pouvoir expliquer. A ce titre, la principale question soulevée par ce double usage concerne sa *source*. Y a-t-il une propriété partagée par tous les items de polarité, qui permettrait d'expliquer les restrictions sur leur distribution et leur interprétation ? Ou bien, faut-il accepter que les différents paradigmes attestés sont soumises à des contraintes distinctes, qui ne sont pas forcément reliées entre elles ?

Afin d'apporter des réponses à cette question, nous examinons en détail les propriétés empiriques du déterminant existentiel *vreun* en roumain. Plus précisément, nous montrons qu'il partage certaines propriétés des items de polarité négative et des items de libre choix existentiels, sans pour autant que leur distribution soit complètement identique. En cela, *vreun* résiste à toute classification par rapport à une typologie comme celle en (16) ci-dessus.

Illustrons le problème posé par *vreun*, qui sera discuté de manière plus détaillée dans la section 2. Lorsqu'on essaie d'intégrer ce déterminant dans la typologie en (16), on s'aperçoit qu'il a à la fois des propriétés des IPNs et des propriétés des ILC existentiels.

Ainsi, *vreun* est un élément de polarité, défini comme étant exclu des contextes épisodiques, comme en (18) :

- (18) * Am văzut *vreun* film.
Avoir.1SG vu V-UN¹ film

Lorsqu'on essaie de déterminer à quel type de paradigme de polarité il appartient, on s'aperçoit qu'il apparaît dans tous les contextes canoniques de polarité négative, comme illustré dans les exemples ci-dessous, où un IPN comme *ever* ou *any* serait également licite.

- (19) *Dacă găsești vreo carte despre asta, cumpără-mi-o.*
si trouver.2SG. V-UN livre sur ça, achete-me.DAT-le.ACC
'Si tu trouves un livre sur ça, achète-le-moi.'
- (20) *Rar îmi dă vreo explicație în legătură cu ceea ce face.*
rarement me.DAT donner.3SG V-UN explication en lien avec DEM ce faire.3SG
'Il me donne rarement d'explication sur ce qu'il fait.'
- (21) *Dansa cu el refuzând să-i adreseze vreun cuvânt.*
Danser.3SG avec lui refusant SUBJ-CL.3SG adresser.3SG V-UN mot
'Elle dansait avec lui en refusant de lui adresser la parole'

Malgré cet usage dans les contextes de polarité négative, la distribution sous la portée de la négation propositionnelle est plus complexe que celle d'un IPN comme *any* :

- (22) a. **Nu am scris vreun articol.*
NEG avoir.1SG écrit V-UN article
- b. *Nu am vreo speranță că s-ar schimba ceva.*
NEG avoir.1SG V-UN espoir que REFL-avoir.3SG.COND changer quelque chose
'Je n'ai pas le moindre espoir que quelque chose pourrait changer.'

Plus précisément, la négation *nu* semble pouvoir légitimer *vreun* dans certains cas, comme en (22)b, mais pas dans d'autres, comme le montre l'agrammaticalité de en (22)a. dans notre étude, nous attribuons ce contraste aux propriétés des mots en *N* en roumain, un paradigme dont la distribution est restreinte aux contextes négatifs (discutés en section 5 ci-dessous). Nus montrons ainsi que la distribution de *vreun* dans la portée de la négation propositionnelle est due à un effet de blocage induit par les mots en *N*, blocage qui peut dans certains cas, comme en (22)b, être dépassé. Laissant les détails de cette approche pour la section 2 et 5 ci-dessous, soulignons simplement que *vreun* a certaines propriétés en commun avec les IPNs, mais que l'interaction avec la négation semble moins 'canonique' que celle d'un IPN.

Vreun est un item de polarité à double usage, et le premier défi auquel il faut faire face c'est l'identification des contextes où il apparaît. Plus précisément, en mettant de côté les environnements de polarité négative, nous remarquons que *vreun* apparaît dans certains contextes modaux, comme par exemple dans la portée de l'opérateur de possibilité en (23) :

¹ J'utilise en français le même type de notation que celui proposé par Farkas, et glose *vreun* comme *v-un*, afin d'indiquer le lien avec l'article indéfini. Dans la traduction en français, j'utilise soit l'article indéfini, soit des IPN comme *qui/quoi que ce soit*, ou parfois des éléments de libre choix comme *un N quelconque*, selon ce qui est plus proche du sens en roumain.

- (23) E *posibil* ca Maria să se fi întâlnit cu ***vreun*** prieten
 est possible que Maria SUBJ REFL ETRE rencontré avec V-UN ami
 ‘Il est possible que Maria ait rencontré un ami’

Dans ce contexte, on pourrait également utiliser l’item de libre choix existentiel *un N oarecare* (donné en (24)), avec un sens similaire, notamment qu’il est possible que Maria ait rencontré un ami, dont le locuteur ignore l’identité :

- (24) E *posibil* ca Maria să se fi întâlnit cu ***un*** prieten ***oarecare***
 est possible que Maria SUBJ REFL ETRE rencontré avec un ami quelconque
 ‘Il est possible que Maria ait rencontré un ami quelconque ’

Ce type d’occurrence indique que *vreun* apparaît dans le même type de contexte qu’un ILC existentiel, mais il existe également des contextes où cela ne semble pas être le cas. Par exemple, dans la portée du modal *devoir* ci-dessous, qui légitime un ILC existentiel (25), mais pas *vreun* (26).

- (25) Maria *trebuie* să se căsătorească cu un doctor ***oarecare*** din sat.
 Maria devoir.3 subj refl marier avec un docteur quelconque
 ‘Marie doit épouser un docteur quelconque’
 (26) *Maria *trebuie* să se căsătorească cu ***vreun*** doctor din sat.
 Maria devoir.3 subj refl marier avec V-UN docteur quelconque

Il semble donc que *vreun* ne soit pas (simplement) un INP/ILC existentiel comme par exemple *irgendein* dans la typologie en (16). Le but de cette étude est d’identifier le paradigme de double usage de *vreun* et chercher à en rendre compte. Dans la section 2, nous détaillerons les contextes précis d’occurrence de *vreun* et montrons que le facteur pertinent est la présence d’un opérateur (de modalité) épistémique. Les chapitres suivants cherchent à situer ce type de double usage par rapport à d’autres dépendances sémantiques attestées et à en déterminer la source.

Dans cette étude, nous adoptons une approche unitaire de la polarité qui postule l’existence d’une propriété commune à tous les items de polarité, qui constitue la source de leur dépendance, telle celle défendue par Chierchia (2006). Plus précisément, l’une des propositions les plus influentes dans la littérature suppose que tous les items de polarité ont la propriété dite d’*élargissement du domaine* (voir, entre autres, Kadmon & Landman (1993), Lee & Horn (1994), Krifka (1995), Chierchia (2006)). Ainsi, un élément de polarité comme *any* introduit des alternatives de domaine et amène à considérer un domaine de quantification plus large que celui associé à un simple indéfini. Par exemple, lorsqu’on utilise l’IPN *any* dans un syntagme nominal comme *any mammal* ‘n’importe quel mammifère’, le domaine de quantification est étendu, et peut inclure des entités comme des chauve-souris, ou des ornithorynques, que nous ne considérons pas forcément quand on utilise simplement l’article indéfini, comme dans *a mammal* ‘un mammifère’. Cette propriété d’élargissement de domaine peut être exploitée de façon appropriée seulement dans les contextes négatifs, où elle contribue à rendre l’énoncé plus informatif. Ainsi, un énoncé comme *I didn’t see any mammal* ‘je n’ai pas vu quelque mammifère que ce soit’ est plus informatif que l’énoncé équivalent avec un article indéfini *I didn’t see a mammal* ‘Je n’ai pas vu un mammifère’. Cette approche met donc au cœur du phénomène de la polarité *le sens* des items de polarité, et cherche à en dériver leur distribution.

En partant de la typologie en (16), et en adoptant une approche en termes d'élargissement du domaine, nous investiguons les propriétés des éléments de polarité en roumain. La thèse est organisée comme suit :

Le Chapitre 2 est consacré à l'étude de la distribution du déterminant *vreun*, afin d'identifier les contraintes de légitimation auxquelles il est soumis. Sur la base de données nouvelles, nous défendons l'hypothèse que sa distribution peut être réduite à deux types de contextes : contextes de polarité négative et contextes de modalité épistémique. Pour ce qui est des contextes 'positifs', nous proposons une contrainte de légitimation sémantique qui impose que *vreun* soit dans la portée d'un opérateur propositionnel qui implique l'existence de mondes parmi les mondes compatibles avec les croyances de l'agent épistémique où la proposition qui légitime *vreun* peut être fausse.

Le Chapitre 3 explore la source du double emploi de *vreun* en contexte de polarité négative et de modalité épistémique. Plus précisément, nous rejetons une analyse en termes d'ambiguïté lexicale, telle celle défendue dans Farkas (2002, 2005) et une approche plus unitaire, en termes de nonvéridicalité (Giannakidou 1997, 1999, 2009). Dans un deuxième temps, nous cherchons à établir les similarités et les différences entre *vreun* et d'autres items existentiels dépendants, tels les déterminants *quelque* en français, et *algun* en espagnol. Cette investigation nous amène à postuler l'existence d'un paradigme d'éléments épistémiques, que tout approche unitaire de la polarité doit intégrer.

Le Chapitre 4 contient une description détaillée de la théorie de la polarité que nous adoptons dans cette étude, développée par Chierchia (2006, 2008). Elle dérive la distribution des classes d'éléments en (16) en partant de l'hypothèse de l'élargissement du domaine, comme étant la propriété sous-jacente au phénomène de polarité. Nous explorons ensuite la façon dont ce système peut rendre compte de la distribution et l'interprétation de *vreun*.

Enfin, le Chapitre 5 étudie les propriétés des éléments appelés *mots en N*, dont la distribution est restreinte aux phrases négatives (concordance négative). Nous défendons l'hypothèse qu'ils ne sont pas des éléments de polarité, mais des éléments intrinsèquement négatifs sur la base de deux types d'arguments : tout d'abord, nous montrons qu'ils peuvent introduire une négation sémantique dans certains contextes, et diffèrent des items de polarité négative en ne permettant pas de lecture purement existentielle, non négative. Deuxièmement, ils ont un certain nombre de propriétés qui les rend similaires aux quantificateurs négatifs dans des langues sans concordance négative. Nous montrons ensuite que l'hypothèse que les mots *en N* sont des éléments négatifs permet de rendre compte de la distribution de *vreun* sous la portée de la négation propositionnelle.

2 La distribution de *vreun*

Le Chapitre 2 constitue une étude détaillée des contextes où le déterminant existentiel *vreun* peut apparaître. En prenant comme point de départ la description des faits empiriques donnée par Farkas (2002, 2005), et en introduisant des données nouvelles, nous montrons que la distribution de *vreun* peut être réduite à deux types de contextes : polarité négative (détaillés en section 2.1) et contextes de modalité épistémique (section 2.2) :

2.1 *Vreun* comme item de polarité négative (IPN)

Le déterminant dépendant *vreun* (masculin)/*vreo* (féminin) est morphologiquement dérivé de l'article indéfini *un* (masculin)/*o* (féminin), qui se combine avec le morphème *vre-* (provenant

du verbe latin *volere* > (**vere*) ‘vouloir’. *Vreun* peut apparaître dans tous les contextes canoniques de polarité négative, qui légitiment des éléments comme *any* ou *ever*. Ainsi, il est fréquemment utilisé dans des questions, à la fois des questions totales (1)a ou partielles (1)b, ainsi que dans des questions indirectes (1)c, comme l’illustrent les exemples suivants :

- (27) a. Ai **vreun** vis neîmplinit?
avoir.2SG V-UN rêve non-réalisé
‘As-tu un rêve non réalisé?’
b. Cine are **vreo** informație despre grevă?
qui avoir.3SG V-UN information sur grève
‘Qui a des informations sur la grève?’
c. Mă întreb dacă/cine a văzut **vreun** film românesc recent.
REFL.1SG demander.1SG si/qui avoir.3SG vu V-UN film roumain récemment
‘Je me demande s’il a vu/qui a vu un quelconque film roumain récemment.’

Il est également légitimé dans l’antécédent d’une phrase conditionnelle (2) ou la restriction d’un quantifieur universel (3), contextes analysés comme étant monotones décroissants (Ladusaw (1979), Zwarts (1993), van der Wouden (1997)) :

- (28) Dacă găsești **vreo** carte despre asta, cumpără-mi-o.
si trouver.2SG. V-UN livre sur ça, achete-me.DAT-le.ACC
‘Si tu trouves un livre sur ça, achète-le-moi.’
(29) Fiecare martor care are **vreo** informație va fi chemat la direcțiune.
Chaque témoin qui avoir.3SG V-UN information va.3SG être appelé à direction
‘Chaque témoin qui a une quelconque information sera appelé à la direction’

D’autres contextes typiques de légitimation d’item de polarité négative, où *vreun* peut apparaître incluent des opérateurs monotones décroissants comme *rarement* (9), des prédicats négatifs comme *refușer* (10), où dans la portée de l’opérateur *fără* ‘sans’ (32):

- (30) Rar îmi dă **vreo** explicație în legătură cu ceea ce face.
rarement me.DAT donner.3SG V-UN explication en lien avec DEM ce faire.3sg
‘Il me donne rarement d’explication sur ce qu’il fait.’
(31) Dansa cu el *refuzând* să-i adreseze **vreun** cuvânt.
Danser.3SG avec lui refusant SUBJ-CL.3SG adresser.3SG V-UN mot
‘Elle dansait avec lui en refusant de lui adresser la parole’
(32) Am intrat *fără* **vreun** scop anume într-o librărie.
avoir.1SG entré sans V-UN but certain dans une librairie
‘Je suis entré dans une librairie sans un but précis.’

La distribution de *vreun* illustrée dans les exemples ci-dessus montre donc un comportement typique d’item de polarité négative. Néanmoins, il existe une différence importante entre *vreun* et un IPN comme *any* or *qui que ce soit*. Considérez les exemples suivants :

- (33) a. **Nu* am scris **vreun** articol.
NEG avoir.1SG écrit V-UN article
b. *Nu* am scris **niciun** articol.
NEG avoir.1SG écrit aucun article
‘Je n’ai écrit aucun article.’

L’agrammaticalité de la phrase en (16)a montre que *vreun* n’est pas légitimé sous la négation propositionnelle *nu*, où un élément morphologiquement négatif dit *mot en N* (Laka 1990), le

déterminant *niciun* doit être réalisé. Cette situation est problématique pour l'hypothèse que *vreun* est un IPN, car une des propriétés définitoires d'un IPN est sa légitimation dans la portée de la négation. Ce type d'exemple a été utilisé par Farkas (2002) comme argument contre une analyse de *vreun* en termes de d'item polarité négative.

Nous montrons cependant que cette conclusion est erronée et nous défendons l'hypothèse que *vreun* est un véritable item de polarité négative, malgré le fait qu'il ne soit pas légitimé dans un exemple comme celui en (16)a. Plus précisément, Pereltsvaig (2004) note que la situation illustrée par (16), c'est-à-dire la présence d'un IPN dans tous les contextes négatifs (affectifs) sauf sous la négation même, est due à un effet de *blocage* par le paradigme des *mots en N*. Plus précisément, *vreun* et les mots *en N* peuvent tous les deux apparaître dans des énoncés négatifs, mais comme les mots *en N* sont 'spécialisés' pour les contextes négatifs (comme le montre le Chapitre 5), ils représentent le choix par défaut sous la portée de la négation propositionnelle. Selon Pereltsvaig, cette situation est fréquente à travers les langues qui ont à la fois des mots *en N* et des IPN, comme par exemple en russe ci-dessous :

- (34) *Nemnogie* studenty čitali ***kakoj-libo*** žurnal.
 Peu étudiant _{IPST} quel-*libo* journal
 'peu d'étudiants ont lu un quelconque journal.'

- (35) a. *On ***kogo-libo*** ne vstretil.
 il qui-*libo* neg rencontré
 b. On ***nikogo*** ne vstretil.
 il *ni*-qui net rencontré
 'Il n'a rencontré personne.'

Ce type de blocage ne remet donc pas en question l'hypothèse que *vreun* est un IPN, il montre simplement qu'afin de pouvoir expliquer son interaction avec la négation propositionnelle, il faut prendre en compte tous les paradigmes possibles dans ce contexte, et notamment celui des *mots en N*. Une partie importante de cette thèse étudie la distribution et l'interprétation de cette classe d'éléments, que nous détaillerons dans la section 5 de ce résumé.

Il existe d'autres faits empiriques qui étayent l'hypothèse que *vreun* est un vrai item de polarité négative. Plus précisément, il existe des contextes négatifs où *vreun* peut apparaître malgré le blocage des *mots en N*. *Vreun* peut 'gagner' la compétition avec les *mots en N* dans deux types de situations : lorsque le locuteur veut induire un effet d'élargissement de domaine et lorsque l'utilisation de *vreun* permet d'éviter une ambiguïté. Les exemples suivants illustrent la différence de sens entre *vreun* et le mot *en N* *niciun* sous la portée de la négation :

- (36) a. *Nu* am ***vreo*** speranță că s-ar schimba ceva.
 NEG avoir.1SG V-UN espoir que REFL-avoir.3SG.COND changer quelque chose
 'Je n'ai pas le moindre espoir que quelque chose pourrait changer.'
 b. *Nu* am ***nicio*** speranță că s-ar schimba ceva.
 NEG avoir.1SG aucun espoir que REFL-avoir.3SG.COND changer quelque chose
 'Je n'ai aucun espoir que quelque chose pourrait changer.'

Le choix de *vreun* induit un effet d'élargissement de domaine, commun à tous les items de polarité négative, que nous avons paraphrasé comme 'pas le moindre espoir', effet qui est absent pour un mot *en N*. Nous pouvons donc voir que *vreun* a les propriétés caractéristiques des IPNs. Une autre configuration qui permet l'usage de *vreun* en contexte négatif est la présence d'un mot *en N* dans la phrase, comme en (21) ci-dessous :

- (37) *Nimeni nu a avut vreo informație despre cele întâmplate.*
 personne NEG avoir.3SG eu V-UN information sur DEM.PL passé
 ‘Personne n’a eu d’information sur ce qui s’est passé.’

Comme nous allons le voir dans la partie consacrée aux mots *en N* en roumain, une structure avec deux mots *en N* est ambiguë entre une lecture dite de concordance négative et une lecture dite de double négation. Par exemple, si l’on remplace *vreo* en (21) par le mot *en N nicio*, la phrase aurait deux interprétations possibles : soit ‘ce n’est pas le cas qu’il existe une personne qui ait eu des informations sur ce qui s’est passé’ (concordance négative), soit ‘tout le monde a eu des informations sur ce qui s’est passé’ (double négation). Afin d’éviter l’ambiguïté et avoir seulement une lecture de concordance négative, avec une seule négation au niveau de l’interprétation, on utilise *vreun*.

Nous pouvons donc conclure que ***vreun* est un item de polarité négative**, légitimé dans tous les contextes où d’autres éléments appartenant à cette classe peuvent apparaître. L’interaction plus complexe avec la négation positionnelle peut s’expliquer par l’existence en roumain des mots *en N*, paradigme dont distribution est restreinte aux contextes négatifs.

2.2 *Vreun* comme item épistémique

La distribution de *vreun* s’étend au-delà des contextes de polarité négative, ce qui rend *vreun* un item à double usage, similaire dans ce sens à certaines classes d’éléments recensées dans la typologie en (16), comme *any* ou *irgendein*. La contribution empirique de cette étude est d’examiner en détail la distribution de *vreun* en contexte ‘positif’, et de réunir les environnements qui le légitiment sous la catégorie de *contexte (de modalité) épistémique*. Plus précisément, nous introduisons des faits empiriques nouveaux, qui mettent en évidence des contrastes jusqu’à présent ignorés dans la littérature, notamment dans les contextes modaux. Nous appelons l’usage de *vreun* en contexte positif *usage épistémique* et nous proposons la contrainte de légitimation sémantique suivante :

- (38) Configuration de légitimation: **Op [...vreun...]**

Contrainte de légitimation: **Op** *p* implique que les alternatives doxastiques de l’agent épistémique incluent des mondes-*non p*

Nous allons maintenant présenter de façon détaillée les contextes positifs où *vreun* apparaît, en montrant comment la contrainte de légitimation en (25), que nous pouvons abréger comme *contrainte de mondes-non p*, permet de rendre compte de ces faits.

2.2.1 Contextes modaux

Le roumain a deux verbes modaux, l’un pour exprimer la nécessité *a trebui* ‘devoir’, et l’autre pour exprimer la possibilité *a putea* ‘pouvoir’. Les exemples ci-dessous montrent que *vreun* peut apparaître dans la portée des deux :

(39) Cu numele lui, *trebuie* să fie ***vreun*** aristocrat.
 avec nom.DEF son doit SUBJ être.3SG V-UN aristocrate
 ‘Au vu de son nom, il doit être un aristocrate.’

(40) Marcel *poate* fi în ***vreo*** stațiune de ski, iarna merge des la munte.
 Marcel pouvoir.3SG être dans V-UN station de ski, hiver.DEF aller.3SG souvent à montagne
 ‘Marcel peut être dans une station de ski, en hiver il va souvent à la montagne.’

Néanmoins, il existe également des contextes où *vreun* est agrammatical sous ces mêmes deux verbes modaux, comme l’attestent les phrases en (41)-(40) :

(41) **Trebuie* să scriu ***vreun*** articol despre ultimele alegeri.
 doit SUBJ écrire.1SG V-UN article sur dernières.DEF élections
 ‘Je dois écrire un article sur les dernières élections.’

(42) **Poți* scrie ***vreun*** articol despre albine, publicăm orice.
 pouvoir.2SG écrire V-UN article sur abeilles, publier.1PL n’importe quoi
 ‘Tu peux écrire un article sur les abeilles, on publie de tout.’

Le contraste entre la légitimation de *vreun* en (39)-(40) d’une part, et son agrammaticalité en (41)-(40), d’autre part, montre qu’il faut examiner la sémantique des opérateurs modaux afin d’identifier le facteur responsable pour la distribution de *vreun*.

Nous adoptons une analyse canonique de la modalité en termes de mondes possibles, telle que proposée par Kratzer (1981, 1991), entre autres. Dans ce cadre, les modaux sont équivalents à des quantificateurs sur des mondes : quantification universelle pour un modal de nécessité, comme *devoir*, et quantification existentielle pour un modal de possibilité, comme *pouvoir*. L’interprétation d’un modal met en jeu deux autres facteurs, appelés *paramètres conversationnels* : la *base modale* et la *source ordonnante*. Dans ce qui suit, nous mettons de côté la source ordonnante, et nous nous concentrons sur la base modale, qui joue un rôle important dans la légitimation de *vreun*.

La base modale détermine l’ensemble des mondes accessibles à partir de chacun des mondes dans le domaine de quantification de l’opérateur modal. Par exemple, en énonçant une phrase comme *Paul peut être à Paris*, un locuteur ne dit pas seulement qu’il existe un monde possible dans lequel Paul est à Paris, mais plutôt quelque chose comme *Il existe un monde possible compatible avec les connaissances du locuteur, tel que Paul est à Paris dans ce monde*. Kratzer distingue deux principaux types de base modale : une base modale *épistémique* et une base modale *circonstancielle*. Le contraste entre les deux est illustré par les énoncés ci-dessous :

(43) Paul *peut* voter aux prochaines législatives.

(44) Il se *peut* que Paul vote aux prochaines législatives.

Lorsque la phrase en (43) est interprétée par rapport à une base modale circonstancielle, elle est évaluée par rapport à certains faits pertinents dans le monde d’énonciation, tels que l’âge de Paul, sa nationalité, son inscription sur les listes électorales, etc. En revanche, la phrase en (44) est évaluée par rapport aux informations dont dispose le locuteur, et donc la proposition serait vraie dans une situation où, par exemple, le locuteur a remarqué le fait que Paul

s'intéresse aux élections. Il s'agit dans ce cas d'une interprétation faite par rapport à une base modale épistémique, déterminée par l'information et les croyances d'un certain locuteur. On voit donc qu'un verbe modal, qu'il soit de nécessité ou de possibilité, peut avoir plusieurs lectures possibles selon les paramètres contextuels qui interviennent dans son interprétation.

Cette distinction est pertinente pour la distribution de *vreun* : plus précisément, nous montrons que *vreun* est sensible à la base modale par rapport à laquelle on évalue une phrase avec un modal. Les verbes modaux étant ambigus entre plusieurs interprétations, ce n'est donc pas l'énoncé en lui-même qui détermine si *vreun* est grammatical ou non, mais son contexte d'utilisation. En guise d'illustration, considérez l'énoncé en (32):

- (45) Mircea *trebuie* să fie la ***vreun*** magazin.
Mircea doit SUBJ être.3SG à V-UN magasin
'Mircea doit être dans un magasin. (quelconque)'

La phrase est légitime seulement dans une situation d'énonciation où le modal reçoit une interprétation épistémique, comme par exemple dans un contexte comme celui en (i) ci-dessous:

- (i) Je suis passé chez lui, mais Mircea était encore absent. Récemment, il a eu une augmentation de salaire, dont il est très content. Depuis, il passe beaucoup de temps à faire les magasins.

Dans ce contexte, la phrase en (32) fait une assertion par rapport à l'information dont dispose le locuteur au moment d'énonciation et exprime que les mondes compatibles avec ses croyances, Mircea est dans un magasin (quelconque).

En revanche, dans une situation qui parle, par exemple, des obligations de Mircea (comme en (ii) ci-dessous), autrement dit un contexte non-épistémique, l'énoncé en (32) serait exclu:

- (ii) Mircea est un commercial. Ces derniers temps, il est souvent arrivé en retard à son travail, qu'il néglige de plus en plus. Son employeur l'a prévenu qu'il n'accepterait plus cette situation et donc, à partir de ce moment, Mircea doit être dans un magasin à 9 heures du matin, afin de promouvoir les produits de la compagnie. S'il ne respecte pas cette obligation, Mircea sera licencié.

Dans ce type de contexte, le modal de nécessité acquiert une lecture déontique, qui fait référence non pas aux connaissances ou croyances des locuteurs, mais à certaines obligations. La base modale dans ce cas est une base circonstancielle, qui ne permet pas la légitimation de *vreun*.

En prenant comme point de départ cette distinction entre base modale épistémique, d'une part et circonstancielle, d'autre part, nous avançons l'hypothèse suivante :

- (46) *Vreun* est légitimé dans les contextes modaux épistémiques

Nous montrons que c'est seulement les contextes épistémiques qui permettent de satisfaire la contrainte de légitimation en (25), qui impose que *vreun* apparaisse sous un opérateur qui permet d'inférer que parmi les mondes compatibles avec les croyances de l'agent épistémique, il y a des mondes où la proposition qui contient *vreun* pourrait être fausse. Les modaux épistémiques étant utilisés dans des contextes où le locuteur n'est pas dans une position où il peut faire l'assertion sans le modal, tout énoncé avec un modal épistémique implique que le locuteur admet la possibilité que la proposition où *vreun* apparaît soit fausse.

2.2.2 Contextes hypothétiques

La généralisation formulée en (46) permet de regrouper d'autres contextes de légitimation, que Farkas (2002) appelle *hypothétiques*, qui expriment une hypothèse sur une certaine situation, comme par exemple en (47), où l'utilisation des syntagmes nominaux *vreun peste* 'un poisson' ou *vreo rata* 'un canard' expriment une hypothèse sur la source possible du bruit entendu.

- (47) În balta din spatele cantonului, ceva plescăi
 Dans étang.DEF de derrière.DEF canton.DEF.GEN quelque chose éclabousser.3SG
 scurt, **vreun** pește sau **vreo** rață.
 brièvement V-UN poisson ou V-UN canard
 'Dans l'étang derrière le canton, quelque chose fit des éclaboussures : un poisson ou un canard '.

Nous montrons qu'il existe deux types de contextes hypothétiques, et les deux peuvent être analysés en termes de modalité épistémique ; par conséquent, ils satisfont la contrainte de légitimation que nous avons proposé (donnée en (25)) : le présomptif (discuté dans la section 2.2.2.1) et la disjonction (section 2.2.2.2). La distribution de *vreun* par rapport à ces contextes n'avait pas été investiguée auparavant dans la littérature.

2.2.2.1 Le présomptif

Le système verbal roumain dispose d'un mode verbal spécialisé pour exprimer des hypothèses, traditionnellement appelé *présomptif* (*Grammaire de l'Académie Roumaine*, 2006). Il s'agit d'un mode non-indicatif, morphologiquement dérivé sur la base d'un marqueur modal (conditionnel, futur ou subjonctif), qui se combine avec l'infinitive du verbe *être* et ensuite avec un participe présent ou passé, comme dans le tableau ci-dessous :

Tableau 1 : Le paradigme du présomptif en roumain

FORM	CONDITIONNEL	FUTUR1	FUTUR2	SUBJONCTIF	FI ‘ETRE’	PARTICIPE
1 PERSONNE SG	aș	voi	oi	SA		PRESENT
2 PERSONNE SG	ai	vei	oi			
3 PERSONNE SG	ar	va	o			
1 PERSONNE PL	am	vom	om			PASSE
2 PERSONNE PL	ați	veți	oți			
3 PERSONNE PL	ar	vor	or			

Nous montrons que *vreun* est légitimé la plupart du temps par le paradigme formé sur la base du *futur2*, dit également 'futur populaire', comme illustré dans les exemples ci-dessous :

- (48) *Mașina mea are **vreo** problemă la motor, pornește greu
 voiture ma avoir.3SG V-UN problème à moteur, démarrer.3SG difficilement
 'Ma voiture a un problème de moteur, elle démarre difficilement.'

- (49) Mașina mea o fi având vreo problemă la motor, pornește greu
voiture ma FUT2.3SG ETRE avoir.PRST.PART V-UN problème à moteur, démarrer.3SG
'Ma voiture doit avoir un problème au moteur, elle démarre difficilement.'

L'énoncé en (49), avec la forme présomptive du verbe *avoir*, exprime une hypothèse sur la source possible des problèmes de voiture ; le sens étant celui d'une hypothèse, cela implique que le locuteur n'est pas sûr qu'il s'agisse effectivement d'un problème de moteur, et par conséquent, la phrase légitime l'utilisation de *vreun*. En revanche, ce sens hypothétique est absent en (48), où l'utilisation de *vreun* rend la phrase agrammaticale.

Afin de rendre compte de la légitimation de *vreun* dans ce contexte, et le mettre en parallèle avec les contextes modaux précédemment discutés, nous adoptons une analyse récente du présomptif, développée dans Irimia (2008), qui propose une analyse en termes de modalité épistémique. Nous concluons que le présomptif satisfait donc la contrainte de légitimation de la même façon qu'un verbe modal épistémique, que nous n'allons donc pas reprendre. Notons simplement que notre étude montre qu'il s'agit d'un des contextes les plus fréquents de légitimation de *vreun*, ce qui indique le lien étroit entre cet item et les marqueurs épistémiques existants dans la langue.

2.2.2.2 La disjonction

Un autre contexte canonique de légitimation de *vreun* est la disjonction, comme par exemple dans la phrase en (50) :

- (50) În primele clipe, mi-am imaginat o tragedie familială sau vreun
en premiers moments, REFL-avoir.1SG imaginé une tragédie familiale ou V-UN
dezastru financiar.
désastre financier
'Dans les premiers instants, j'ai imaginé une tragédie familiale ou un désastre financier.'

Nous montrons que la disjonction peut également être analysée en termes de modalité épistémique, et donc similaire aux autres opérateurs que nous avons discutés dans les sections précédentes, comme les modaux ou le présomptif. Plus précisément, nous adoptons l'analyse de Zimmerman (2000), selon laquelle une disjonction est une liste de possibilités, comme représenté en (51) :

- (51) a. Paul est à Paris ou à Rome
b. $\Diamond$ Paul est à Paris & $\Diamond$ Paul est à Rome.

Ainsi, lorsqu'on affirme quelque chose comme *Paul est à Paris ou à Rome*, la phrase est interprétée comme *il est possible que Paul soit à Paris et il est possible que Paul soit à Rome*. Voyons maintenant quel est le rapport exact avec la légitimation de *vreun*. Lorsqu'un locuteur utilise une disjonction, donc exprime une liste de propositions possibles, il ne s'engage à la vérité d'aucune de ces propositions. Intuitivement, il n'exclut pas que la possibilité que Paul soit à Rome est fausse, et il n'exclut pas non plus que la possibilité que Paul soit à Paris soit fausse. Autrement dit, il est compatible avec ses croyances que n'importe laquelle de ces deux propositions soit fausse, situation qui permet à *vreun* d'être légitimé.

2.2.3 Verbes d'attitude

Les contextes discutés dans cette section illustrent la distribution de *vreun* en dehors des environnements de polarité négative et mettent en évidence le lien étroit qui existe entre ce

déterminant et la modalité épistémique. La contrainte de légitimation en (25), formulée en termes de croyances ('alternatives doxastiques') d'un agent épistémique, permet d'étendre la couverture empirique aux prédicats d'attitude épistémique comme *croire*, *supposer* ou *imaginer*, qui autorisent *vreun* dans la proposition qu'ils prennent comme complément, comme en (54) -(55) :

(52) *Cred* *că a* *intrat* ***vreun*** *hoț.*
croire.1SG que avoir.3SG entré V-UN voleur
'Je crois qu'un voleur est entré.'

(53) *Bănuiesc* *că ai* *participat* *deja la* ***vreun*** *colocviu.*
Supposer.1SG que avoir.2SG participé déjà à V-UN colloque
'Je suppose que tu as déjà participé à un colloque.'

Tout comme les modaux épistémiques, ces prédicats peuvent être utilisés seulement dans des situations où le locuteur admet la possibilité que la proposition complément soit fausse. Par exemple, en disant '*Je crois que Paul est parti*', le locuteur exprime simplement ses croyances, justifiées ou pas, mais n'est pas en position de faire une affirmation plus forte, que serait par exemple '*Je sais que Paul est parti*'.

Nous montrons également que le contraste entre l'agrammaticalité de *vreun* sous le prédicat *vouloir* (54) et sa légitimation sous le verbe *espérer* (55) représente un argument empirique important en faveur de la contrainte proposée en (25) :

(54) **Vreau* *să* *cumpăr* ***vreo*** *carte* *despre Franța.*
vouloir.1SG SUBJ acheter V-UN livre sur France
'Je veux acheter un livre sur la France'.

(55) *Sper* *că ai* *adus* ***vreun*** *cadou.*
espérer.1SG que avoir.2SG apporté V-UN cadeau
'J'espère que tu as apporté un cadeau.'

Lorsque l'on compare les propriétés de ces deux prédicats, on s'aperçoit que *vouloir*, contrairement à *espérer*, peut prendre comme complément une proposition qui est établie dans le contexte comme étant vraie. Par exemple, lorsqu'on voit qu'il pleut dehors, on peut énoncer quelque chose comme *Il pleut et je veux qu'il pleuve* ou *Il pleut et c'est ce que je veux*, mais nous ne pouvons en aucun cas dire *Il pleut et c'est ce que j'espère (maintenant)*. Autrement dit, pour que *espérer* puisse être approprié, il faut que le locuteur ne puisse pas exclure la possibilité que la proposition en question soit fausse. C'est cette propriété qui permet à *espérer* de légitimer *vreun* dans la proposition qu'il prend comme complément, comme en (55). *Vouloir* est compatible avec des situations où la contrainte de mondes-*non p* est clairement pas satisfaite, et par conséquent, *vreun* ne peut pas apparaître dans ce contexte.

2.3 Contraintes et contextes de légitimation

Dans cette section, nous avons illustré la façon dont la contrainte de mondes-*non p* rend compte des contrastes entre modaux épistémiques et non-épistémiques ou bien entre *vouloir* et *espérer*. En examinant d'autres environnements où *vreun* est légitimé, et en mettant ensemble les contextes positifs et négatifs, notre étude des contextes d'occurrence de *vreun* nous amène à la distribution résumée dans le tableau 2 ci-dessous :

Contextes	<i>Vreun</i>
Questions	✓
Antécédents d'une conditionnelle	✓
Restriction d'un quantifieur universel	✓
Subordonnées introduites par <i>avant</i>	✓
Portée de <i>sans</i>	✓
Portée d'opérateurs monotones décroissants	✓
Portée de prédicats négatifs	✓
Portée de la négation propositionnelle	✓
Modaux épistémiques	✓
Mode présomptif	✓
Disjonctions	✓
Verbes d'attitude épistémiques (non factifs)	✓
Portée de <i>espérer</i>	✓
Portée de <i>préférer</i>	✓
Impératives (<i>d'alternative</i>)	✓
(Type II) Impérative and déclarative (IaDs)	✓
Phrases affirmatives (épisodiques)	*
Conséquent d'une conditionnelle	*
Portée d'un quantifieur universel	*
Modaux non-épistémiques	*
Génériques	*
Impératives (de <i>choix</i>)	*
Verbes d'attitude intensionnels	*
Verbes factifs	*

Tableau 2 La distribution de *vreun*

Nous proposons de traiter *vreun* comme un item de polarité à double usage : IPN/épistémique, soumis aux deux contraintes en (56):

- (56) (a) ***vreun* est un item de polarité négative:** *vreun* est légitimé dans les contextes de polarité négative
 (b) ***vreun* est un item épistémique :** Configuration de légitimation: Op [...*vreun*...]
 Contrainte de légitimation: Op *p* implique que les alternatives doxastiques de l'agent épistémique incluent des mondes-*non p*

Le Chapitre 3 cherche à situer ces observations par rapport aux analyses proposées dans la littérature pour rendre compte de la distribution de *vreun*. Nous comparons également ces contraintes à celles responsable pour la distribution d'autres items que l'on peut qualifier d'épistémiques, en français et en espagnol. Le contenu de ce chapitre est résumé dans la section suivante.

3 Analyses précédentes et éléments similaires

L'une des premières questions soulevées par la distribution résumée dans le Tableau 2 ci-dessus est la question du double usage : dans quelle mesure est-ce qu'on peut parler d'un seul item *vreun* ? Y a-t-il un lien entre l'usage d'item de polarité négative et l'usage d'item épistémique, ou bien, il s'agit d'une ambiguïté lexicale ? Les deux réponses ont été proposées dans la littérature : Farkas (2005) défend une analyse qui repose sur l'ambiguïté lexicale, alors que Giannakidou (1997, 1999) développe une approche de la polarité basée sur la notion de nonvéridicalité, en mentionnant *vreun* comme pouvant être analysé dans ce cadre. Nous montrons qu'aucune de ces deux approches ne peuvent rendre compte de la distribution de *vreun* que nous avons identifiée précédemment.

Dans un premier temps, nous discutons l'approche de Farkas (2002, 2005), qui constitue la seule étude détaillée de *vreun* dans la littérature, et que nous avons pris comme base de départ pour notre propre investigation. Sans entrer dans les détails de son analyse, elle postule l'existence de deux items différents, tous les deux prononcés comme *vreun* : un item dit de *choix non-différencié* (*undifferentiated choice*) et un item de *choix arbitraire* (*random choice*). Nous évaluons cette proposition par rapport à sa couverture empirique et concluons que l'hypothèse de l'ambiguïté lexicale est à la fois problématique et non nécessaire. En effet, une telle hypothèse contribue peu à notre compréhension du phénomène de la polarité et ne peut ni expliquer, ni prédire le type de double usage attesté à travers les langues. Dans la mesure où l'on peut développer une approche uniforme de la polarité et des différents paradigmes instanciés dans le langage naturel, elle est conceptuellement préférable à toute hypothèse d'ambiguïté lexicale.

Une approche plus uniforme des contraintes responsables de la légitimation des différents items de polarité à travers les langues est celle développée par Giannakidou (1997, 1999, 2009), en termes de nonvéridicalité. Plus précisément elle suppose que les items de polarité sont 'référentiellement déficients', dans le sens où ils ne peuvent pas introduire un référent à eux seuls. Ils sont donc contraints d'apparaître dans des contextes qui ne les forcent pas à référer, tels la négation, les phrases conditionnelles, les questions, ou les modaux. Cette approche a l'avantage de mettre ensemble un grand nombre de contextes de légitimation, mais nous montrons néanmoins qu'elle ne peut pas être étendue à la distribution de *vreun*. L'un des principaux problèmes identifiés réside dans le fait que cette analyse ne peut pas rendre compte du contraste entre modalité épistémique, d'une part et modalité non-épistémique, d'autre part, alors qu'il s'agit d'une des principales caractéristiques de la distribution de *vreun*. Nous concluons qu'une analyse en termes de non-véridicalité n'est pas appropriée pour *vreun*.

En cherchant à déterminer dans quelle mesure les contraintes que nous avons identifiées pour *vreun* sont-elles valables pour d'autres items, nous discutons la distribution de plusieurs types d'items existentiels dépendants : les items de libre choix existentiels comme *un N quelconque* (Jayez & Tovenà 2006), le déterminant *quelque* (Jayez & Tovenà 2007, 2008a,b) et le déterminant *algun* (Alonso-Ovalle & Menéndez-Benito 2008, 2009). En nous appuyant sur les données disponibles dans la littérature, nous concluons qu'il existe plusieurs items épistémiques, dans le sens que nous avons défini pour *vreun*. Plus précisément, *quelque* et *algun* sont tous les deux des déterminants sensibles à la modalité épistémique et sont exclus dans des situations où le locuteur n'admet pas la possibilité que la proposition où ces items apparaissent soit fausse. De plus, cette investigation met en évidence une propriété partagée par tous les items épistémiques, qui les distingue des items existentiels de libre choix. Ainsi, tous ces items requièrent un domaine de quantification qui contienne plus d'un individu, et sont donc incompatibles avec des situations où il existe un seul individu qui pourrait satisfaire l'assertion. Cette propriété est illustrée pour le français ci-dessous :

(57) ??Marie a rencontré **un** diplomate *quelconque*, à savoir mon frère.

(58) ?? Yolande a probablement rencontré *quelque* amie, à savoir Marie.

Nous adoptons la terminologie de Jayez & Tovenà (2007) pour y référer et nous appelons cette contrainte PAS DE GAGNANT. De plus, les ILCs existentiels comme *un N quelconque* imposent une autre contrainte, appelée PAS DE PERDANT, qui requière que l'on ne puisse pas exclure un membre de leur domaine de quantification. Autrement dit, il faut que tous les membres de ce domaine soient équivalents quant à leur possibilité de satisfaire l'assertion. L'exemple en (59) illustre cette contrainte :

(59) ??Marie a rencontré **un** diplomate **quelconque**, *qui ne peut pas être mon frère*.

En revanche, tous les items épistémiques admettent que l'on exclue un membre de leur domaine de quantification, une situation que l'on peut décrire en disant qu'ils ne sont pas sujets à la contrainte PAS DE PERDANT. En guise d'illustration, considérez les énoncés suivants:

(60) La contrainte PAS DE PERDANT est violée

E posibil ca Irina să se fi întâlnit cu **vreun** prieten, *dar nu poate*
est possible que Irina SUBJ REFL ETRE rencontré avec V-UN ami, mais NEG peut
fi Matei, tocmai l-am văzut.

être Matei, à peine CL-avoir.1SG vu

'Il est possible que Irina ait rencontré un ami, mais ça ne peut pas être Mircea, je viens de le voir.'

(61) La contrainte PAS DE PERDANT est violée

Yolande a probablement rencontré **quelque** amie, *qui n'était pas Marie*.

Nous identifions cela comme étant la propriété commune à tous les items épistémiques, qui les distingue des items de libre choix existentiels.

Malgré ces similarités, *vreun* diffère de *algun* et *quelque* sous plusieurs aspects. Sans les recenser ici, notons simplement la distribution dans la portée de la négation propositionnelle. Dans la section 2.1 ci-dessous, nous avons montré qu'il existe des contextes où *vreun* est préféré sous la négation propositionnelle, malgré l'effet de blocage typiquement créé par les mots *en N*, comme par exemple en (62) :

(62) *Nu am vreoo speranță că s-ar schimba ceva.*

NEG avoir.1SG V-UN espoir que REFL-avoir.3SG.COND changer quelque chose

'Je n'ai pas le moindre espoir que quelque chose pourrait changer.'

En revanche, *quelque* et *algun* sont tous les deux exclus de la portée de la négation, comme l'attestent les exemples suivants :

(63) *Je n'ai pas mangé **quelque** pomme.

(64) *No he leído **algún** artículo recientemente.

NEG avoir.1SG lu ALGUN article récemment

Sur la base de cette comparaison entre différents déterminants dans des langues romanes, nous concluons qu'il existe des items sensibles à la modalité épistémique, un paradigme encore insuffisamment investigué dans les études sur la polarité. Les différences entre ces items restent à déterminer, mais la distribution sous la négation indique que le recouvrement d'usages n'est pas identique. Alors que *vreun* est clairement un item à double usage IPN/épistémique, l'usage d'IPN pour *quelque* et *algun* est moins bien documenté.

Afin de rendre compte de la distribution de *vreun*, nous avons adopté l'approche unitaire de la polarité proposée par Chierchia (2006, 2008), en termes d'élargissement de domaine, que nous introduisons dans la section suivante.

4 Analyse unitaire de la polarité : élargissement du domaine

L'une des approches les plus influentes dans l'étude du phénomène de polarité est celle basée sur l'hypothèse de l'élargissement du domaine (due à Kadmon & Landman 1993). Dans ce

cadre, les items de polarité sont des indéfinis qui amènent obligatoirement la considération d'un domaine d'individus plus large que celui que l'on associe à un simple indéfini comme 'un'. Ils imposent donc un *élargissement* de l'ensemble dénoté par le nom avec lequel ils se combinent. Par exemple, un déterminant indéfini comme *a politician* 'un politicien' introduit un certain domaine de quantification, pertinent dans le contexte. En revanche, lorsqu'on choisit d'utiliser un IPN comme *any* dans un syntagme comme celui en (1)b, on élargit ce domaine, induisant un sens que l'on peut paraphraser comme 'J'ai rencontré un individu parmi tous les politiciens possibles', ce qui rend l'assertion peu informative.

- (65) a. I met *a* politician.
 'J'ai rencontré un politicien'
 b. *I met *any* politician
 'J'ai rencontré quelque politicien que ce soit'

L'hypothèse qui sous-tend toutes les analyses en termes d'élargissement de domaine est que cette propriété peut être exploitée seulement dans des contextes négatifs, où elle contribue à un gain d'informativité, comme l'illustrent les exemples suivants :

- (66) a I didn't meet *a* politician.
 'Je n'ai pas rencontré un politicien.'
 b. I didn't meet *any* politician.
 'Je n'ai pas rencontré de politicien/ quelque politicien que ce soit.'

Ainsi, un énoncé comme 'je n'ai pas rencontré quelque politicien que ce soit' ('je n'ai pas rencontré un politicien parmi tous les individus possibles') est clairement plus 'fort', plus informatif que son équivalent avec un indéfini simple, comme en (66)a, qui dit simplement 'je n'ai pas rencontré un politicien' (dans un certain domaine restreint, pertinent dans le contexte). Autrement dit, l'énoncé en (66)b implique celui en (66)a. L'élargissement du domaine induit par l'item de polarité entraîne donc un *renforcement* du sens que l'on aurait avec un simple indéfini. En supposant que les items de polarité doivent obligatoirement amener un renforcement de sens, et que celui-ci ne peut avoir lieu que dans des contextes négatifs (plus précisément, monotones décroissants, Ladusaw 1979), ce type d'approche dérive la distribution restreinte des items de polarité négative.

Cette hypothèse cherche donc à relier le sens des items de polarité à leur usage. Néanmoins, en posant des contraintes en termes d'informativité, une analyse dans ces termes ne peut pas expliquer pourquoi une phrase comme celle en (1)b est agrammaticale, à la place d'être simplement peu informative. Comme la contrainte de renforcement du sens est liée aux conditions d'usage, cette approche ne peut pas dériver pourquoi la grammaire des locuteurs ne produit pas des phrases comme en (1)b. Il est donc rapidement apparu que cette implémentation 'pragmatique' de la propriété de l'élargissement du domaine ne peut pas rendre compte des contraintes de légitimation des items de polarité.

Chierchia (2004, 2006) développe une implémentation de l'hypothèse d'élargissement du domaine qui cherche à remédier à ce problème. Ainsi, il défend une approche de la grammaire qui remet en question la distinction traditionnelle entre sémantique et pragmatique, et fait l'hypothèse que certaines inférences pragmatiques peuvent affecter la composition sémantique, et donc le statut de grammaticalité d'un énoncé. Nous illustrons cette hypothèse dans la section suivante.

4.1 Implicatures et exhaustification

L'approche traditionnelle de la grammaire pose une distinction très claire entre le sens des énoncés (sémantique) et les conditions d'usage de ce sens (pragmatique). Par exemple, dans un dialogue comme celui en (67), la réponse de B est perçue comme étant une réponse négative, même si l'assertion en elle-même ne concerne que certaines obligations que B doit remplir.

- (67) A: Tu viens à la fête ce soir?
B: Je dois travailler

Le sens de l'énoncé (impliquant que B ne va pas aller à la fête) est donc plus riche que son sens littéral (B doit travailler). Le terme utilisé depuis Grice (1975) pour désigner les parties du sens qui ne sont pas présentes dans le sens littéral est celui d'*implicature*. Afin de comprendre comment on arrive au sens enrichi d'une phrase, prenons un exemple avec des quantificateurs, comme suit :

- (68) **Beaucoup** de touristes ont visité ce musée.
a. **Quelques** touristes ont visité ce musée.
b. **Beaucoup** de touristes ont visité ce musée.
c. **Tous** les touristes ont visité ce musée.

Les énoncés sont généralement interprétés par rapport à des *alternatives* que le locuteur aurait pu produire. Les implicatures sont le résultat des inférences que l'on fait sur la base de ces alternatives. Par exemple, lorsqu'un locuteur choisit de produire l'énoncé en (10), il dit non seulement que beaucoup de touristes ont visité un certain musée, mais il *implique* également que *pas tous les touristes* ont visité le musée en question. Simplifiant, lorsqu'on interprète cette phrase, on considère les alternatives en (10)a-c et on exclut toute alternative qui aurait été plus informative que l'assertion originale. Dans le cas présent, (10)c avec le quantifieur universel *tous* est une alternative plus informative, plus forte que l'assertion avec *beaucoup*. Si le locuteur n'a pas asserté (10)c, c'est qu'il n'a pas suffisamment d'informations qui lui permettraient d'affirmer l'alternative la plus forte. En supposant que le locuteur est bien informé et coopératif, on arrive à la conclusion que cette alternative est fausse. On arrive donc au sens enrichi, également appelé *renforcé* d'une phrase en rajoutant à l'assertion initiale la négation de toute alternative plus informative. Le résultat est donc *Beaucoup mais pas tous les touristes ont visité ce musée*.

Des analyses récentes de ce type d'inférences (voir par exemple Chierchia, Fox & Spector 2009) supposent que le renforcement du sens est le résultat d'un processus grammatical d'*exhaustification* équivalent à l'insertion d'un opérateur comme *only* 'seulement' dans la dérivation. Lorsqu'on renforce le sens d'un énoncé en utilisant cet opérateur d'exhaustification, défini comme en (12), on affirme que l'assertion initiale est vraie et que toute alternative plus forte est fausse :

$$(69) [[O_{ALT}(S)]]^w = 1 \text{ iff } [[S]]^w = 1 \wedge \forall \phi \in ALT \ (\phi(w) = 1 \rightarrow [[S]] \subseteq \phi)$$

Les implicatures qui servent à renforcer le sens sont donc calculées grâce à cet opérateur d'exhaustification, qui les 'rajoute' au sens initial.

4.2 Exhaustification et polarité

Le processus d'exhaustification joue un rôle crucial dans l'approche de la polarité développé par Chierchia (2006, 2008). Plus précisément, il défend l'hypothèse que l'élargissement du domaine est la propriété inhérente de tout item de polarité. Ainsi, un élément de polarité est un indéfini, qui introduit obligatoirement des alternatives de domaine, qui requièrent la présence d'un opérateur d'exhaustification. Son rôle est d'éliminer les alternatives plus fortes lorsqu'il y en a, et donc d'enrichir l'assertion initiale.

Chierchia montre que les restrictions sur les différentes classes d'éléments de polarité (recensées dans la typologie en (16)), avec un double usage ou non, peuvent être dérivées selon le type d'opérateur qui est introduit, et le type d'alternatives auxquelles il s'applique. L'agrammaticalité des phrases avec un item de polarité résulte de configurations où il y a des alternatives plus fortes que l'assertion, mais l'exhaustification ne peut pas se faire.

Nous n'allons pas détailler ce système ici, ou comment procède l'exhaustification pour chacune des classes d'items dans la typologie en (16), notons simplement que cette approche prend comme point de départ l'élargissement du domaine (les alternatives introduites par un item de polarité), et arrive à dériver l'agrammaticalité dans les cas de non-légitimation grâce à la présence de cet opérateur dans la syntaxe. Si les contraintes associées avec cet opérateur ne sont pas satisfaites (comme par exemple dans des cas où il y a des alternatives plus fortes, mais que l'enrichissement ne peut pas avoir lieu), la dérivation ne peut donc pas procéder. Cette implémentation résout donc le principal problème de l'analyse de Kadmon & Landman, qui posent une contrainte moins forte, qui n'affecte pas la composition sémantique et qui ne peut donc pas dériver l'agrammaticalité des phrases où un item de polarité n'est pas légitimé.

L'hypothèse centrale dans la théorie de Chierchia est donc que les alternatives introduites par les éléments de polarité doivent servir à un enrichissement du sens. Le type d'enrichissement peut être différent, selon qu'il s'agit d'un élément légitimé dans des contextes négatifs seulement, ou bien ayant d'un double usage avec un item de libre choix comme *any*, ou étant restreint aux contextes modaux. Le Chapitre 4 de notre étude présente de façon détaillée les dérivations associées à chacune de ces classes d'items.

En adoptant ce système, nous cherchons à rendre compte de la distribution de *vreun*, en supposant qu'il est similaire aux éléments à double usage IPN/ ILC existentiel et en proposant une modification du type d'alternatives de domaine que l'on considère lorsqu'on interprète une phrase avec *vreun*. Nous montrons ainsi que l'on peut dériver la différence de sens entre un item épistémique et un ILC existentiel, qui réside dans ce que ce qui a été désigné ci-dessus comme la contrainte PAS DE PERDANT. Plus précisément, nous dérivons le fait que n'importe quel membre du domaine de quantification peut être exclu, en supposant que les alternatives que l'on considère pour enrichissement sont réduites à des ensembles contenant un seul individu. Sans détailler plus cette proposition, nous concluons que le système que nous adoptons permet de dériver le sens de *vreun*. Il n'en va pas de même pour la contrainte de légitimation en (25), contrainte de mondes-*non p*, qui, à ce stade d'investigation, ne peut pas être facilement dérivée. Autrement dit, nous pouvons dériver le sens de *vreun*, mais il faut encore dériver le lien entre sa distribution et ce sens. Au vu de l'existence de plusieurs items épistémiques, dont il reste à déterminer les propriétés exactes, nous considérons que toute approche unitaire de la polarité doit intégrer ce paradigme.

5 Les propriétés des mots *en N* en roumain

Un autre paradigme d'éléments dépendants étudié dans cette thèse est celui des mots *en N* (terme dû à Laka 1990) en roumain, dont la distribution est restreinte aux contextes négatifs, et qui entrent dans le système dit de concordance négative de la langue. Nous défendons l'hypothèse qu'ils ne sont pas des items de polarité négative (des indéfinis introduisant un élargissement du domaine), mais des éléments négatifs. Nous montrons ainsi qu'il existe des contextes où ils introduisent la négation à eux seuls, contrairement aux IPNs. De même, nous allons montrer qu'ils partagent un certain nombre de propriétés avec des quantifieurs négatifs comme *nobody*. Notre hypothèse sur les mots *en N* comme des éléments intrinsèquement négatifs nous permet ensuite d'expliquer l'interaction de *vreun* avec la négation propositionnelle. Ci-dessous, nous résumons les propriétés des mots *en N* et les arguments en faveur de l'hypothèse que ce sont des éléments négatifs. Ces faits sont discutés dans la thèse au Chapitre 1, section 2, et dans le Chapitre 5, et sont basés sur Falaus (2007a,b).

La négation propositionnelle, réalisée par le marqueur négatif *nu*, est toujours obligatoire pour légitimer un mot *en N* en roumain, qu'il soit en position préverbale (1a) ou postverbale (1b):

- (1) a. *Nimeni* ***(nu)** stie ce se intampla.
personne NEG sait ce REFL passe
'Personne ne sait ce qui se passe.'
b. ***(Nu)** am aflat *nimic* nou.
NEG avoir.1sg appris rien nouveau
'Je n'ai appris rien de nouveau.'

Les phrases en (1) ont une interprétation avec une seule négation sémantique, malgré la présence de plusieurs éléments morphologiquement négatifs. Ce phénomène est connu sous le nom de *concordance négative stricte* et est attesté, entre autres, dans les langues slaves, le grec, le hongrois ou le japonais (voir Giannakidou 2002 et les références citées dans le texte).

En revanche, dans d'autres langues, comme la plupart des langues germaniques, la co-occurrence de la négation propositionnelle avec un mot *en N* donne lieu à une lecture à double négation, équivalente à une affirmation :

- (2) Paul **didn't** speak to *nobody*
Paul AUX.NEG parler à personne
'Paul n'a pas parlé à personne' = 'Paul a parlé à quelqu'un'

La question qui se pose alors pour les langues à concordance négative est de savoir quelle est la contribution sémantique de chaque élément morphologiquement négatif. Sur la base des structures de concordance négative stricte en roumain, nous montrons que les mots *en N* sont des expressions sémantiquement négatives, malgré leur co-occurrence systématique avec la négation propositionnelle. L'interprétation des phrases avec plusieurs mots *en N*, ainsi que les données diachroniques fournissent des arguments importants en faveur de cette hypothèse.

5.1 Le paradoxe de la double négation

La concordance négative est définie comme la co-occurrence de plusieurs marques morphosyntaxiques négatives, qui donne lieu à une interprétation avec une seule négation sémantique, comme l'illustre l'exemple en (3) en italien:

- (3) **Non** ho visto *nessuno*.
 NEG avoir.1SG vu personne
 ‘Je n’ai vu personne.’

Dans la phrase en (3), il y a deux marques morphologiquement négatives, la négation propositionnelle *non* et le mot *en N nessuno*, mais l’interprétation de la phrase contient une seule négation sémantique : *Ce n’est pas le cas qu’il existe un individu x, tel que j’ai vu x*. Il existe deux types de concordance négative : stricte et non-stricte. Dans les langues à concordance négative non-stricte, la négation propositionnelle est obligatoire avec les mots *en N* en position postverbale (4a) et exclue avec un mot *en N* en position préverbale (4b). Cette asymétrie est attestée surtout dans les langues romanes, à l’exception du catalan et du roumain :

- (4) a. ***(Non)** ho visto *nessuno*
 NEG avoir.1sg vu personne
 ‘Je n’ai vu personne’
 b. *Nessuno* **(*non)** ha visto Mario.
 personne NEG avoir.3SG vu Mario
 ‘Personne n’a vu Mario’

En revanche, dans les langues à concordance négative stricte, la négation propositionnelle apparaît obligatoirement dans la même proposition qu’un mot *en N*, comme dans les exemples ci-dessous en roumain avec un mot *en N* en position sujet (5a) et un mot *en N* en position objet (5b):

- (5) a. *Nimeni* ***(nu)** ma cunoaste.
 Personne NEG me connaît
 ‘Personne ne me connaît.’
 b. ***(Nu)** cunosc pe *nimeni*.
 NEG connais.1sg Acc. personne
 ‘Je ne connais personne’

Nous concluons que dans les langues à concordance négative stricte, la généralisation suivante est valide :

- (a) une phrase avec la négation propositionnelle et un seul mot *en N* a toujours une interprétation avec une seule négation sémantique.

La présence obligatoire de la négation propositionnelle dans les langues à concordance négative stricte a été souvent considérée comme un argument pour l’absence des lectures à double négation dans ces langues. En effet, une seule négation est présente dans l’interprétation de la phrase en (6) :

- (6) *Nimeni* **nu** ma iubeste.
 Personne NEG m’aime
 ‘Ce n’est pas le cas qu’il y a quelqu’un qui m’aime.’

En discutant des exemples similaires dans d'autres langues, Giannakidou (2006) avance que « dans les langues à concordance négative stricte, les lectures à double négation ne sont jamais permises ».

Une analyse plus détaillée des données empiriques démontre que cette généralisation est contraire aux faits. Il est vrai que la phrase en (6) ne peut jamais induire une lecture à double négation. En revanche, dès qu'il y a plus d'un mot *en N* dans la même proposition, une telle lecture est possible :

- (7) *Nimeni nu iubeste pe nimeni.*
 Personne NEG aime ACC personne
 'Personne n'aime personne.'
 a. Ce n'est pas le cas qu'il y ait deux personnes x, y tel que x aime y [CN]
 b. Tout le monde aime quelqu'un [DN]

Cet énoncé a deux interprétations possibles. La première correspond à la lecture où il y a une seule négation sémantique (7a). La phrase signifie alors *Ce n'est pas le cas qu'il existe une personne x et une personne y, tel que x aime y*. Il s'agit de la lecture à concordance négative (CN), où la présence de plusieurs mots *en N* négatifs donne lieu à une interprétation avec une seule négation sémantique.

La deuxième interprétation possible est celle de double négation (DN), donnée en (7b). Ainsi, la phrase en (7) peut également signifier *Ce n'est pas le cas qu'il existe une personne qui n'aime personne*. Cette interprétation est équivalente à *Tout le monde aime quelqu'un*.

Les exemples ci-dessous montrent que la lecture à double négation est toujours disponible dès qu'il y a au moins deux mots *en N* dans la même proposition :

- (8) *Nimeni nu vine de nicaieri.*
 Personne NEG vient de nulle part
 a. Personne ne vient d'où que ce soit [CN]
 b. Tout le monde vient de quelque part [DN]
- (9) *Nimeni n-a iubit niciodata pe nimeni*
 Personne NEG a aimé jamais ACC personne
 a. Personne n'a jamais aimé qui que ce soit [CN]
 b. Tout le monde a aimé quelqu'un à un moment donné [DN]

Cette lecture est même préférée dans certains contextes, pour des raisons pragmatiques, comme en (10) :

- (10) *Nimeni nu moare niciodata* [DN préférée]
 Personne NEG meurt jamais
 'Personne ne meurt jamais'

La lecture à double négation est une lecture très marquée, dont la distribution est influencée par plusieurs facteurs, surtout pragmatiques (Horn 2001). Elle est généralement utilisée pour contredire une affirmation ou une présupposition négative. Ainsi, l'énoncé en (10) peut constituer une réponse à une affirmation comme *Le grand-père de Paul a 104 ans*, on dirait qu'il est immortel. Dans ce contexte, la phrase *Personne ne meurt jamais* est facilement interprétée comme ayant une lecture à double négation, équivalente à l'affirmation *Tout le monde meurt à un moment donné*.

Un autre facteur pertinent pour la légitimation de la double négation est le contour intonatif. Selon Corblin (1996), la double négation est facilitée si un mot *en N* est détaché prosodiquement du reste de la phrase par une accentuation particulière, comme en (11) :

- (11) a. PERSONNE // ne dit rien à personne
 b. Personne ne dit rien // à PERSONNE

Plus généralement, Zeijlstra (2004) soutient que la double négation est toujours disponible : « la double négation à l'intérieur d'une même proposition est extrêmement rare, mais cela est dû à des restrictions pragmatiques et non pas à des contraintes syntaxiques ou sémantiques qui rendraient impossible la double négation » (Zeijlstra 2004 : 60). En ce qui concerne le roumain, nous avons montré que la double négation est une lecture possible d'une phrase avec deux ou plusieurs mots *en N*. La lecture à double négation est très marquée (et donc peu fréquente), que ce soit dans les langues à concordance négative ou dans les langues à double négation. Le statut marginal de cette lecture dans une langue à concordance négative stricte n'est donc pas surprenant.

Nous concluons que la généralisation empirique qui décrit la distribution de la lecture à double négation en roumain est la suivante :

- (b) une phrase avec deux ou plusieurs mots *en N* (arguments / modifieurs du même prédicat) peut avoir une lecture à double négation

Les phrases avec plusieurs mots *en N* montrent qu'en plus de la lecture de concordance négative, toujours disponible, il existe une deuxième lecture possible, celle de double négation. La distribution des mots *en N* en roumain nous amène donc à poser le paradoxe suivant :

- (12) a. une phrase avec la négation propositionnelle et un seul mot *en N* a toujours une interprétation avec **une seule négation sémantique**;
 b. une phrase avec deux ou plusieurs mots *en N* (arguments / modifieurs du même prédicat) peut avoir une **lecture à double négation**.

Toute analyse des mots *en N* doit pouvoir rendre compte du paradoxe en (12). En particulier, l'existence de la lecture à double négation constitue un défi pour toute analyse des mots *en N* comme des éléments non-négatifs. On pourrait supposer que la négation propositionnelle introduit une négation sémantique dans l'interprétation d'une phrase avec deux mots *en N* et la particule *nu*. Mais, si la négation est introduite seulement par la négation propositionnelle et que les mots *en N* sont non-négatifs, d'où vient la deuxième négation dans une lecture à double négation ? Une analyse basée sur l'idée d'ambiguïté lexicale (Herburger 2002) ne peut pas non plus rendre compte de (12). Plus précisément, si les mots *en N* sont ambigus entre une interprétation négative et une interprétation non-négative, une phrase avec un mot *en N* devrait avoir deux lectures possibles, contrairement aux faits. Nous prenons donc la lecture à double négation comme un argument fort en faveur de l'hypothèse que les mots *en N* sont sémantiquement négatifs.

5.2 Les mots *en N* en roumain sont des éléments négatifs

Dans la littérature sur la concordance négative il y a deux questions centrales. La première concerne le statut quantificationnel des mots *en N* : est-ce qu'ils contribuent un vrai

quantifieur dans la représentation sémantique ou seulement une variable (et une restriction sur cette variable)? Le deuxième sujet de débat est la négativité des mots *en N* : est-ce que les mots *en N* ont un sens négatif inhérent ou non ?

Dans cette étude nous défendons l'hypothèse que les mots *en N* en roumain sont des éléments négatifs. Plus précisément, nous présentons des arguments contre une approche des mots *en N* comme des indéfinis/des existentiels (qui introduiraient un effet d'élargissement du domaine). Selon nous, une analyse qui suppose que les mots *en N* sont des éléments non-négatifs et, en conséquence, que la négation sémantique est introduite seulement par la négation propositionnelle ne peut pas expliquer d'où vient la deuxième négation dans la lecture à double négation. Seule une approche des mots *en N* comme des éléments négatifs peut rendre compte du paradoxe de la double négation en (12). La question du statut est moins importante pour notre objet d'étude, mais le type de tests utilisés pour répondre à cette question nous montrent que les mots *en N* en roumain ont certaines caractéristiques des quantifieurs négatifs dans les langues sans concordance négative.

Dans ce qui suit, nous donnerons des arguments supplémentaires en faveur de notre hypothèse sur la négativité inhérente des mots *en N* en roumain.

5.2.1 Absence de lecture existentielle

Le principal argument en faveur d'une analyse de la concordance négative comme un phénomène de polarité est le fait que dans certaines langues, les mots *en N* peuvent apparaître dans des contextes non-négatifs. En particulier, ils sont licites dans des contextes de polarité, comme les questions, les comparatives, la portée des prédicats négatifs ou la restriction des quantifieurs universels, contextes de polarité négative, qui légitiment des IPNs. Nous prenons des exemples en espagnol et en italien en guise d'illustration :

- (13) È venuto *nessuno* ?
 être.3SG venu personne
 'Est-ce que quelqu'un est venu?'
- (14) Perdimos la esperanza de encontrar *ninguna* salida.
 perdre.1pl l'espoir de trouver aucune sortie
 'Nous avons perdu l'espoir de trouver une sortie'

Dans les phrases en (13) et (14), les mots *en N* ont une interprétation existentielle, non-négative. Le roumain est une langue à concordance négative stricte, où les mots *en N* ont une distribution restreinte à la même proposition que la négation propositionnelle *nu*. Les phrases équivalentes à celles en (13)-(14), où les mots *en N* sont légitimés avec une interprétation existentielle non-négative, sont agrammaticales en roumain, comme le montrent les exemples en (15) :

- (15) a. *A venit *nimeni* ?
 avoir.3sg venu personne
- b. *Am pierdut speranta sa gasim *nicio* iesire.
 avoir.1pl perdu espoir-le subj. trouver.1pl aucune sortie

Les mots *en N* en roumain ne sont pas non plus licites dans la portée d'un prédicat négatif comme *douter* ou de la préposition *avant*. Plus généralement, il n'y a aucun contexte qui donne lieu à une interprétation existentielle/positive des mots *en N* en roumain. L'absence de lecture existentielle des mots *en N* dans les contextes canoniques de polarité est

problématique pour toute analyse des mots *en N* comme des éléments non-négatifs. Si les mots *en N* sont des items de polarité négative, comment expliquer le fait qu'ils ne sont pas licites dans les contextes canoniques de polarité négative ? En revanche, notre hypothèse sur le sens négatif inhérent de ces items prédit correctement les faits en roumain. L'agrammaticalité des mots *en N* dans les contextes de polarité constitue donc un argument important en faveur de notre analyse. Dans ce qui suit nous montrons l'absence de lecture existentielle est une des propriétés marquantes de l'évolution des mots *en N* en roumain, remettant donc en question une analyse en termes d'items de polarité.

5.2.2 La distribution des mots *en N* en diachronie

L'évolution de ces éléments dans le passage du latin en roumain confirme l'hypothèse que les mots *en N* introduisent une négation dans la proposition où ils apparaissent. En ancien roumain (jusqu'au XVIe siècle), la négation propositionnelle ne légitime pas les mots *en N* en position préverbale. Si elle apparaît, cette négation a seulement une valeur emphatique. Les exemples en (16) et (17) illustrent la distribution des mots *en N* en ancien roumain :

- (16) *nemica* adevar graesc, ce tot mînt [F. Dumitrescu : 346]
rien vérité disent.3PL, mais toujours mentent.3PL
'Ils ne disent aucune vérité, ils mentent toujours'
- (17) a. *nimea* amu sa se apropie
personne maintenant SUBJ se approche
'que personne n'approche maintenant'
- b. sa nu spui *nemunuia*
SUBJ NEG dire.2SG personne.DAT
'ne dis à personne'

Le roumain est ensuite devenu une langue à concordance négative stricte où la présence de la négation propositionnelle est obligatoire, quelle que soit la position des mots *en N*.

L'évolution des mots *en N* en italien et en espagnol est l'image inverse de ce qui se passe en roumain. Ainsi, l'ancien espagnol était une langue à concordance négative stricte, comme le montre Herburger (2001) :

- (18) que a myo Cid Ruy Diaz, que *nadi* no diessen posada
que à mon Seigneur Ruy Diaz que personne neg donne logement
'que personne n'héberge mon Seigneur Ruy Diaz'

En revanche, en italien et espagnol contemporain, la négation propositionnelle ne peut pas apparaître avec un mot *en N* préverbal dans une structure de concordance négative :

- (19) a. *Nessuno* (*non) è venuto
Personne NEG est venu
b. Nadie (*no) ha venido.
Personne neg est venu
'Personne n'est venu'

La comparaison entre le roumain d'un côté, et l'espagnol ou l'italien de l'autre, soulève la question du cycle d'évolution des mots *en N*, mais nous ne discutons pas plus en détail le lien diachronique entre concordance négative stricte et non-strict. La distribution des mots *en N*

en diachronie est pertinente pour notre analyse pour deux raisons. Premièrement, les mots *en N* en position préverbale se comportent clairement comme les quantifieurs négatifs, car ils introduisent une négation. Deuxièmement, malgré le fait qu'il s'agit de langues à concordance négative non-strictes dans les deux cas, il existe une différence cruciale entre l'ancien roumain et l'espagnol / l'italien actuel : les mots *en N* en roumain ne sont jamais attestés avec une lecture existentielle dans les contextes de polarité. Cette absence de lecture positive en diachronie confirme notre analyse des mots *en N* comme des quantifieurs négatifs.

5.2.3 Les contextes non-tensés

Les données diachroniques discutées dans la section précédente montrent l'existence d'un stade de concordance négative non-strictes en ancien roumain. Nous retrouvons ce même paradigme en synchronie, notamment dans certains contextes non-tensés, c'est-à-dire sans verbe fléchi (*non-finite* en anglais). Sans reprendre tout le paradigme, discuté en détail dans Iordachioaia (2004), nous illustrons l'asymétrie entre position pré- et postverbale avec un participe passé :

- (20) a. O masura de *nimeni* dorita a fost adoptata de guvern
 une mesure de personne désirée a été adoptée de gouvernement
 'une mesure désirée par personne a été adoptée par le gouvernement'
 b. O masura nedorita de *nimeni* a fost adoptata de guvern
 une mesure neg-désirée de personne a été adoptée de gouvernement
 'une mesure désirée par personne a été adoptée par le gouvernement'
 c. ??O masura de *nimeni* nedorita a fost adoptata de guvern
 une mesure de personne neg-désirée a été adoptée de gouvernement
 'une mesure par personne non-désirée a été adoptée par le gouvernement'

Dans les exemples en (20), la présence de la négation *ne-* (qui s'attache aux verbes non-fléchis) est obligatoire pour légitimer un mot *en N* en position postverbale (20b), mais elle est exclue si le mot *en N* apparaît en position préverbale (20a). Si toutefois elle apparaît, la phrase (marginale) a une lecture à double négation, que l'on peut paraphraser par Une mesure désirée par tout le monde a été adoptée par le gouvernement. Les phrases en (20a) et (20b) sont équivalentes et ont toutes les deux une lecture avec une seule négation sémantique. Cependant, la seule marque de la négation en (20a) est le mot *en N*. Ces faits nous amènent à conclure que les mots *en N* en roumain se comportent comme des quantifieurs négatifs dans certains contextes non-tensés.

Une des propriétés les plus intrigantes des mots *en N* en roumain, au vu des autres structures de concordance négative recensées dans la littérature concerne le phénomène de propagation négative (en anglais *negative spread*), où la présence d'un mot *en N* peut légitimer un autre mot *en N*, n'est jamais présent en roumain, ni même dans les contextes non-tensés, comme l'illustre (21) :

- (21) a. *o masura de *nimeni niciodata* dorita
 une mesure de personne jamais désirée
 b. *o masura de *nimeni dorita niciodata*
 une mesure de personne désirée jamais

Les faits discutés remettent en question toute analyse des mots *en N* comme des éléments non-négatifs. Premièrement, les mots *en N* en roumain sont exclus des contextes de polarité et

n'ont jamais de lecture existentielle. Deuxièmement, la distribution des mots *en N* en ancien roumain, ainsi que dans les contextes non-tensés, pose le même problème que la lecture de double négation. Si on suppose que les mots *en N* sont des éléments non-négatifs, il faut expliquer d'où vient la négation présente dans l'interprétation de ces phrases. Nous concluons que seule une analyse des mots *en N* comme des quantifieurs négatifs prédit correctement la distribution et l'interprétation de ces expressions.

5.3 Mots *en N* et quantifieurs négatifs

Nous avons défendu l'hypothèse que les mots *en N* ont un sens négatif inhérent. Nous avons montré que l'absence de lecture existentielle en roumain, à la fois en synchronie et en diachronie, remet en question une analyse des mots *en N* comme des éléments non-négatifs. Nous présentons maintenant des arguments supplémentaires en faveur de cette conclusion. Plus précisément, nous verrons que les mots *en N* ont les mêmes propriétés que les quantifieurs négatifs dans les langues sans concordance négative. Il s'agit de diagnostics typiquement utilisés pour déterminer si les mots *en N* sont des quantifieurs existentiels ou universels. Les résultats sur le statut quantificationnels ne sont pas clairs, mais plusieurs tests montrent que les mots *en N* ressemblent aux quantifieurs négatifs des langues dites à double négation. Nous prenons ces similarités comme un argument en faveur de notre hypothèse que les mots *en N* en roumain sont des éléments négatifs.

5.3.1 Légitimation de l'anaphore non-liée

Contrairement aux existentiels, les quantifieurs universels ne peuvent pas légitimer des pronoms qui ne sont pas dans leur portée syntaxique. Cette généralisation est illustrée par les exemples suivants :

- (33) Studentii care au o carte_i de citit, sa o_i citeasca acum
Etudiants-les qui ont un livre à lire, SUBJ le lire.3PL maintenant
'Les étudiants qui ont un livre à lire, qu'ils le lisent maintenant)
(34) *Studentii care au citit fiecare articol_i trebuie să-l_i prezinte
Etudiants-les qui ont lu chaque article devoir.3sg SUBJ le présenter
'Les étudiants qui ont lu chaque article doivent le présenter'

La variable introduite par l'indéfini *o carte* ('un livre') est liée par un quantifieur existentiel et peut servir d'antécédent à la variable introduite par le pronom *o* ('le') bien qu'il n'y ait pas de relation de c-commande. En revanche, en (34), l'universel *chaque livre* ne peut pas être l'antécédent de la variable introduite par *le*.

La phrase en (35) ci-dessous illustre le fait que, tout comme les quantifieurs universels, les mots *en N* ne peuvent pas légitimer des anaphores non-liées :

- (35) *Studentii care *nu* au citit *niciun* articol_i trebuie să-l_i citeasca acum
Etudiants-les qui NEG ont lu aucun article devoir.3SG SUBJ le lire.3pl maintenant
'Les étudiants qui n'ont lu aucun article doivent le lire maintenant'

Dans l'exemple (35), le DP *aucun article* ne peut pas servir d'antécédent pour la variable introduite par *le*.

Iordachioaia (2005) montre que les mots *en N* peuvent légitimer une anaphore non-liée quand ils apparaissent dans un contexte existentiel, contexte où les quantifieurs universels sont exclus. Le contraste entre (36a) et (36b) illustre cette propriété :

- (36) a. Ori *nu* exista *nicio* baie_i in casa asta, ori au construit-o_i intr-un loc ciudat
 Soit neg existe aucun bain dans maison cette, soit ont construit-le en endroit bizarre
 ‘Soit il n’y a aucune salle de bains dans cette maison, soit on l’a construite dans un endroit bizarre’
 b. *Ori *niciun* câine_i de pe strada asta *nu* latra, ori l_i-au alungat tunetele
 soit aucun chien de sur rue cette neg aboie, soit le-ont chassé tonnerres
 ‘Soit aucun chien dans cette rue n’aboie, soit les coups de tonnerre l’ont chassé’

Ces faits sont problématiques pour une analyse des mots *en N* comme des universels : non seulement les mots *en N* sont licites dans un contexte existentiel, mais ils légitiment également une anaphore non-liée. Mais les exemples en (36) mettent en évidence le comportement similaire des mots *en N* en roumain et des quantifieurs négatifs dans les langues germaniques. Ainsi, nous retrouvons les mêmes faits avec un quantifieur comme *no* : le quantifieur négatif est licite dans un contexte existentiel (37a), et il peut alors légitimer une anaphore non-liée.

- (37) a. Either there is *no* bathroom_i in this house, or *it_i*’s in a funny place
 Soit il n’y a aucune salle de bains dans cette maison, soit elle est dans un endroit bizarre’
 b. * Either *no* dog_i in that street barks at all, or *it_i* is very quiet
 Soit aucun chien dans cette rue n’aboie, soit il est très silencieux

Ces faits ne nous permettent donc pas de déterminer si les mots *en N* sont des universels ou des existentiels, mais ils établissent un parallèle entre les mots *en N* dans une langue à concordance négative stricte et les quantifieurs négatifs dans les langues à double négation.

5.3.2 Absence de présupposition d’existence

Il est bien connu qu’un quantifieur universel est présuppositionnel, autrement dit sa restriction introduit généralement un ensemble non-vide. En revanche, il n’y a pas une telle présupposition d’existence avec un quantifieur existentiel. Ce contraste est illustré en (38) ci-dessous :

- (38) a. # Maria *nu* a vazut *fiecare* extraterestru
 ‘Maria n’a pas vu chaque extraterrestre’
 b. Maria *nu* a vazut un extraterestru
 ‘Maria n’a pas vu un extraterrestre’

L’exemple en (38a) avec un quantifieur universel est étrange, car il force la présupposition d’existence d’un ensemble d’extraterrestres. Une continuation du type les extraterrestres n’existent même pas est impossible en (38a), alors qu’elle est facilement admise en (38b).

Du point de vue de ce test, les mots *en N* en roumain se comportent comme les quantifieurs existentiels. L’absence de présupposition d’existence avec les mots *en N* est

pertinente pour notre analyse, car on retrouve les mêmes faits avec les quantifieurs négatifs dans les langues à double négation, comme l'allemand en (38b) ci-dessous:

- (39) a. Ion *nu* a vazut *niciun* unicorn. *Nici nu* exista unicorni
 'Ion n'a vu aucune licorne. Les licornes n'existent même pas'
 b. Hans hat *kein* Einhorn gesehen. Es gibt gar *keine* Einhörner
 'Hans n'a vu aucune licorne. Il n'y a pas de licornes'

Les faits discutés ici montrent donc que les mots en *N* en roumain partagent des propriétés avec les quantifieurs négatifs dans les langues de double négation. D'autres tests qui étayent cette conclusion sont la modification par *presque* /*absolument* et le fait que les mots en *N* peuvent constituer à eux seuls une réponse négative. Nous n'allons pas détailler ces tests ici, notons simplement qu'ils illustrent à la fois des différences entre les mots en *N* en roumain et les items de polarité négative et des similarités avec les quantifieurs négatifs dans les langues sans concordance négative. Le tableau ci-dessous schématise ces propos :

	IPN (<i>any</i>)	Quantifieur négatif	Mot en <i>N</i>
Réponses négatives	✓	✓	✓
Modification par <i>presque</i> / <i>absolument</i>	*	✓	✓
Légitimation d'anaphore non-liée	✓	*	*
Présupposition d'existence	*	*	*

5.4 Mots en *N* et *vreun*

L'analyse des mots en *N* comme des quantifieurs négatifs permet d'expliquer la distribution du déterminant *vreun* sous la négation. Plus précisément, nous avons montré que *vreun* apparaît dans tous les contextes de polarité négative, mais pas sous la négation propositionnelle *nu*, où le déterminant mot en *N* *niciun* doit être utilisé:

- (40) a. **Nu* am scris ***vreun*** articol.
 NEG avoir.1SG écrit V-UN article
 b. *Nu* am scris ***niciun*** articol.
 NEG avoir.1SG écrit aucun article
 'Je n'ai écrit aucun article.'

Nous avons également illustré le fait que cet effet de blocage peut être dépassé dans deux types de situations. La première est l'ambiguïté créée par la présence de deux mots en *N*, comme détaillé dans la section 5.1.

- (41) *Nimeni nu a* avut *nicio* informație despre cele întâmplate.
 personne NEG avoir.3SG eu aucun information sur DEM.PL passé
 a. ‘Personne n’a eu d’information sur ce qui s’est passé.’ [NC]
 b. ‘Tout le monde a eu des informations sur ce qui s’est passé.’ [DN]
- (42) *Nimeni nu a* avut *vreo* informație despre cele întâmplate.
 personne NEG avoir.3SG eu V-UN information sur DEM.PL passé
 ‘Personne n’a eu d’information sur ce qui s’est passé.’ [NC]

Ainsi, comme les mots en *N* sont des éléments négatifs, la phrase en (41) est ambiguë entre une lecture de double négation et une lecture de concordance négative. Cette ambiguïté peut être évitée, en utilisant *vreun*, comme en (42). La plupart des exemples attestés de *vreun* sous négation propositionnelle constituent des cas de ce type. Ces données ne peuvent être expliquées qu’en mettant ensemble les propriétés des mots en *N* et de *vreun* : autrement dit, c’est parce que les mots en *N* sont négatifs, et parce que *vreun* est un IPN, donc non-négatif, que nous pouvons rendre compte de l’absence d’effet de blocage.

L’utilisation de *vreun* sous la négation propositionnelle en (43)b reçoit une explication similaire :

- (43) a. *Nu am vreo speranță că* s-ar schimba ceva.
 NEG avoir.1SG V-UN espoir que REFL-avoir.3SG.COND changer quelque chose
 ‘Je n’ai pas le moindre espoir que quelque chose pourrait changer.’
 b. *Nu am nicio speranță că* s-ar schimba ceva.
 NEG avoir.1SG aucun espoir que REFL-avoir.3SG.COND changer quelque chose
 ‘Je n’ai aucun espoir que quelque chose pourrait changer.’

Plus précisément, les mots en *N* (dans ce cas *niciun*) sont des éléments négatifs, et représentent la façon non-marquée d’exprimer une proposition négative. En revanche, *vreun* est un IPN, c’est-à-dire un indéfini qui induit un effet d’élargissement de domaine. Lorsqu’un locuteur veut produire cet effet, et donc rendre son assertion plus forte, comme le mot en *N* ne produit habituellement pas d’élargissement de ce type, le locuteur peut utiliser *vreun*.

En conclusion, la distribution de *vreun* sous la négation propositionnelle est déterminée par les propriétés des mots en *N*, et plus spécifiquement par le fait qu’ils ne sont pas des éléments non-négatifs. Cette conclusion souligne l’importance de considérer les liens existants entre les différents paradigmes d’éléments dépendants dans une langue, montrant ainsi que l’on ne peut pas les étudier en isolation.

6 Conclusion

Cette étude a examiné les propriétés du déterminant dépendant *vreun* en roumain, en mettant en évidence les enjeux à la fois empirique et théoriques qu’il soulève. Plus précisément, nous avons montré que sa distribution n’est pas facilement mise en relation avec des paradigmes de polarité attestés dans la littérature. À partir de données nouvelles, nous avons examiné les contextes de légitimation de *vreun* et proposé que sa distribution est réduite aux deux usages ci-dessous :

- (a) ***vreun* est un item de polarité négative:** *vreun* est légitimé dans les contextes de polarité négative
 (b) ***vreun* est un item épistémique :** Configuration de légitimation: Op [...*vreun*...]

Contrainte de légitimation: Op p implique que les alternatives doxastiques de l'agent épistémique incluent des mondes-*non p*

En explorant l'usage d'item épistémique, qui est moins bien documenté dans la littérature, nous avons cherché à établir si ces contraintes sont valables pour d'autres items, tels les déterminants *quelque* ou *algun*. Malgré les différences (notamment dans les énoncés négatifs), nous avons défendu l'existence d'une classe d'items sensibles à la modalité épistémique, qui restent à intégrer dans les analyses et les typologies des items de polarité.

En examinant les propriétés des mots *en N*, nous avons montré qu'il existe un lien étroit entre leur sens négatif inhérent et la distribution de *vreun* dans les phrases négatives. Cette conclusion souligne les connections qui existent entre les différents paradigmes d'éléments dépendants et l'importance de considérer dans sa globalité le système de la polarité dans une langue donnée.

POLARITY ITEMS AND DEPENDENT INDEFINITES IN ROMANIAN

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Chapter 1

The landscape of polarity in Romanian

This chapter introduces the phenomenon of polarity sensitivity by focusing on the landscape of polarity items in Romanian. More precisely, I take as a point of departure a typology of polarity items which focuses on negative polarity and free-choice items attested across languages, and the different types of overlap they exhibit. We will thus see that whereas certain items are restricted to either negative or modal contexts, some other elements can occur in both types of environments. The frequency of overlap of uses raises two important questions: first, an *empirical* question, concerning the types of overlap we find in natural language, and the extent to which these patterns are systematic. And second, the *source* question: what is the property that underlies the ‘double behavior’ of certain polarity items?

In order to address these questions, we investigate the constraints governing the (restricted) distribution of three classes of elements in Romanian: so-called *n-words*, the existential free-choice item *un N oarecare* and the existential determiner *vreun*, which shares properties of both. On the basis of this survey, we establish that *vreun* instantiates an unfamiliar pattern of overlap of uses, that we reduce to negative polarity and epistemic (modal) contexts; we then formulate the challenges this raises with respect to the typology of polarity sensitive items.

This overview outlines the importance of viewing polarity items in connection with the other elements available in a given language and provides the background for the issues concerning polarity sensitivity to be addressed in the remainder of this thesis.

1 Issues in the study of polarity sensitivity

Polarity items are elements whose distribution and interpretation are sensitive to the properties of the context of occurrence. Their hallmark property is “exclusion from positive assertions with simple past” (Giannakidou 2009:1), as illustrated by the ungrammaticality of the polarity item *anybody* in (1):

- (1) * Paul called *anybody*.

In the initial studies that focused on the distributional constraint illustrated in (1), it was established that some elements are sensitive to the *polarity* of the context, i.e. whether they occur in a *negative* or a *positive* sentence. More specifically, several studies (ever since Klima 1964, Baker 1970, Horn 1972, Fauconnier 1975) have attested the existence of expressions which are only licensed in *negative* (also called ‘affective’) contexts, such as *yet* in the sentence in (2), which would be ungrammatical in the absence of negation:

- (2) I have*(*n't*) been to Thailand *yet*.

Elements that need to be in negative contexts are called Negative Polarity Items (NPIs). On the other hand, there are also items which are ruled out precisely in negative contexts, known as Positive Polarity Items (PPIs) such as *already* in (3) and *rather* in (4):

- (3) I have(**n't*) *already* been to Thailand.

- (4) He is(**n't*) *rather* upset these days.

The negative/positive context partition has provided an important background for much subsequent empirical and theoretical work, but it rapidly proved to be inadequate to cover the different attested patterns. For example, some elements, dubbed *free-choice items* (FCIs), seem to be sensitive not so much to whether a context is positive or negative, but rather to whether it involves *modality*, as illustrated by the contrast between the non-modalized sentence in (5), where the Italian item *qualsiasi* is odd, and the modal context in (6), where this effect disappears:

- (5) ?? Ieri ho incontrato *qualsiasi* studente.
yesterday have.1SG met whatever student
‘Yesterday, I met any student.’

- (6) *Puoi* incontrare *qualsiasi* studente.
can.2SG meet whatever student
‘You can meet any student.’

The conclusion emerging from empirical studies on polarity sensitivity is that while the phenomenon is extremely widespread, the precise division of labor in the field of polarity items cross-linguistically is subject to a wide range of variation, in more than one respect.

First, there is an important degree of variation with respect to the set of elements that can be considered polarity items. They belong to various syntactic categories: some polarity items are nominal (such as English *any*, or Italian *qualsiasi*), but there are also polarity sensitive adverbs (such as *yet*, *already*), verbs (*need* in English, *brauchen* in German) or particles (*either*). In addition, we also find a large number of complex expressions that function as polarity items, most well-known cases involving so-called *minimizers* like *budge an inch*, *lift a finger*. This thesis will be primarily concerned with nominal polarity items and with the issue of how the presence of a polarity determiner/modifier affects the interpretation of the noun with which it combines.

An important aspect of the variation of polarity patterns concerns the distinctions operated in the system of polarity items within one language. More precisely, there are languages in which one and the same class of items covers uses for which some other languages exploit several different morphological paradigms of polarity sensitive items. The canonical example is the English polarity item *any*, which has both negative polarity and free-choice uses, for an example, see (7) below (e.g. Vendler 1967, Ladusaw 1979, Carlson 1980, Kadmon & Landman 1993, Horn 2000). Subsequent descriptive work made it clear that English is far from being the only language to exhibit a certain overlap of uses; for example, Haspelmath's typological work (1997) indicates that approximately half of the 40 languages under survey adopt this strategy. This is a challenging state of affairs, which raises two important questions. First, focusing on the empirical side on the phenomenon, what are the overlap patterns that we find cross-linguistically, and to what extent are they systematic? Second, what is the source of this overlap? In particular, do polarity items that seem to have 'double' behavior constitute an instance of lexical ambiguity or rather do they have a given property that makes them compatible with different types of contexts?

The issue of overlap is central to this thesis, which focuses on the Romanian landscape of polarity sensitivity and provides answers to both questions formulated above, namely the range of overlap and its source. Before making this remark more precise, let me introduce some background. First, let us take a closer look at polarity classes which typically exhibit overlap across languages. Both the terminology designating these patterns of polarity and the way the empirical facts are classified vary across studies of the phenomenon. In the following, I adopt the terminology and classification in Chierchia (2006), who develops a unified account for polarity sensitivity, to be presented in detail in Chapter 4. Remaining in the area of negative polarity and free-choiceness, we can distinguish several widely attested patterns. First, I have already mentioned the existence of items like *any* which can function both as

NPIs and FCIs, as attested by the examples in (7):

- (7) a. I haven't attended **any** conference this semester.
b. You *can* visit **any** museum for free on Sundays.

On the other hand, certain polarity elements disallow double uses of this kind. Accordingly, there are polarity items whose distribution is restricted to negative contexts, such as *ever* or *yet*. Since they cannot occur in modal contexts, i.e. they cannot have free-choice uses, they are sometimes called *pure* or *weak* NPIs. The basic pattern of distribution is illustrated by the following pair of sentences:

- (8) a. I haven't **ever** been to Barcelona.
b. *I *can* **ever** go Barcelona.

Similarly, certain free-choice items, such as the Italian determiner *qualunque*, disallow negative polarity uses and only occur in modal contexts. For example, the sentence in (9), with *qualunque* under negation cannot have the negative polarity interpretation 'it is not the case that there is a student, such that I saw that student', a reading that is available for the equivalent English sentence *I didn't see any student*. The only reading under which the sentence is acceptable is the so-called *rhetorical* reading, which we can paraphrase as 'not just any', equivalent to something like *I didn't see just any student (but a special one)*:

- (9) ??Non ho visto **qualunque** studente. [Chierchia 2006:565]
NOT have.1SG seen whatever student
'I didn't see (just) any student.'

- (10) Puoi prendere **qualunque** mela.
can.2SG pick whatever apple
'You may pick any apple.'

A further distinction needs to be made in the area of free-choice items, namely that between 'universal' and existential FCIs. Like all free-choice items, existential FCIs are typically ruled out in episodic contexts like (11), and require a modal context. In contrast to FCIs like *any* or *qualunque*, which typically acquire a universal interpretation, they are always interpreted as existentials. Chierchia (2006) provides the following examples for illustration:

(11) ??Ieri ho parlato con *un qualsiasi* filosofo.

yesterday (I) have spoken with a whatever philosopher

‘Yesterday I spoke with a philosopher (I don’t know/don’t care who).’

(12) Domani interroghero *qualsiasi* studente che mi capiterà a tiro.

‘Tomorrow (I) will interrogate whatever student that I will lay my eyes on.’

(13) Domani parlero con *un* studente *qualunque*.

‘Tomorrow I will talk to a student whatsoever.’

Whereas the sentence in (12), with the *pure* FCI *qualunque* conveys that the speaker will talk to more than one student, the sentence in (13), with the (morphologically related) existential FCI *un studente qualunque* can only mean that the speaker will talk to a single student, among several possible students, and she doesn’t know or care who is that student. In addition to Italian, the latter pattern, often referred to as *existential* FCI, is attested in languages like German (Kratzer & Shimoyama 2002) or French (Jayez & Tovenà 2006).

Interestingly enough, existential FCIs also differ with respect to whether they allow a negative polarity use of not. Consider the following examples:

(14) *Niemand* musste *irgendjemand* einladen.

✓RHETORICAL/✓NPI READING

no one had to a person whatever invite

‘No one had to invite anybody.’

(15) *Nessuno* è costretto ad invitare *una* persona *qualsiasi*.

✓RHETORICAL/*NPI READING

no one had to invite a person whatever

‘No one had to invite just anybody.’

According to Kratzer & Shimoyama, the sentence in (14), with the existential free-choice *irgendjemand* usually acquires an NPI-like reading. A second, less frequent, interpretation, corresponding to the rhetorical ‘not just any’ reading, is triggered by special intonation and contextual factors. In contrast to this, the Italian existential free-choice *una persona qualsiasi* cannot be interpreted as a typical NPI, and can only have the ‘not just anybody’ interpretation. In other words, some existential free-choice items (such as *irgendein*) can function like NPIs, whereas some others (like *un N qualsiasi*) cannot.

Summarizing these observations, there are three basic types of polarity sensitive

elements which disallow any kind of ‘double’ behavior: (pure) negative polarity (*ever*), (pure) universal-like free-choice (*qualsiasi*) and existential free-choice (*un N qualsiasi*). Once we integrate cases of overlap between NPIs and FCIs, we arrive at the typology in (16), which serves as a basis for further discussion:

(16) Pure NPIs (*ever*)

NPI/FCI (*any*)

Pure FCI (*qualunque/qualsiasi*)

Existential FCI (*un N qualsiasi*)

NPI/Existential FCI (*irgendein*)

This preliminary discussion of negative polarity and free-choice patterns partly illustrates the many facets of variation among polarity sensitive elements. This gives a better sense of the challenges raised by the phenomenon. On the one hand, the items differ both with respect to their interpretation (universal *versus* existential) and their distribution (negative or modal contexts). On the other hand, despite differences, these patterns seem to be closely connected, as attested by the frequency of instances of overlap.

In view of this situation, the crucial question we need to address is the *source* of this phenomenon. Why is it that natural language allows overlap to such considerable extent? Is it a reflection of (massive) lexical ambiguity, or rather the result of some property endogenous to polarity items? The theoretical debate on polarity items bears on the existence of a (possibly unique) source of polarity. Is there a unifying property, common to all polarity items, which is the driving force for their semantic and syntactic deficiency? Or should we acknowledge that distinct polarity items have different distributional constraints and consequently, accept different accounts for the various attested classes?

I will address this question by focusing on the properties of a dependent item in Romanian, namely the determiner *vreun*. From the perspective of a typology of polarity items, its case is particularly interesting, because it resists classification in any kind of known pattern of polarity sensitivity. More precisely, *vreun* shares distributional and interpretive properties of both NPIs and existential free-choice items. However, its distribution cannot be reduced to a standard pattern of overlap between negative polarity and free-choice uses, of the kind illustrated above, because *vreun* makes further distinctions amongst its contexts of occurrence. In particular, as extensively discussed in Chapter 2 (see also section 4 below), there are typical negative polarity contexts which rule out the use of *vreun*, and also modal contexts which allow existential free-choice items, but disallow the occurrence of *vreun*.

Exploring this pattern, I show that *vreun* illustrates a type of overlap of uses which hasn't been previously investigated in the literature, namely that between negative polarity and *epistemic* modal contexts. This immediately raises the question of whether we should treat its occurrence in negative polarity and epistemic environments as two distinct instances of semantic dependency, or rather attribute this double behavior to some property that makes its use compatible with both types of contexts.

In trying to provide an answer to the source question, two major lines of thinking have been pursued in the literature: a *variation* account, most recently defended in Giannakidou (2009), who argues that polarity sensitivity stems from (possibly) different sources (such as scalarity, referential dependency or degree of speaker's commitment) and a *unitary* approach to polarity items, which aims at identifying one basic source for their dependency².

I will endorse and pursue the latter type of approach, which seeks to reduce polarity sensitivity and instances of overlap to a common property of polarity items. An influential such proposal relies on the hypothesis that *domain widening* is the core semantic property of polarity items (Kadmon & Landman 1993, Lee & Horn 1994, Krifka 1995, Chierchia 2006), responsible for their restricted distribution. Roughly speaking, polarity items introduce domain alternatives and lead to the consideration of a larger domain of quantification than the one we have in mind when we use a simple indefinite. Kadmon & Landman, for instance, assume that a polarity item like *any* 'extends the interpretation of the common noun phrase' with which it combines (Kadmon & Landman 1993: 360). For example, when we use *any mammal* as opposed to *a mammal*, we are entitled to conclude that the set associated with the phrase *any mammal* is larger, i.e. includes more individuals than the set denoted by the indefinite noun phrase. Assuming that domain widening has to be exploited, the distribution of polarity items is restricted to contexts where the domain widening property can lead to stronger claims, such as in the case of a negative sentence. For example, the sentence *I don't see any way of solving this problem* seems stronger, more categorical than the equivalent *I don't see a way of solving this problem*.

The notion of domain widening will be precisely defined in Chapter 4, where I provide a detailed description of a recent implementation of this hypothesis, namely the one developed in Chierchia (2006, 2008). The distribution and interpretation of the types of

² For a more detailed description of the issues raised by polarity sensitivity, as well as the different approaches to this phenomenon, see Toveni (2001), and Giannakidou (2009).

polarity items introduced so far (be they NPIs, or FCIs, with a universal or existential interpretation) are shown to be the result of the way we exploit their domain widening property, more precisely the types of inferences speakers make regarding the alternatives introduced by polarity items. Endorsing this framework, I explore the consequences of the type of overlap exhibited by *vreun* and argue that its distribution can be fully captured only within a unified account of polarity sensitivity.

As mentioned above, the intriguing properties of *vreun* constitute a challenge with respect to any typology of polarity patterns, and I will show that they can only be properly understood once we consider the whole landscape of Romanian polarity items³. Setting aside for now free-choice patterns (to be discussed in section 3 below), I focus on negative polarity contexts, and show that the typology in (16) cannot be straightforwardly applied to the system of Romanian polarity sensitivity. More precisely, as I will argue in section 2, Romanian has no class of domain widening existentials whose distribution would be restricted to negative polarity contexts, i.e. *pure NPIs*. Consequently, any kind of item that has negative polarity uses in Romanian exhibits an overlapping distribution. This is precisely the case of *vreun*, which is the typical domain widening existential in negative contexts, but whose distribution, however, also includes non-polarity environments. Situations of this kind underline the importance of viewing polarity items in connection with the other elements available in a given language. I now turn to the distribution of so-called n-words in Romanian, whose occurrence is restricted to negative contexts, but whose interpretation I argue to be different from (pure) NPIs.

2 Negative concord as an instance of negative polarity?

In the brief introduction to the typology of polarity items, we mentioned items like *ever*, so-called pure or weak NPIs, whose distribution is restricted to negative contexts.

(17) John wo*(n't) *ever* see me.

³ The discussion focuses on *classes of polarity items*, similar to those identified by Chierchia. Accordingly, I ignore minimizers, or certain polarity verbs that have been argued to require a negative context like *a se deranja* 'to bother'. On the view adopted in this dissertation, they are not polarity items: they do not form classes, and do not have systematic restrictions on their occurrence, but rather involve distributional idiosyncrasies. A more complete list of such items can be found at <http://www.sfb441.uni-tuebingen.de/a5/codii/>, as part of the *The Collection of Distributionally Idiosyncratic Items* (Project *Distributional Idiosyncrasies* of the Collaborative Research Centre 441 at the University of Tübingen).

Turning to Romanian, the equivalent of the sentence in (17) is expressed using the morphologically negative item *niciodată*:

(18) Ion **(nu)* mă va vedea ***niciodată***.

Ion NEG CL will.3SG see N-ONCE

‘Ion won’t ever see me.’

The polarity item above belongs to the paradigm in (19), of the range of expressions called *n-words* (term coined by Laka 1990), whose occurrence is restricted to negative sentences:

(19) List of Romanian n-words

Nimeni ‘n-body’ = nobody

Nimic ‘n-thing’ = nothing

Niciun/nicio ‘n-a’ (masc/fem) = no

Niciodată ‘n-ever’ = never

Nicicând ‘n-when’ = never

Niciunde ‘n-where’ = nowhere

Nicicum ‘n-how’ = in no way

They all have negative morphology *ni(ci)*, which combines either with a simple indefinite, or with a *wh*-word. N-words in Romanian always co-occur with sentential negation, realized by the negative marker *nu*, be it in preverbal (20) or postverbal (21) position:

(20) ***Nimeni*** **(nu)* știe ce se întâmplă.

N-BODY NEG know.3SG what REFL happen.3SG

‘Nobody knows what is happening.’

(21) **(Nu)* am aflat ***nimic*** nou.

NEG have.1SG found N-THING new

‘I didn’t find anything new.’

The sentences in (20)-(21) are interpreted as single negations, although they contain several morphologically negative elements. For instance, the sentence in (20) can be paraphrased as *It is not the case that there is an x such that x an individual and x knows what is happening*. This phenomenon is known as *negative concord* and is attested in a wide variety of languages, including Romance, Slavic, Greek, Hungarian or Japanese (for recent overviews of the phenomenon, see Zeijlstra 2004, Giannakidou 2006, de Swart (in press) and references

therein).

2.1 Lack of existential readings

The question that arises is where to situate n-words in the landscape of polarity sensitivity. From the perspective of the typology of polarity items previously discussed, negative concord looks very similar to weak NPI-licensing: both n-words and NPIs are ungrammatical in the absence of an appropriate licenser. However, the sentences above show that n-words and (weak) NPIs are not subject to the same licensing conditions, a situation which might indicate that negative concord is a more restricted instance of NPI-licensing. Indeed, many analyses of negative concord grant n-words an NPI-status, i.e. indefinites requiring the presence of negation (Ladusaw 1992, Giannakidou 1997, Acquaviva 1997). This is precisely the position defended by Chierchia (2006), quoted in (22) below:

- (22) “n-words in languages like Italian have roughly the same semantics as (NPI) ‘any’.
They are, therefore, (domain-widening) existentials.” [Chierchia 2006:559]

I now take issue with this position and argue that Romanian n-words are not NPIs, a claim for which I provide further support in Chapter 5.

The first type of argument that runs against the position in (22) is the lack of a non-negative, existential reading, characteristic of NPIs. More precisely, Romanian n-words have a distribution much more restricted than weak polarity items like *ever* and cannot occur in typical polarity environments, such as the scope of the operator *few* (23), scope of negative predicates (24), questions (25), the antecedent of conditionals (26), *before*-clauses or restriction of a universal quantifier, which all license the occurrence of NPI *any*:

- (23) **Puțini* studenți au citit **niciun** articol.
Few students have.3pl read N-A paper
‘Few students have read any paper.’
- (24) **Irina refuză să spună* **niciun** cuvânt.
Irina refuse.3SG SUBJ say.3SG N-A word
‘Irina refuses to say any word.’

(25) *A venit **nimeni**?

Have.3sg come n-body

‘Has anyone come?’

(26) **Dacă* vine **nimeni**, anunță-mă.

If come.3sg n-body announce.2sg-cl

‘If anybody comes, let me know.’

Crucially, the ungrammaticality of these sentences makes Romanian n-words very different from their Italian (27)-(28) or Spanish (29) counterparts, which can occur in certain polarity contexts, as shown below:

(27) Viene **nessuno** in negozio ?

[Corblin & Tovenà 2003:13]

Come.3SG N-BODY in store

‘Does anyone come to the store?’

(28) E l’idea *piu stupida* che abbia mai avuto **nessuno**.

[Giannakidou 2006:30]

be.3sg the idea more stupid that have.subj.3sg ever had n-person

‘It’s the dumbest idea I have ever had.’

(29) *Perdimos* la esperanza de encontrar **ninguna** salida.

[Giannakidou 2006:30]

lost.1PL the hope to find N- exit

‘We lost hope of finding some way out.’

The n-words in (27)-(29) are interpreted as (non-negative) existentials, a property that seems to provide support for a treatment of negative concord as an instance of NPI-licensing. Romanian n-words, on the other hand, are ruled out in non-negative contexts, and clearly do not allow a purely existential reading, unlike their Italian or Spanish counterparts. These interpretive and distributional differences run against the claim that Romanian n-words are NPIs.

The ungrammaticality of Romanian n-words in polarity contexts (illustrated in (23)-(26)) indicates that their licensing condition is much stricter than in the case of NPIs like *ever* or Italian or Spanish n-words. I have already illustrated the fact that n-words require the presence of clausemate sentential negation. The only other context which licenses Romanian n-words is the operator *fără* ‘without’:

(30) Silvia a plecat *fără* să vorbească cu *nimeni*.

Silvia have.3SG left without SUBJ talk.3SG with N-BODY

‘Silvia left without talking to anyone.’

The question that arises at this point is what is the semantic property of sentential negation and the operator *without* that is relevant for the licensing of n-words. In other words, we need to find a property that is common to these two operators, and at the same time distinguishes them from other negative polarity licensors like *few* or *before*.

2.2 Romanian n-words are licensed by anti-morphic operators

Ever since the groundbreaking work of Ladusaw (1979), we know that downward entailment plays a crucial role in the licensing of NPIs. More precisely, the common property of negative polarity contexts is the fact that they allow inferences from sets to subsets (as defined in (31) below). A typical example is sentential negation, which licenses the inference from *Mira doesn't like vegetables* to *Mira doesn't like carrots*. Other downward-entailing contexts include the restrictor of a universal, *if*-antecedents, quantifiers like *few* or *nobody*, predicates like *doubt* or *refuse*, and operators like *without* or *before*. This hypothesis has proved very fruitful for studies of negative polarity, insofar as it offered a precise characterization of licensing contexts. However, subsequent research has shown that different types of polarity items are sensitive to different types of licensors (e.g. Zwarts 1993, van der Wouden 1997). In particular, it has been shown that whereas all NPI-licensors are ‘negative’, i.e. downward-entailing, their negativity is of different ‘strength’. More precisely, they come in three different variants, according to the kind of inferences they license. Thus, Zwarts (1993) and van der Wouden (1997) classify polarity items according to three types of operators: downward entailing (monotonic), anti-additive and anti-morphic. Let us define and illustrate these properties, starting with the downward entailment in (31):

(31) (a) An operator Op is DOWNWARD ENTAILING iff:

Op (X or Y) → Op (X) and Op (Y)

(b) **Few** boys sing *or* dance → **Few** boys sing *and* **few** boys dance.

The defining property of downward entailing operators, typically attributed to all NPI-licensors, is their ability to sustain the entailment in (31)a, as illustrated by the example with the operator *few* in (31)b.

Anti-additive operators, like the negative quantifier *no*, are defined as a subset of

downward entailing contexts. In addition to the downward-entailing inference in (32)b, they also sustain the entailment in (32). As such, they represent a ‘stronger’ form of negation:

(32) (a) An operator Op is ANTI-ADDITIVE iff:

Op (X or Y) $\leftrightarrow$ Op (X) and Op (Y)

(b) **No** boy sings *or* dances. $\rightarrow$ **No** boy sings *and* **no** boy dances

(c) **No** boy sings *and* **no** boy dances. $\rightarrow$ **No** boy sings *or* dances.

The strongest form of negation is represented by so-called *anti-morphic* operators, which are defined in (33), and which are directly relevant to our discussion of n-words:

(33) An operator Op is ANTI-MORPHIC iff (i) **and** (ii):

(i) Op (X or Y) $\leftrightarrow$ Op (X) and Op (Y) (ii) Op (X and Y) $\leftrightarrow$ Op (X) or Op (Y) ⁴

(a) John doesn’t smoke *or* drink. $\rightarrow$ John doesn’t smoke *and* doesn’t drink.

(b) John doesn’t smoke *and* doesn’t drink. $\rightarrow$ John doesn’t smoke *or* drink.

(c) John doesn’t smoke *and* drink. $\rightarrow$ John doesn’t smoke *or* doesn’t drink.

(d) John doesn’t smoke *or* doesn’t drink. $\rightarrow$ John doesn’t smoke *and* drink.

In addition to satisfying the conditions that define downward entailing ((33)a) and anti-additive contexts ((33)b), anti-morphic contexts must satisfy the additional condition in (33)ii, illustrated by the inferences in (33)c-d.

Adopting this more fined-grained view of NPI-licensors, I take antimorphism to be the semantic feature responsible for the licensing of n-words in Romanian.

The validity of the inferences in (33) illustrates the antimorphism of sentential negation. On the basis of this property, sentential negation, translated as the propositional operator *it is not the case that*, is said to represent the strongest form of negation we find in natural language. The only other operator which has been argued to support the inferences in (33) is *without* (Giannakidou 2002, Błaszczak 2002, Pereltsvaig 2004). For illustration, consider the equivalences in (34)-(35), given for both the Romanian operator *fără* ‘without’ and its English equivalent:

⁴ These inferences are also called De Morgan’s laws. For details and discussion of the algebraic properties of ‘negative’ contexts, see e.g. Zwarts (1993), Toveni (1996), van der Wouden (1997).

- (34) Paul a plecat **fără** să doarmă *sau* ↔ Paul a plecat **fără** să doarmă
 să mănânce. *si fără* să mănânce.
 Paul left **without** sleeping *or* eating. Paul left **without** sleeping
and without eating.
- (35) Paul a plecat **fără** să doarmă *si* ↔ Paul a plecat **fără** să doarmă
 să mănânce. *sau fără* să mănânce.
 Paul left **without** sleeping *and* eating Paul left **without** sleeping *or without*
 eating.

On the basis of these equivalences, we can conclude that negation and *without* pattern together with respect to the type of inferences they allow. As such, they differ from other ‘negative’ operators, such as *nobody* or *refuse*, which only sustain a subpart of the inferences above, and thus do not qualify as anti-morphic operators. For example, the invalidity of the inference (36)b shows that the verb *refuse* is not anti-morphic, but only an anti-additive operator:

- (36) a. He **refuses** to eat or sleep ↔ He **refuses** to eat and **refuses** to sleep.
 b. He **refuses** to eat *and* sleep ↔ He **refuses** to eat *or* **refuses** to sleep.

Now that we have identified a common semantic property for negation and *without*, we can formulate the licensing condition which governs the distribution of Romanian n-words:

- (37) *Romanian n-words are only licensed in the (immediate) scope of an anti-morphic operator*

In section 3, we will see that anti-morphic operators also play a role in the distribution of existential free-choice items.

2.3 Romanian n-words are not NPIs

With this generalization in mind, we can return to the discussion of Romanian n-words as compared to polarity items. As shown in (22), for Chierchia, n-words are NPIs semantically similar to *any*, i.e. existential quantifiers which require a downward entailing context, and convey a domain widening effect. However, it seems that negative concord is a more restricted phenomenon, as illustrated by the licensing condition of Romanian n-words. Chierchia acknowledges the difference between n-words and NPIs like *ever* and suggests that overt negative morphology on n-words might be responsible for the fact that n-words cannot

occur in all NPI-contexts and impose stricter locality conditions. To put it differently, NPIs and n-words are claimed to have the same interpretation, but different licensing conditions.

This position raises several questions. In particular, why is it that n-words do not convey domain widening? Negative concord represents the default, non-marked way of expressing negative statements, without any particular pragmatic effect. If their meaning is similar to that of ‘regular’ NPIs, we expect them to expand the domain of quantification in exactly the same way, contrary to fact. Moreover, if n-words are NPIs, why do Romanian n-words never exhibit an existential, i.e. non-negative reading, unlike their Romance counterparts? If they were indeed existentials, we would expect the purely existential reading to surface in at least some contexts, as we have seen in the case of Italian n-words in questions (27), or n-words under negative verbs like *lose* in Spanish (29), which exhibit a clearly non-negative reading. In Chapter 5, I will show that this property holds even in diachrony: old Romanian exhibits a pattern of negative concord very similar to what we find in modern Italian or Spanish (where it is only postverbal n-words that need to be licensed by sentential negation, whereas preverbal ones disallow it), but nevertheless, there is no evidence for an existential interpretation. We thus arrive at the following two conclusions: (i) Romanian n-words do not behave like existentials, and (ii) do not convey domain widening. This amounts to saying that they are not domain widening NPIs.

This issue will be taken up in Chapter 5, where I provide further arguments against the analysis of negative concord as an instance of NPI-licensing. Whereas here I focused on the lack of NPI-status, in Chapter 5, I defend the hypothesis that Romanian n-words are inherently negative expressions, which share many properties of negative quantifiers like *nobody*, in non-negative concord languages. Furthermore, the fact that n-words are negative elements is shown to play a key role in determining the behavior of other polarity items in negative contexts. In particular, since n-words are not NPIs, and hence, cannot act as domain-widening existentials, it is the determiner *vreun* that performs this role in negative statements, as illustrated in section 4 below.

Summarizing, we have seen that Romanian n-words can only occur in the immediate scope of a strongly negative, i.e. anti-morphic operator, instantiated by negation and *without*. As far as their interpretation is concerned, I have shown that Romanian n-words never exhibit an existential, non-negative reading, unlike weak NPIs and n-words in other Romance languages. I take this difference as indicating that n-words in Romanian are not NPIs.

With this in mind, let us now return to the whole system of polarity sensitivity in Romanian. The discussion of n-words leads us to conclude that they cannot be analyzed as

weak NPIs. What are the implications of this state of affairs in view of the typology of polarity items in (16), repeated below as (38)?

(38) Pure NPIs (*ever*)

NPI/FCI (*any*)

Pure FCI (*qualunque/qualsiasi*)

Existential FCI (*un N qualsiasi*)

NPI/Existential FCI (*irgendein*)

Given that Romanian has no class of pure NPIs, we expect any kind of item that occurs in negative polarity contexts to exhibit overlap. We will now turn to the area of free-choice items, and see what instances of overlap we can find. First, it should be mentioned that the landscape of polarity items in Romanian includes a class of ‘pure’ free-choice items, morphologically composed of the disjunctive marker *ori* and *wh*-words. The full paradigm is given below:

(39) List of Romanian free-choice items

oricine ‘or+who’=anyone

orice ‘or+what’ = any(thing)

oricare ‘or+which’ = any

oricând ‘or+when’ = anytime

oriunde ‘or+where’ = anywhere

oricum ‘or+how’ = anyway

oricând ‘or+when’ = anytime

Romanian free-choice items do not double as NPIs, unlike *any* in English. When they occur in the scope of a downward entailing operator, they are either ruled out, or acquire a ‘not just any’ reading. In this, they resemble their Italian counterparts *qualsiasi/qualunque*, illustrated in (5)-(6) above, whose distribution doesn’t extend to negative polarity contexts either. I give the paradigm for completeness, but I will not be concerned with these items in the remainder of the thesis. We are now left with the area of existential free-choice items, on which I focus in the following section.

3 The distribution of existential free-choice items

In line with the typology in (38), existential free-choice items differ with respect to their ability to occur in NPI-contexts. For illustration, consider the following sentences with

existential free-choice items embedded under negation (examples (40)-(41) are taken from Chierchia (2006), example (42) from Jayez & Tovenà (2006)):

(40) *Nessuno* è costretto ad invitare ***una*** persona ***qualsiasi***. ✓RHETORICAL/*NPI READING

no one had to invite a person whatever

‘No one had to invite just anybody.’

(41) *Niemand* musste ***irgendjemand*** einladen. ✓RHETORICAL/✓NPI READING

no one had to a person whatever invite

‘No one had to invite anybody.’

(42) Marie n’a *pas* lu ***un*** livre ***quelconque***. ✓RHETORICAL/✓NPI READING

Mary NEG have.3SG NEG read a book whatever

‘Mary read absolutely no book.’

The example in (40) disallows an NPI-reading for the existential free-choice DP *una persona qualsiasi*, whereas its German and French counterparts allow both a rhetorical and an NPI reading, as shown in (41)-(42). Setting aside the rhetorical, ‘not just any’ reading, which I believe cannot be properly understood as long as we disregard the role of focus, existential FCIs seem to differ according to whether they acquire an NPI-reading⁵.

In the following, I will address the properties of the Romanian existential free-choice item *un N oarecare*, and show that it behaves like an NPI only in a subset of NPI-licensing contexts, whereas under anti-morphic operators, negation and *without*, it is ruled out (unless focus or contextual factors make available the rhetorical reading). These facts corroborate the conclusion we established on the basis of Romanian n-words, namely that not all licensors behave on a par. The following description puts together data and discussion in Săvescu-Ciucivara (2005) and Fălăuș (2008b).

3.1 *Un N oarecare* is anti-licensed by anti-morphic operators

Un N oarecare has the usual properties of an existential free-choice⁶: it indicates lack of

⁵ On the basis of the difference between *un N qualsiasi* and *irgendein*, Chierchia (2006:574) suggests that the [+/- NPI-reading] reflects a ‘generalized parametric variation between Romance and Germanic’. The fact that the French item *un N quelconque* allows both uses runs against this claim.

⁶ In addition, we can also find a related form of free-choice item, where the free-choice component *oarecare* precedes the noun. I am not aware of any study on the syntactic or interpretive differences between the two variants, but I think the prenominal one usually combines with abstract nouns: *un oarecare optimism* ‘a whatever

knowledge or free-choice with respect to the identity of the individual variable introduced by the noun it modifies. As we will see later in this thesis (Chapter 4), the meaning of an existential FCI comes about as a result of putting together an indefinite (which says that there is only one individual that has a certain property) and a free-choice component (which conveys that any individual in the domain under consideration is a possible value). The two parts can only combine appropriately in contexts involving a certain modalization, where the variation requirement typical for free-choice item can be satisfied. The following sentences, due to Săvescu-Ciucivara (2005), illustrate the occurrence of *un N oarecare* in conditionals (43), under a necessity modal (44), under an ability modal (45) and under a habitual operator (46):

(43) *Conditionals:*

Dacă pui o carte *oarecare* pe raft , se va prăbuși imediat.
 if put.2sg a book whatever on shelf, it will collapse immediately
 ‘If you put some book on the shelf, it will collapse immediately’

(44) *Necessity modals*

Maria *trebuie* să se căsătorească cu un doctor *oarecare* din sat.
 Mary must subj refl marry with a doctor whatever from village
 (i) ‘There is a certain doctor that Mary has to marry, but the speaker does not know about or doesn't know who he is.’
 (ii) ‘Mary has to marry some doctor or other, any doctor is a possible choice.’

(45) *Ability modals*

Maria *poate* să rezolve o problemă *oarecare*.
 Mary can SUBJ solve a problem whatever
 (i) There is a certain problem that Mary can solve; the speaker does not know which problem it is.
 (ii) No matter what problem Mary is faced with, she is able to solve it.

optimism = some optimism’. In the following, I abstract away from this form, whose properties I leave for future research.

(46) *Habituals*

Maria invită *de obicei* un bărbat *oarecare* la petrecerile ei.

Mary invites usually a man whatever at parties her

(i) Mary usually invites a certain man to her parties, but the speaker does not

remember who that is, or maybe she does not care who the man is.

(ii) Mary usually invites a man to her party, and any man could be a possible choice for Mary.

The distribution and interpretation of *un N oarecare* in ‘modal’ contexts is similar to other existential free-choice, which all require the presence of a modal operator, a restriction on which I will not focus in more detail in this section. What is more interesting for our present purposes is whether or not this item can also function as an NPI, as seems to be the case of *irgendein* or *un N quelconque*. At first sight, the answer is positive: the following sentences show that *un N oarecare* can successfully occur in NPI-licensing contexts, like the scope of the downward-entailing operator *few* (47), the scope of negative verbs like *doubt* (48) or *refuse* (49), or in *before*-clauses (50)⁷:

(47) *Puține* state au *o* soluție *oarecare* pentru încălzirea planetei.

few countries have a solution whatever for warming planet.GEN

‘Few countries have a solution whatsoever for global warming.’

(48) Am *refuzat* o bursă *oarecare* fără să știu exact ce fac

Have.1sg refused a grant whatever without SUBJ know.1sg exactly what do.1sg

‘I refused some grant without knowing exactly what I was doing.’

(49) Mă *îndoiesc* că Maria poate să lucreze pe *un* calculator *oarecare*.

REFL doubt.1SG that Mary can SUBJ work ACC a computer whatsoever

‘I doubt that Mary can work on some computer or other’.

⁷ In many of these contexts, the default choice would be the determiner *vreun*, whose distribution and interpretation will be thoroughly investigated in the remainder of this thesis (see also section 4 below). Despite this preference, it is clear that the existential free-choice is possible, and is interpreted in the scope of the NPI-licensing operator.

(50) *Inaintea **unui** examen **oarecare**, trebuie să te relaxezi.*

Before a.GEN exam whatsoever must SUBJ REFL relax.2sg

‘Before any exam whatsoever, you must relax.’

(51) *Fiecare copil care rezolvă **o** problemă **oarecare** din manual va primi un premiu.*

every kid that solve.3SG a problem whatsoever from textbook will get a prize

‘Every kid that can solve some problem from the textbook will get a prize.’

These examples show that *un N oarecare* can occur in NPI-licensing environments, and take scope below the downward-entailing operator. For example, we can paraphrase the interpretation of the sentence in (47) like ‘few countries have any solution to global warming’, using an NPI instead of the existential free-choice item. In other words, the sentence does not have a wide-scope, ignorance reading, which would mean ‘there is a solution to global warming that few countries have, and the speaker doesn’t know/care which solution it is’. These facts indicate that the Romanian existential free-choice item allows an NPI use, just like its German and French counterparts. A closer investigation reveals, however, that this conclusion is inaccurate. Consider the following sentences:

(52) **Nu am scris **un** articol **oarecare**.* **NEG > OARECARE*⁸

NEG have.1sg written an article whatever

Intended reading: ‘I didn’t write any article (whatsoever).’

(53) **Paul **nu** a vorbit cu **un** student **oarecare**.* **NEG > OARECARE*

Paul NEG have.3sg talked to a student whatever

Intended reading: ‘Paul didn’t talk to any student (whatsoever).’

In (52)-(53), *un N oarecare* occurs in the scope of the sentential negative marker *nu*, a canonical NPI-licensor, which nevertheless rules out the existential free-choice. The ungrammaticality of these sentences runs against the conclusion that *un N oarecare* behaves like an NPI. Furthermore, sentential negation is not the only operator ruling out *un N oarecare*. As attested by the example in (54), *without* has a similar effect:

⁸ A marginal rhetorical reading is possible if the existential free-choice is focused.

(54) *Am venit la petrecere *fără un prieten oarecare*. **WITHOUT>OARECARE*

Have.1sg come to party without a friend whatever

Intended reading: ‘I came to the party without any friend (whatsoever).’

In other words, *un N oarecare* can take NPI-readings in typical polarity contexts, but it cannot occur in the scope of sentential negation or *without*, which are both anti-morphic operators (as shown in section 2.2 above). One way to describe this situation is to say that *un N oarecare* is *anti-licensed* in these two environments, as in (55):

(55) ‘*Un N oarecare*’ is *anti-licensed* in the (immediate) scope of a clausemate anti-morphic operator

This situation is surprisingly similar to the one identified for n-words: not only does the licensing condition for n-words require fine-grained distinctions among licensors, but the relevant operators that behave different from all the others are identical: negation and *without*, (as attested by the constraint in (37), section 2.2). In the case of n-words, they are the only licensors, in the case of *un N oarecare*, they are the only downward-entailing operators that rule out its use as an NPI, hence *anti-license* it.

3.2 Positive polarity effects

In order to make sense of the anti-licensing effects described in the previous section, the restriction on the use of *un N oarecare* in (55) can be connected to constraints argued to be relevant in the area of positive polarity items (see Szabolcsi (2004) for a recent discussion of issues related to positive polarity). As mentioned in the introduction of this chapter, positive polarity items (PPIs) are generally identified by the fact that they resist embedding under negation or other NPI-licensing operators. For illustration, consider the following statement:

(56) ??I haven’t *already* visited Barcelona.

The sentence in (56), with the positive polarity item *already* can only be (marginally) accepted as the denial of an assertion like *I have already been to Barcelona*. Crucially, *already* cannot take scope below negation and mean something like *yet*. This situation is usually described in terms of *anti-licensing*: whereas NPIs require a licensor like negation, positive polarity items disallow it.

However, empirical studies of positive polarity established that not all operators behave alike with respect to the anti-licensing of positive polarity items. More precisely, PPIs require distinctions among the various types of downward entailing operators, defined in

section 2.2. For example, *already* is ruled out under anti-morphic operator like negation, but doesn't mind embedding under the downward entailing operator *few* in the sentence in (57):

(57) *Few* students have ***already*** been accepted at a big conference.

In other words, just like some NPIs have stronger licensing constraints than others, anti-licensing effects exhibited by PPIs also require distinctions among the downward entailing operators that anti-license them. This has led to a view of polarity sensitivity where negative and positive polarity patterns offer a mirror image (van der Wouden 1997). For example, anti-morphic operators act as licensors for certain classes of negative polarity items (called *strong NPIs*) and as anti-licensors for certain classes of positive polarity items (called *weak PPIs*). For illustration, consider the Dutch examples below (van der Wouden 1997), with the negative polarity *mals*:

(58) a. **Geen* oordeel was ***mals***.

‘No judgement was tender.’

b. *Zijn* oordeel was *niet* ***mals***.

‘His judgement was not tender.’

The negative polarity item *mals* ‘tender’ is not licensed by the negative quantifier *geen* ‘no’ (58)a, but becomes grammatical in the scope of the stronger negative operator *niet* ‘not’ (58)b. It is therefore only licensed by antimorphism. On the other hand, certain positive polarity items are anti-licensed by anti-morphic operators only. This situation is illustrated by the ungrammaticality, hence anti-licensing, of the Dutch positive polarity item *nog* ‘still’ in (59)b, as compared to its embedding under the anti-additive *nobody* in (59)a, which is unproblematic:

(59) a. *Niemand* will ***nog*** Donne lezen

Nobody wants still Donne read.

‘Nobody wants to read Donne any more’

b. **Jan* wil *niet* ***nog*** Donne lezen.

John wants not still Donne read.

Returning to our discussion of the existential free-choice *un N oarecare*, its anti-licensing constraint in (55) is thus very similar to conditions governing the distribution of positive polarity items. In the following, I will provide further support for this similarity, by comparing the behavior of *un N oarecare* to the properties of *some*, whose positive polarity

status is well-documented in Szabolcsi (2004).

The hallmark of positive polarity is the ban to occur in the scope of negation, as illustrated in (56) for the item *already*, a property that we have seen to also hold for the existential free-choice item *un N oarecare*. The relevant example is repeated below:

- (60) *Paul *nu* a vorbit cu **un** student *oarecare*. *NEG > OARECARE

Paul NEG have.3sg talked to a student whatever

Intended reading: ‘Paul didn’t talk to any student (whatsoever).’

The ban to appear in the scope of negation only holds for clausemate negation: as illustrated in (61)-(62), both *someone*-PPIs and *un N oarecare* can scope below **superordinate** negation:

- (61) I don’t think that you will invite *someone*. ✓NEG > PPI

- (62) *Nu* cred că s-a înscris la **un** curs *oarecare*.

NEG think.1SG that REFL-have.3SG registered to a course whatsoever

‘I don’t think that he has registered for any course.’

Furthermore, both *someone*-PPIs and *un N oarecare* can take scope below merely downward entailing operators like *few*, as in the sentences in (63)-(64) below:

- (63) *Few* of us knew *someone* in Patagonia. ✓FEW > PPI

- (64) *Puțini* participanți câștigaseră **un** premiu *oarecare* înainte de aceasta competiție

few participants win.PAST.3PL a prize whatsoever before of this competition

‘Few participants had won a prize whatsoever before this competition.’

There are two more properties that support the analogy between *un N oarecare* and positive polarity items. First, the relation between *un N oarecare* and the negation is subject to intervention effects: both *someone*-PPIs and *un N oarecare* can scope below negation if there is another operator intervening (the phenomenon is also known as *shielding*). The following sentences illustrate this effect with the universal quantifier *always* intervening between negation and the PPI:

- (65) John doesn’t *always* invite *someone*. ✓NOT > ALWAYS > PPI

- (66) Mircea *nu* a plecat de la *fiecare* ședință sub **un** pretext *oarecare*.

Mircea NEG has left from every meeting under a pretext whatsoever

‘Mircea hasn’t left every meeting under some pretext.’

Second, positive polarity items are argued to exhibit *rescuing* effects: they can happily scope below negation (or any other anti-licensor) when further embedded in an NPI-licensing

context:

- (67) a. *Few* boys didn't invite *someone*. ✓FEW >NEG>PPI
b. *Pușini* studenți *nu* au scris *un* articol *oarecare* înainte de susținere.
Few students NEG have.3PL written an article whatsoever before of defense
'Few students didn't write some paper before their defense.'

- (68) a. *If* we don't ask *someone*, we'll never know. ✓IF >NEG >PPI
b. *Dacă nu* ai *o* ipoteză *oarecare*, nu poți critica alte analize.
If NEG have.2SG a hypothesis whatsoever NEG can.2SG criticize other analyses
'If you don't have a hypothesis whatsoever, you can't criticize other analyses.'

The sentences in (67)-(68) show that the anti-licensing by negation can be cancelled by the presence of an NPI-licensing operator, such as *if* or *not*. This rescuing effect also occurs in the case of the operator *without*, which normally anti-licenses *un N oarecare*:

- (69) Am ajuns cunoscut *nu fără un* merit *oarecare*. ✓NEG>WITHOUT>OARECARE
Have.1sg became famous not without a merit whatever
'I have become famous not without some merit.'

The rescuing effects indicate that positive polarity is a complex phenomenon, which shouldn't be reduced to a simple prohibition to occur in the scope of negation, but this issue is not relevant for our present purposes.

On the basis of these facts, we can conclude that *un N oarecare* behaves like a PPI, anti-licensed by antimorphism. By attributing *un N oarecare* a PPI-like status, its ungrammaticality under negation and *without* is less mysterious, insofar as it relates to other phenomena of semantic dependencies. Note, however, that my only claim at this point concerns the distribution of *un N oarecare* in negative polarity contexts, which closely resembles the pattern of positive polarity items like *some*^{9,10}. As far as its interpretation is concerned, *un N oarecare* is an existential free-choice item, hence an item whose meaning combines an indefinite, existential, component with a free-choice component, conveying variation in the domain of quantification, as discussed extensively in Chapter 4.

This situation is parallel with our conclusion for Romanian n-words, discussed in

⁹ In Fălăuș (2008), building on observations in Săvescu-Ciucivara (2005), I have shown that *someone-PPIs* and *un N oarecare* are not sensitive to the same semantic property: whereas *un N oarecare* is anti-licensed by antimorphism, *someone-PPIs* are anti-licensed by anti-additivity.

¹⁰ For analyses of *some*, see Farkas (2002b) or Szabolcsi (2004).

section 2: whereas they are subject to a licensing constraint which makes them similar to certain NPIs, this does not grant them an NPI-status. More specifically, I have shown that *n*-words never have a non-negative interpretation, and argued that they are not domain widening existentials, an issue to which I return in Chapter 5, where I present evidence that they are inherently negative elements.

Let us now return to the landscape of Romanian polarity sensitivity and summarize the patterns we established. I have argued that Romanian has no class of ‘pure’ NPIs, and thus we expect every item that occurs in negative polarity contexts to present overlap in its uses. This is precisely the conclusion we have reached for the existential free-choice item, which typically occurs in modal environments, like all free-choice items, but which can ‘double’ as an NPI. However, the parallel between the distribution of the existential free-choice *un N oarecare* and positive polarity provides support for the need to establish distinctions among downward-entailing operators. More specifically, I have shown we cannot address the question of whether *un N oarecare* doubles as an NPI, in the same sense as *irgendein* or *un N quelconque*, until we look at more fine-grained distinctions in the range of NPI-licensors. Following this line of thinking, I have argued that sentential negation and *without* are to be treated as subset of DE-operators, which share the property of being anti-morphic, and which are relevant for the distribution of *un N oarecare*. I suggest we can take this as a basis for understanding certain cross-linguistic differences, of the kind observed in the behavior of existential free-choice items. My conclusion is that the question of overlap cannot be addressed in the absence of a precise definition of the set of possible (anti-)licensors and ways to capture the differences between polarity contexts.

Our overview of the Romanian polarity system established the existence of one case of overlap in the area of existential free-choice items. In the following section, I turn to an instance of overlap that will be the focus of this study, namely the one displayed by the determiner *vreun*, which constitutes a challenge to any typology of polarity sensitivity.

4 The Romanian challenge to polarity typology: *vreun*

In this section, I provide the basic distributional properties of *vreun*, to be discussed extensively in Chapter 2, and establish that it differs from other known patterns of polarity. More precisely, I show that *vreun* is licensed in some but not all NPI-contexts (section 4.1),

and is licensed in some but not all contexts of occurrence of existential FCIs (Section 4.2). On the basis of this preliminary survey of the type of overlap illustrated by *vreun*, I formulate the questions that will be addressed in the remainder of this thesis.

4.1 Is *vreun* a negative polarity item?

The existential determiner *vreun* (masculine)/*vreo* (feminine), which is a morphologically complex variant of the indefinite article *un* (masculine)/*o* (feminine), occurs in typical negative polarity contexts, as illustrated by its occurrence in questions (70), and the scope of the downward entailing quantifier *few* (71):

- (70) Ai ***vreun*** vis neîmplinit?
Have.2SG V-A¹¹ dream unrealized
'Do you have any unrealized dream?'

- (71) *Puțini* studenți au publicat ***vreun*** articol în primul an de doctorat.
Few students have.3PL published V-A article in first year of PhD
'Few students have publishes any paper in their first year of PhD.'

It can occur in all contexts of negative polarity, including the scope of the anti-morphic operators *without* (72) and *nu* (73), where I have shown that n-words are also possible (section 2):

- (72) A plecat *fără* să spună ***vreun*** cuvânt.
Have.3SG left without SUBJ say.3SG V-A word
'(S)he left without saying a word.'

- (73) *Nu* am ***vreo*** speranță că s-ar schimba ceva.
NEG have.1SG V-A hope that REFL-have.3SG.COND change something
'I don't have any hope that something might change.'

This illustrates a typical negative polarity pattern, which amounts to licensing by a downward entailing operator, regardless of whether it is a stronger or a weaker form of downward entailment. However, the situation is more complex than this preliminary conclusion suggests.

¹¹ I follow Farkas (2002) in glossing *vreun* with 'v-a' as a way to indicate that it is a morphologically complex form of the indefinite article. In the English translations, I use *any*, *some* and the simple indefinite *a*, according to the form that comes closest to the intended meaning.

Consider the following negative sentence:

(74) **Nu* am scris ***vreun*** articol.

NEG have.1SG written V-A article

Intended reading: ‘I haven’t written any paper.’

The ungrammaticality of *vreun* in the scope of the sentential negation in (74) comes as a surprising fact for an item which in many other respects behaves like an NPI. In particular, the contrast between (73) and (74) calls for an explanation: in both cases, *vreun* is in the scope of the sentential negative marker *nu*, but the two sentences differ with respect to their grammaticality status. Since the (potential) licenser is present in both cases, we must seek elsewhere an explanation for this contrast.

In Chapter 2, and more extensively in Chapter 5, I argue that these facts can only be accounted for once we consider the complete system of polarity patterns in Romanian. In particular, I show that the unacceptability of (74) is due to the properties of n-words, whose distribution is captured by the licensing constraint in (37). It is precisely because n-words are the default option in negative sentences that *vreun* is ruled out. In other words, they block the use of *vreun* in negative sentences. Crucially, as attested by the sentence in (73), there are cases where this effect can be overridden, in particular in situations where the speaker intends to convey a domain widening effect, which is not triggered by n-words. This issue will be discussed in detail in Chapter 2 and Chapter 5, for now, the only relevant conclusion is the fact that in order to understand the behavior of *vreun* in negative polarity contexts, we need to consider the full range of possibilities available in the language.

4.2 Is *vreun* an existential free-choice item?

Let us now turn to the connection between *vreun* and the existential free-choice item *un N oarecare*. Consider the following sentence:

(75) E *posibil* ca Maria să se fi întâlnit cu ***vreun*** prieten și să fi

Be.3SG possible that Maria SUBJ REFL BE met with V-A friend and SUBJ BE

rămas cu el în oraș.

remained with him in town

‘It is possible that Maria met some friend and stayed with him in town.’

In (75), *vreun* occurs in the scope of the modal operator ‘it’s possible’. The sentence conveys the meaning that Maria might have met a friend, the speaker doesn’t know/care which friend,

and she might have stayed with him in town. This ignorance/indifference flavor is similar to the one conveyed by the use of the existential free-choice item *un N oarecare*, which would also be licensed in this context, as illustrated in (76):

- (76) E *posibil* ca Maria să se fi întâlnit cu **un** prieten **oarecare** și să
 Be.3SG possible that Maria SUBJ REFL BE met with A friend whatsoever and SUBJ
 fi rămas cu el în oraș.
 BE remained with him in town
 ‘It is possible that Maria met some friend and stayed with him in town.’

This example suggests that the distribution of *vreun* goes beyond negative polarity and ventures into the area of free-choice items. However, whereas *vreun* indeed occurs in modal contexts, it makes further distinctions among its licensing environments, as shown by the contrast in (77)-(78):

- (77) **Trebuie* să scriu **vreun** articol despre ultimele alegeri.
 must SUBJ write.1SG V-A article about last.DEF elections
 ‘I must write some paper about the last elections.’

- (78) Cu numele lui, *trebuie* să fie **vreun** aristocrat.
 With name.DEF his must SUBJ be.3SG V-A aristocrat
 ‘Given his name, he must be some aristocrat.’

Both these sentences illustrate the distribution of *vreun* in the scope of necessity modal *trebuie* ‘must’, one of the typical licensing contexts for existential free-choice items (see example (44) in section 3). However, *vreun* is ruled out in (77), and licensed in (78). This raises the question of the licensing factor to which *vreun* is sensitive: what is the source of this contrast? In what ways is *vreun* different from existential free-choice items, which can occur in both these sentences? Similar questions raise for the contrast between the ungrammaticality of *vreun* in the scope of the verb *want* (79) and its licensing under the verb *hope* (80):

(79) * *Vreau* să cumpăr *vreo* carte despre Olanda.
 want.1SG SUBJ buy V-A book about Holland
 ‘I want to buy a book about Holland.’

(80) *Sper* că ai adus *vreun* cadou.
 Hope.1SG that have.2SG brought V-A present
 ‘I hope you brought some present.’

Finally, imperatives constitute another modal context which licenses existential free-choice items, but where *vreun* seems to make further distinctions, which need to be understood:

(81) * Ia *vreo* prăjitură!
 Take V-A cookie
 ‘Have some cookie.’

(82) Verifică pe *vreun* site, nu sunt sigură că nu e o greșeală.
 Check.2SG on V-A site, NEG be.1SG sure that NEG be.3SG a mistake
 ‘Check on some website, I’m not sure it’s not a mistake.’

These facts show that *vreun* is not an existential free-choice item, although it is an existential determiner which occurs in modalized contexts. The challenge we have to face is to identify the factor(s) responsible for the distribution of *vreun* in non-polarity contexts. In Chapter 2, I argue extensively that *vreun* is an epistemic item, sensitive to the epistemic agent’s beliefs. For now, I’ll just use the term epistemic contexts to refer to non-negative licensing contexts.

4.3 How many *vreun* items?

The data introduced in this section clearly show that *vreun* cannot be situated with respect to the types of polarity patterns we have seen so far. Once we identify the pattern of distribution of *vreun*, and reduce it to negative polarity and epistemic contexts, we need to address several intriguing questions. First, the issue of overlap, which is crucial to understanding the phenomenon of polarity sensitivity. On the empirical side, *vreun* exhibits a new kind of overlap, which remains to be explained and integrated in a typology of semantic dependencies. From the theoretical perspective, we are once again confronted with the question of whether this overlap reflects lexical ambiguity, or rather comes about as a result of some property of *vreun* which makes it compatible with both (and only) negative and epistemic contexts. In Chapter 3, I argue against a lexical ambiguity approach, defended by

Farkas (2005), and defend a unified view of polarity sensitivity, in terms of domain widening, which is responsible for the use of *vreun* both as an NPI and as an epistemic item.

4.4 Semantic or pragmatic constraints?

Another issue raised by the distribution of *vreun* is what is the precise nature of its licensing constraint in non-polarity contexts. More precisely, by bringing in notions like epistemic agent and his beliefs, we can wonder whether *vreun* is sensitive to pragmatic or semantic factors. In Chapter 2, I show that there is a way of putting together all non-polarity contexts which license *vreun*, such as modals or attitude verbs like *hope*, and formulate a semantic licensing constraint which makes reference to the type of beliefs entertained by the epistemic agent. I defend the hypothesis that *vreun*'s distribution is regulated by *semantic* factors, and argue that the relevant factor is the type of entailment allowed by the licensing operator. Given that sentences where *vreun* is not in the scope of an appropriate licenser are not merely infelicitous, but ungrammatical, this clearly argues in favor of an account of polarity in terms of licensing constraints (as opposed to approaches which put the burden on the context of use of an item, and seek to determine whether the element in question is appropriate or not). In Chapter 4, I pursue a theory of polarity in terms of domain widening, which, roughly speaking, seeks to derive the restricted distribution of polarity items from the types of inferences speakers make regarding the domain alternatives these items introduce. The immediate question is how pragmatic inferences of this kind lead to (un)grammaticality. On the approach to polarity that I endorse in this thesis, developed in Chierchia (2006, 2008), certain pragmatic inferences or implicatures are derived by means of compositional rules, which affect the truth-conditional meaning of the sentence, and as such contribute to its (un)grammaticality. On this view, domain widening doesn't trigger inferences which follow the computation, but can directly affect it. The meaning and use of polarity items are closely connected, and therefore, polarity failure doesn't amount to some kind of inappropriateness, but leads to ill-formedness. We can thus maintain the assumption that polarity sensitivity stems from the meaning of polarity items, and at the same time accommodate the connection with their conditions of use. This double-determined dependency addresses the fundamental question of the relation between semantic and pragmatic constraints, and consequently, a better understanding of polarity phenomena can be significant for our understanding of the architecture of grammar.

Outline of the dissertation

The remainder of this thesis is organized as follows: In Chapter 2, I investigate the full pattern of distribution of *vreun*, and identify the licensing constraints underlying it. I argue that *vreun* has a negative polarity and an epistemic use, sensitive to the type of alternatives entertained by the epistemic agent. I show that in its non-polarity use, *vreun* needs to be in the scope of a propositional operator which entails the existence of worlds where the complement proposition might not hold.

Chapter 3 seeks to understand the source of this overlap of uses. I argue against a lexical ambiguity approach, as pursued by Farkas (2002, 2005) and against a unified account in terms of nonveridicality (Giannakidou 1999, 2009). Finally, I consider similarities and differences between *vreun* and other existential dependent elements, such as existential free-choice items, the French determiner *quelque* and Spanish *algún*. On the basis of this survey, I conclude that typologies of polarity sensitivity need to integrate a class of epistemic elements. In view of the ungrammaticality of *vreun* in the absence of an appropriate licenser, I maintain that we need a theory of polarity sensitivity based on licensing constraints, as opposed to accounts which rely on conditions of appropriateness.

In Chapter 4, I present the system of polarity that I endorse in this thesis, due to Chierchia (2006, 2008), which relies on the hypothesis that domain widening is the core property of polarity items responsible for their restricted distribution. The approach derives the interpretation and distribution of several types of items (NPIs, FCIs, existential FCIs, and overlap cases) by making use of the types of alternatives they introduce and the way these alternatives are exploited. Within this framework, I consider the distribution of *vreun* and the challenges it raises. In order to account for its interpretation, and the way it connects with existential free-choice items, I propose a modification concerning the type of domain alternatives which are relevant for its interpretation.

Finally, Chapter 5 investigates the properties of n-words in Romanian, which I argue to be inherently negative elements, on the basis of two types of arguments: first, I show they differ from polarity items, both in terms of their distribution and of their interpretation. Second, I show they share several properties with negative quantifiers in non-negative concord languages. The fact that Romanian n-words are negative elements is shown to be crucial to

the understanding of the distribution of *vreun* under sentential negation.

Chapter 2

Enriching the empirical base of dependent items: the case of Romanian *vreun*

In the previous chapter, we introduced the landscape of polarity sensitivity in Romanian, and the issues it raises for a typology of polarity items. In particular, I have shown that the distribution of the determiner *vreun* cannot be easily accommodated by existing classifications. I now investigate the empirical properties of this determiner and argue its occurrence is restricted to two types of environments: negative polarity and epistemic contexts (a label that I will explain in detail below). This detailed study argues for the necessity to make room for more fine-grained distinctions in the range of items licensed by modality. The consequences of this finding are explored in the next chapter, where I compare the distributional pattern of *vreun* with that of other existential dependent determiners and address the challenges raised by Romanian for current analyses of semantically dependent items.

The chapter is organized as follows: section 1 investigates the occurrence of *vreun* in negative polarity contexts. In section 2, I discuss the constraints on licensing in non-polarity contexts, and argue in favor of the hypothesis that the distribution of *vreun* depends on the speaker's beliefs, i.e. doxastic alternatives. The licensing constraint that I put forward subsumes a wide range of licensing contexts, thus offering a better understanding of the pattern of distribution of *vreun*.

1 The distribution of *vreun* as a negative polarity item

The special determiner *vreun* (masculine)/*vreo* (feminine) is a complex variant of the standard indefinite article *un* (masculine)/*o* (feminine), combined with the morpheme *vre-* (from the Latin verb *volere* > (**vere*) 'want'¹²), which occurs with singular countable nouns¹³. Its

¹² Another hypothesis on the origin of *vreun* is that it comes from the disjunction *vel* 'or', which attached to the indefinite article. (Dumitrescu 1974)

¹³ I restrict the discussion to DPs introduced by *vreun*, but there is another morphologically related item *vreodată* (v-once) 'ever' to which the analysis developed here can be extended. Another item morphologically related is

distribution has only been discussed in detail in Farkas (2002, 2005)¹⁴, despite its frequency and wide range of use. The obvious reason for this lack of attention is the difficulty to provide a uniform characterization of the contexts of occurrence of this item. Simplifying at this point, *vreun* shares uses of both *any* and *some* in English, a situation which makes *vreun* hard to situate in any typology of dependent items, such as the one given in Chapter 1.

In this chapter, I examine the full range of environments that license *vreun* and formulate the generalizations capturing its distribution. I argue that its contexts of occurrence can be subsumed under two main categories: negative polarity and epistemic (modal) contexts, or more generally, environments where the relevant licensing factor is the type of epistemic alternatives entertained by the speaker. Indefinites that are sensitive to ‘knowledge of the speaker’ are generally called ‘epistemic’ (Haspelmath (1997), Jayez & Tovenà (2006)), and although this label is used for a wide and heterogeneous class of items across languages, this is the term I adopt to refer to non-polarity uses of *vreun*. The differences with other ‘epistemic’ indefinites will be addressed in the next chapter.

The interest of the detailed study of *vreun* is twofold: on the one hand, its intriguing distributional pattern enriches the empirical base of (semantically) dependent items and as such, provides a valuable area to test the predictions and explanatory adequacy of theories of polarity sensitivity. On the other hand, this ‘double’ (negative polarity/epistemic modal) behavior brings about interesting parallels with other ‘modalized’ indefinites recently discussed in the literature (Alonso-Ovalle & Menéndez-Benito (2009), Jayez & Tovenà (2008)), whose distribution is determined by (possibly different types of) modality, and which will be discussed in Chapter 3. Consequently, accounting for the properties of *vreun* leads not only to a better understanding of the possible connections between polarity and modality, but also enables us to delineate the parameters of variation among semantically dependent items.

1.1 Negative polarity contexts

The first set of environments where *vreun* occurs is constituted by contexts that license typical negative polarity items, like English *any* or *ever*. Accordingly, the determiner *vreun* is

vreo in *vreo doi km* (about two kilometers), which combines with cardinals, conveying a meaning paraphrasable as ‘approximately’. Sauerland & Stateva (2006) discuss similar markers across languages, that they call ‘vagueness’ markers. I believe there is a link between *vreo* and the determiner *vreun*, but I leave this matter for future research.

¹⁴ *Vreun* is also mentioned in Giannakidou (1999) and argued to be a nonveridical item, and also mentioned as an NPI in Isac (2004) and Teodorescu (2005), but none of these papers considers its distribution in detail. To my knowledge, Farkas’ work constitutes the fullest description available, so this is the work I will refer to in this thesis. Giannakidou’s approach to items assumed to be similar to *vreun* will be discussed in Chapter 3.

frequently used in interrogatives, both in *yes/no* and *wh*-questions, root and embedded, as illustrated by the examples in (1):

- (1) a. Ai **vreun** vis neîmplinit?
 Have.2SG V-A dream unrealized
 ‘Do you have any unrealized dream?’
- b. Cine are **vreo** informație despre grevă?
 Who have.3SG V-A information about strike
 ‘Who has any information on the strike?’
- c. Mă întreb dacă/cine a văzut **vreun** film românesc recent.
 REFL.1SG wonder.1SG if/who have.3SG seen V-A movie Romanian recent
 ‘I wonder if (s)he/who saw any recent Romanian movie.’

It also freely occurs in antecedent of conditionals (2) and restrictors of universal quantifiers (3), generally assumed to be downward-entailing, and thus NPI-licensing environments; in these sentences *vreun* has a meaning similar to that of polarity-sensitive *any*:

- (2) Dacă găsești **vreo** carte despre asta, cumpără-mi-o.
 if find.2SG. V-A book about this, buy-me.DAT-it.ACC
 ‘If you find any book about this, buy it for me.’
- (3) Fiecare martor care are **vreo** informație va fi chemat la direcțiune.
 every witness who have.3SG V-A information will.3SG be called to director-office
 ‘Every witness who has any information will be called to the principal’s office.’

Similarly, *vreun* is licensed in the restrictor of an operator expressing universal quantification over times, as illustrated in the following examples:

- (4) Ori de câte ori/Când are **vreo** conferință, e foarte stresat.
 times OF DISTR times/when have.3SG V-A conference, be.3SG very stressed
 ‘Anytime/When(ever) he has a/some conference, he is very stressed.’

(5) *De fiecare dată când scriu pe vreun blog, îmi schimb pseudonimul.*
 OF each time when write.1SG on V-A blog, CL change.1SG pseudonym.DEF
 ‘Every time I write on a/some blog, I change my pseudonym.’

(6) *Acum, aici, la Paris, când ia cuvântul vreun comunist, se râde.*
 Now here at Paris when take.3SG word V-A communist, REFL laugh.3SG
 ‘Now, here in Paris, when(ever) some/a communist speaks up, he is laughed at.’

In these sentences, *vreun* is in the first argument of operators that universally quantify over times: *ori de câte ori* ‘anytime’, *când* ‘when’ and *de fiecare dată* ‘every time’, which all have an interpretation equivalent to ‘whenever’. Similarly, *vreun* is rather frequent in *as soon as*-constructions, with a meaning similar to a conditional, that we could paraphrase as *If you have any news, call me* for the sentence in (7) and *Paul used to call me if/whenever he had any news* for (8):

(7) *De îndată ce ai vreo veste, sună-mă!*
 of soon that have.2sg V-A news call-me
 ‘As soon as you have any/some news, call me.’

(8) *Paul obișnuia să mă anunțe imediat ce avea vreo veste.*
 Paul use.IMPERF.3SG SUBJ CL announce immediately that have.IMPERF.3SG V-A news
 ‘Paul used to let me know as soon as he had any/some news.’

Although not all NPIs would be acceptable in these temporal clauses, the point that is relevant for the distribution of *vreun* is that these licensing environments pattern with typical negative polarity contexts: both the restrictor of a universal quantifier (in this case over times) and the antecedent of a conditional are downward-entailing environments, and as such NPI-licensing contexts.

In addition, *vreun* is also licensed in weak negative contexts, such as the scope of (strictly) downward entailing operators like *rarely*, given in example (9) below, or under negative predicates like *refuse* or *doubt*, illustrated in (10)-(11):

(9) *Rar* îmi dă *vreo* explicație în legătură cu ceea ce face.
 Rarely me.DAT give.3SG v-a explanation in connection with DEM what do.3sg
 'Rarely does he give me any explanation on what he is doing.'

(10) *Dansa* cu el *refuzând* să-i adreseze *vreun* cuvânt.
 Dance.3SG with him refusing SUBJ-CL.3SG address.3SG V-A word
 'She danced with him refusing to address any word to him.'

(11) *Mă* *îndoiesc* că trăiește *vreun* animal la altitudinea asta.
 REFL.1SG doubt.1SG that live.3SG V-A animal at altitude.DEF this.FEM
 'I doubt any animal lives at this altitude.'

Finally, other polarity contexts where *vreun* occurs are *before*-clauses (12) and the scope of *without* (13):

(12) Tudor avea remușcări *înainte* de a concedia *vreun* angajat.
 Tudor have.3SG remorse before of INF fire V-A employee
 'Tudor had remorse before firing any employee.'

(13) Am intrat *fără* *vreun* scop anume într-o librărie.
 Have.1SG entered without V-A purpose specific in a bookstore
 'I got into a bookstore without any specific purpose.'

In addition to the above-mentioned environments, *vreun* can also occur in *negative* contexts like scope of sentential negation (15) and negative prefix (14), which can serve as licensors for *vreun*.

(14) *Incapabilă* să scriu *vreun* rând, pierdeam vremea
 unable SUBJ write.1SG V-A line, waste.1SG time
 'Unable to write any line, I was wasting my time'

(15) *Nu* am *vreo* speranță că s-ar schimba ceva.
 NEG have.1SG V-A hope that REFL-have.3SG.COND change something
 'I don't have any hope that something might change'

The interaction with sentential negation is more complex, however, an issue that will be addressed in detail in the next section, but for now, let us just conclude that negative markers

uniformly license *vreun*.

In view of these facts, we can assume *vreun* has (at least) the distribution of a typical negative polarity item, a hypothesis for which I'll provide further support in the following section, where I discuss its interaction with sentential negation and the relation between the licensing of *vreun* and negative concord.

1.2 Sentential negation

As mentioned in Chapter 1, one important context where the distribution of *vreun* is more complex than that of typical NPIs is in the scope of sentential negation. The difference between *vreun* and *any* in simple negative sentences is that *vreun* doesn't easily occur in this context. More specifically, being a negative concord language, Romanian will typically resort to negative concord items, or, in Laka's (1990) terminology, *n-words*, as shown in (16):

- (16) a. **Nu* am scris ***vreun*** articol.
 NEG have.1SG written V-A article
 b. *Nu* am scris ***niciun*** articol.
 NEG have.1SG written no article
 'I haven't written any paper.'

On the basis of the interaction with clausemate sentential negation, Farkas (2002) explicitly rejects an analysis of *vreun* in terms of negative polarity¹⁵. However, I argue that this does not constitute a valid counter-argument against the NPI-status of *vreun*. A closer look at NPI-behavior cross-linguistically shows that this situation, where an NPI is used in all weak negative contexts (downward-entailing), but not in the strong(est) negative context, namely sentential negation, is a common pattern across languages that have both NPIs and *n-words* (or equivalents thereof), such as Slavic languages, Dutch or Japanese. The following sentences illustrate this situation for Russian, where *-libo* indefinites are licensed in all negative polarity contexts, such as the scope of the downward entailing operator *few* (17), but not in the scope of clausemate sentential negation (18)a, where negative concord items would be used instead (18)b:

¹⁵ I am aware of four other papers where *vreun* is considered/mentioned as an NPI: Isac (2004), Teodorescu (2005), Iordachioaia (2005) and Sava (2006). However, none of them addresses the whole range of distribution of *vreun* and thus do not actually provide (counter)arguments for the hypothesis that it is an NPI, unlike Farkas.

(17) *Nemnogie* studenți citali *kakoj-libo* žurnal.

[Perelstvaig 2004:7]

few students read_{PST} which-*libo* journal

‘Few students read any journal.’

(18) a. *On *kogo-libo* ne vstretil.

he whom-*libo* not met

b. On *nikogo* ne vstretil.

he *ni*-whom not met

‘He didn’t meet anyone.’

Pereltsvaig (2004) dubs this situation ‘the Bagel problem’: sentential negation seems to be the ‘missing hole’ in the set of polarity contexts. She develops an analysis in terms of morphological blocking (as in the Distributed Morphology framework of Halle and Marantz 1993): when the requirements of two lexical items are satisfied in a certain context, it is the item whose lexical entry is more fully specified (whose features are specified for a licenser more closely) that gets inserted. N-words being ‘specialized’ for negative contexts, their distribution is typically restricted to the immediate scope of clausemate negation¹⁶, they will always be the *default* option. Crucially, an account of this ‘Bagel problem’ in terms of morphological blocking also leaves open the possibility that *vreun* occur in the scope of sentential negation. This prediction is borne out, as there are indeed contexts where *vreun* can win the competition with n-words, when there is an additional reason that makes *vreun* more appropriate. This happens in two situations: to induce a certain pragmatic effect or to avoid lexical ambiguity.

First, when confronted with the choice between the negative concord item *niciun* and *vreun*, the speaker typically resorts to the latter whenever he wants to introduce a domain widening effect, with a meaning equivalent to ‘not even the least’. The English glosses of the sentences in (19) reflect a similar difference in meaning between the (pragmatically enriched) *any* and the plain negative *no*, although the domain widening effect might not be as strong as in Romanian:

¹⁶ Recall from Chapter 1, section 2, that the only other context which licenses n-words in Romanian is the operator *fără* ‘without’. In *without*-clauses, both the n-word *niciun* and *vreun* are licensed, with the latter triggering a slight domain widening effect, similar to the one conveyed in the scope of sentential negation.

- (19) a. *Nu am vreo speranță că s-ar schimba ceva.*
 NEG have.1SG V-A hope that REFL-have.3SG.COND change something
 ‘I don’t have any hope (at all) that something might change’
- b. *Nu am nicio speranță că s-ar schimba ceva.*
 NEG have.1SG no hope that REFL-have.3SG.COND change something
 ‘I have no hope that something might change’

The domain widening effect is salient in examples where the preceding sentence uses an n-word, such as in (20): the first sentence asserts that the set of ‘agreements signed by the speaker’ is empty, and the second sentence reinforces this description by the use of *vreun*, which extends this claim to future states of affairs and asserts that the set of agreements signed by the speaker will remain empty; this type of use is extremely frequent.

- (20) *Nu am semnat niciun acord. Și nici nu voi semna vreunul.*
 NEG have.1sg signed no agreement and not-even NEG will.1sg sign V-A.DEF
 ‘I have signed no agreement and I will not (even) sign any.’

These examples go against the claim that *vreun* is not licensed by sentential clausemate negation. Furthermore, a quick look at attested examples reveals that the most frequent situation where *vreun* easily co-occurs with sentential negation is when there is another n-word in the sentence, as in (21):

- (21) *Nimeni nu a avut vreo informație despre cele întâmplate.*
 Nobody NEG have.3SG had V-A information about DEM.PL happened
 ‘Nobody had any information about what had happened’

The reason for using *vreun* in (21), I assume, is that a Romanian sentence with two n-words is ambiguous between a negative concord reading (containing one negation) and a double negation reading (where the two negations cancel each other out). For example, if we replace *vreo* in (21) with the n-word *nicio*, the sentence is ambiguous between the negative concord reading we could paraphrase as ‘It is not the case that anybody had any information on what had happened’ and a double negation reading equivalent to ‘Everybody had (at least) some information on what had happened’. In Chapter 5, I provide more arguments in favor of the hypothesis that n-words are inherently negative elements. The crucial matter at this point is that in order to avoid the ambiguity caused by the co-occurrence of several n-words, whenever possible, *vreun* or the temporal *vreodată* ‘ever’ are used instead, which yield only the reading associated with negative concord.

To conclude, the comparison between negative concord and the licensing of *vreun* in the direct scope of clausemate sentential negation shows that *vreun* can occur in this context in two situations, whenever (i) domain widening is involved or (ii) the use of the n-word would give rise to an ambiguity. Accordingly, I argue that the interaction between *vreun* and sentential negation can be explained on independent assumptions (competition between classes of items whose requirements are equally satisfied, and pragmatic factors associated with the domain widening effect), determined by the fact that Romanian is a negative concord language, and as such, does not constitute a valid counter-argument to the hypothesis that *vreun* is an NPI. Consequently, on the basis of the facts discussed so far, the following hypothesis is tenable:

(i) *vreun* is a negative polarity item

Further empirical support for this hypothesis comes from its exclusion from the preverbal position of a simple negated clause, where the n-word *niciun* has to be used, a distributional property that makes *vreun* similar to an NPI like *any*:

- (22) * *Vreun* student *nu* a venit la examen.
 V-A student NEG have.3SG come at exam
 ‘*Any student didn’t come to the exam.’

We have seen that sentential negation can license *vreun*, but, interestingly, the domain-widening effect (which sometimes allows *vreun* to win the competition with n-words) cannot rescue its occurrence in preverbal position of a negative clause. Later in this thesis, I explore in more detail the constraints on Romanian negative concord and discuss the competition with *vreun*, but for now, I take the example in (22) to indicate a common negative polarity pattern, as expected under the hypothesis in (i).

2 Beyond negative polarity – *vreun* as an epistemic item

The distribution of *vreun* presented so far points to a typical negative polarity behavior: in the contexts considered above, *vreun* has a distribution and meaning equivalent to those of polarity-sensitive *any*. However, in addition to these contexts, *vreun* also occurs in non-polarity environments, a fact already noticed in Farkas (2002), who discusses ‘positive’ contexts like *hypotheticals*, illustrated by the following sentences (Farkas 2002:8) [glosses mine]:

(23) E posibil ca Maria să se fi întâlnit cu *vreun* prieten și să fi
 Be.3SG possible that Maria SUBJ REFL BE met with V-A friend and SUBJ BE
 rămas cu el în oraș.
 remained with him in town

‘It is possible that Maria met some friend and stayed with him in town.’

(24) În balta din spatele cantonului, ceva plescăi scurt, *vreun*
 in pond.DEF from back.DEF station.GEN something splashed.3SG briefly V-A
 pește sau *vreo* rață.
 fish or V-A duck

‘In the pond behind the station something splashed briefly, some fish or some duck.’

In these contexts, *vreun* DPs occur as part of a hypothesis on what the referent of the DPs might be. The intuition behind this use of *vreun*, according to Farkas, is ‘uncertainty of existence’, meaning that these contexts involve no existential commitment with respect to the set denoted by the noun with which this determiner combines, i.e. it is not necessary that there is some friend such that Maria met that friend (example (75)) or a duck or fish involved (example (24)).

These environments do not license typical negative polarity items, as confirmed by the English translations of the sentences above, where *vreun* is glossed as *some*. The main challenge is to understand the exact property of non-polarity licensing contexts to which *vreun* is sensitive. In this section, I argue that the crucial factor is the semantic properties of the operator embedding *vreun*. In order to formalize this intuition, I contend that *vreun* is an **epistemic determiner**, i.e. an item sensitive to what an epistemic agent holds to be true. More precisely, I put forward the hypothesis that *vreun* is only licensed in the scope of propositional operators that *entail* that not all of the epistemic agent’s doxastic alternatives are such that the proposition below the operator, *p*, is true. In other words, the licensing operator entails that it is consistent with the speaker’s¹⁷ beliefs that the proposition below the operator is not true¹⁸. Adopting the assumption that the denotation of a proposition is the set of worlds where the

¹⁷ In this thesis, I assume that the epistemic agent is the speaker. As I show in Chapter 3, *vreun* is more speaker-oriented than other arguably similar epistemic items, like *algun*. A detailed exploration of the issues concerning situations where there are several potentially relevant epistemic agents is left for future research.

¹⁸ At this point, one might think that I’m formulating a constraint very similar to Giannakidou’s account of polarity in terms of nonveridicality: if *Op* is a non-veridical operator, then *Op p* does not entail *p* (in some individual’s epistemic model). In Chapter 3, I provide a detailed comparison between Giannakidou’s approach and mine, but note already that the constraint I’m proposing is stronger: the requirement is that the embedding operator *entail* that *p* is *not true* in some of the speaker’s doxastic alternatives.

proposition is true, I propose that *vreun* is subject to the semantic licensing constraint in (25):

(25) Licensing pattern: Op [...*vreun*...]

Licensing constraint: Op *p* entails that the epistemic agent's doxastic alternatives include *non p*-worlds

To illustrate, let us briefly go back to example (75), involving a possibility operator, whose complement proposition is 'Maria met a friend'. In order to see whether the operator satisfies this constraint, we only have to check whether this proposition could be true in all of the speaker's doxastic alternatives. In the case of a possibility operator like 'it's possible that *p*', the answer is clearly no, as attested by its meaning paraphrased in (26):

(26) *possible(p)* is true at the world of utterance w_0 , iff there are worlds w such that w is consistent with the set of the speaker's beliefs, and *p* is true at w

Accordingly, the sentence is interpreted as expressing existential quantification over possible worlds and conveys the meaning that it is consistent with what the speaker believes (on the basis of the evidence available to him) that Maria met a friend of hers.

This simple example illustrates the constraint I formulated in (25), which requires the speaker is not committed to the truth of the proposition where *vreun* occurs. With this in mind, I will now examine in detail non-polarity contexts of occurrence of *vreun* and show how they conform to this licensing pattern. In particular, I argue that *vreun* is licensed only in the scope of operators interpreted with respect to an epistemic modal base where the licensing constraint is satisfied. This hypothesis offers a coherent way of putting together all non-polarity environments and predicts the full distribution of the epistemic use of *vreun*. The set of data discussed in this section refines the observations in Farkas (2002), enriches the empirical base and brings out interesting contrasts in the set of licensing environments previously overlooked¹⁹.

2.1 Modal contexts

The interaction between *vreun* and modality is the key issue in understanding its licensing conditions in non-polarity contexts. In this section, I examine the modal contexts which license *vreun* and show they all involve epistemic modality, as predicted by the hypothesis

¹⁹ The facts discussed in this section were tested on over 30 Romanian speakers. Although there is variation among speakers, in contexts that I indicate later in the discussion, all results support the generalization established in this chapter, namely that *vreun* is sensitive to the epistemic agent's doxastic alternatives.

that *vreun* is an epistemic determiner subject to the constraint in (25).

Romanian has two main modal auxiliaries the possibility modal *a putea* ‘can’ and the necessity modal *a trebui* ‘must’, which are used to express a wide range of modal meanings. *Vreun* can occur under both these modals, as illustrated by the following examples:

(27) Cu numele lui, *trebuie* să fie ***vreun*** aristocrat.

With name.DEF his must SUBJ be.3SG V-A aristocrat
‘Given his name, he must be some aristocrat.’

(28) Marcel *poate* fi în ***vreo*** stațiune de ski, iarna merge des la munte.

Marcel can.3SG be in V-A resort of ski, winter.DEF go.3SG often at mountain
‘Marcel may be in some ski resort, in the winter he often goes to the mountain.’

On the other hand, there are also modal contexts where *vreun* is ungrammatical, despite the fact that it occurs under the exact same modal verbs, the necessity modal in (77) and the possibility modal in (30):

(29) **Trebuie* să scriu ***vreun*** articol despre ultimele alegeri.

must SUBJ write.1SG V-A article about last.DEF elections
‘I must write some paper about the last elections.’

(30) **Poți* scrie ***vreun*** articol despre albine, publicăm orice.

Can.2SG write V-A article about bees, publish.1PL anything
‘You can write some paper on bees, we publish anything’

Before discussing the exact relation between *vreun* and modality, we first need to introduce some background on the semantics of modals.

In possible world semantics, modal expressions are treated as quantifiers over worlds (Lewis (1973), Kratzer (1981, 1991), among others): necessity modals involve universal quantification over possible worlds, whereas possibility modals are existential quantifier over worlds. What worlds a modal quantifies over, more precisely, its restriction, is determined by the context. Thus, in addition to this lexically encoded quantificational force, the different meanings of a modal vary along two contextually-given dimensions, also called *conversational backgrounds*: the modal base and the ordering source.

The modal base determines for every world quantified over by the modal the set of worlds that are accessible from it. For example, in uttering a sentence like *Paul may be in*

Paris, I'm not only saying that there is a possible world such that Paul is in Paris in that world, but rather something like *There is a possible world compatible with what I know such that Paul is in Paris in that world*, or, equivalently, *In view of the evidence available to me, Paul may be in Paris*. Kratzer distinguishes two main modal bases: the **epistemic** one, which picks the set of worlds compatible with the evidence available in the world of utterance and the **circumstantial** modal base, which picks out worlds in which certain facts of the world of utterance hold. The contrast is brought about by the difference in meaning between *can* and *might* in examples like the following:

- (a) Paul can vote at the next European elections.
- (b) Paul might vote at the next European elections.

When interpreted with respect to a circumstantial modal base, the sentence in (a) is evaluated with respect to certain facts that are relevant in the world of utterance/evaluation, such as Paul's age, his citizenship or whether or not he registered to vote. On the other hand, the sentence in (b) is evaluated with respect to the evidence available to a speaker, and the proposition would be true in a situation where, for example, the speaker noticed Paul showed some interest in the elections. Note that although the difference in meaning might be subtle in some cases, the kind of modal base which is relevant for the interpretation leads to different truth-conditions. For example, in a situation where the speaker knows that Paul is not interested in politics at all and actually never votes, the sentence in (b) would be false, but the one in (a) would still be true, as long as the conditions that allow Paul to vote are all satisfied (Paul is a European citizen, over 18 years old, etc.).

The second parameter with respect to which a modal sentence gets evaluated is the *ordering source*, which imposes a partial order on the worlds selected by the modal base. Intuitively speaking, not all of the worlds from which the modal can in principle select its domain of quantification count as equal. To see this, consider the following example, from von Stechow & Heim (2005):

- (31) John must pay a fine.

When interpreted with respect to a circumstantial base where the relevant facts are the set of laws, we could paraphrase this sentence as saying that in all worlds compatible with what the law says John pays a fine, but in reality the truth of (31) depends not only on the laws in the world of evaluation w , but also on the facts in w . The sentence is judged to be true if (i) there is a law against driveway obstructions and (ii) John has obstructed the driveway. On the other

hand, (31) would be false when one of these two conditions is not met, for example if there were no law against driveway obstruction. Now, the facts in a given world and the set of laws cannot count as equal with respect to the evaluation of a modalized sentence. More precisely, the universal quantification only applies to those worlds where John actually broke the law, meaning he obstructed the driveway. In other words, in interpreting this sentence, we only look at relevant circumstances, in this case, the fact that John obstructed the driveway. Accordingly, the modal base, i.e. the set of worlds accessible from the world of evaluation will only contain worlds in which John obstructed the driveway. In addition, relevant worlds are *ordered* according to how well they conform to what the law requires, i.e. any world where John pays a fine will be closer to the ideal set up by the ordering source than a world where he breaks the law, but pays no fine.

Ordering sources differ with respect to the set of propositions that establishes the ordering: deontic (laws), bouletic (wishes), teleological (aims), stereotypical (normal course of events). For example, a deontic ordering source imposes that the more of w 's laws are obeyed in a possible world, the closer it is to w , a bouletic ordering source ranks possible worlds according to the number of (an epistemic agent's) wishes that come true etc.

Formally, the modal base and the ordering source are defined as functions that take possible worlds and return sets of propositions. Typically, the modal base contains factual information (what is the case), while the ordering source contains ideals (what should be the case). Both the modal base and the ordering source are contextually determined, and not all combinations of modal bases and ordering sources are possible. It is usually assumed that modals that are evaluated with respect to an epistemic modal base combine with ordering sources related to information: what the normal course of events is like, reports, beliefs or an ordering based on plausibility or stereotypicality. On the other hand, circumstantial modal bases can combine with normative ordering sources such as "what the law provides, what is good for you, what is moral, what we aim at, what we hope, what is rational, what is normal, what you recommended, what we want..." (Kratzer 1991: 647).

With this background in mind, let us now turn to the relation between *vreun* and modality and examine in more detail the contexts where *vreun* is licensed. Take a sentence like the following:

(32) Mircea *trebuie* să fie la *vreun* magazin.

Mircea must SUBJ be.3SG at V-A store

‘Mircea must be at some store.’

In (32), *vreun* is in the scope of the necessity modal *trebuie* ‘must’ and the proposition ‘Mircea is at a store’ accordingly expresses universal quantification over possible worlds. In addition to this universal quantification, we have seen that the meaning of a modal also involves a restriction, i.e. the conversational background which gives the set of worlds that are accessible from the world of evaluation.

Recall that I have advanced the hypothesis that *vreun* is licensed in a proposition *p* embedded under operators interpreted with respect to an epistemic modal base whenever the speaker’s doxastic alternatives include *non p*-worlds. Under this approach, we expect the distribution of *vreun* under modals to be sensitive to the kind of conversational background involved. This prediction is confirmed: *vreun* is only licensed under epistemic modals, as illustrated by the contrast between the two contexts below:

(i) I stopped by at his place, but Mircea is again not at home. Recently, he has been promoted and had a raise. He has been waiting for a while for this promotion and is very happy about it. Consequently, he tends to spend most of his time shopping.

In this situation, the speaker could use a sentence like (32) to make an assertion compatible with the evidence available to him at the moment of utterance, and to convey the meaning that his belief worlds include worlds where Mircea is at a store. The speaker is familiar with Mircea’s behavior and habits since the promotion. Such a context licenses the occurrence of *vreun* under the necessity modal *trebuie* ‘must’.

Contrast this with the following context of utterance of (32):

(ii) Mircea is a salesman. In the past weeks, he was often late for work and has been neglecting his job. His boss has warned him that he wouldn’t tolerate this situation anymore and thus, Mircea now has to be at a store at 9 o’clock, trying to promote the company’s products. Unless he complies to this rule, Mircea gets fired.

Now, if we utter (32) in this context, the sentence is ruled out. The intended interpretation should be something like ‘In view of what the rules are, Mircea has to be at a store (at 9 o’clock)’, but *vreun* is not licensed, and the simple indefinite would be used instead.

The difference between the two contexts above which plays a part in the licensing of *vreun* is the modal base under consideration. In both cases, we are dealing with a necessity

modal, but, crucially, only a necessity modal that has as its domain of quantification *epistemically* accessible worlds licenses *vreun*. It is only the first context of utterance that makes reference to the speaker's beliefs: on the basis of what he knows on Mircea's typical behavior, the speaker is entitled to believe that Mircea is at a store at the time of utterance. In the latter context, the modal base is circumstantial and *must* acquires a deontic reading, which cannot license *vreun*.

These facts indicate that *vreun* is licensed by epistemic modals, a welcome result under the account pursued so far. In contrast to epistemics, deontic modals do not involve doxastic alternatives and as such cannot count as licensors. This pattern is predicted by the hypothesis requiring that *vreun* gets interpreted with respect to the speaker's doxastic alternatives, which, crucially, must include *non p*-worlds. In other words, the speaker must not be committed to the truth of *p* in all of his belief worlds. Now, what does this requirement imply in the case of epistemic *must*? Under its epistemic reading, there are in principle two options: its domain is determined by either the speaker's knowledge or by the speaker's beliefs. There is an important difference between these two ways of interpreting *must*, related to whether the proposition under consideration is assumed to hold in the actual world. Trivially, the actual world is consistent with everything that the speaker knows in the actual world. By contrast, the actual world is not necessarily consistent with everything that the speaker believes in the actual world, as she may believe things that are false. For example, when we utter something like *Paul must be at home*, in a situation where we see Paul by the window, strictly speaking the proposition is true. However, we know that this is not how we use epistemic modals. When we utter a sentence with an epistemic modal, we cannot have knowledge of a certain fact, such as the fact that Paul is at home, as would be the case when we actually see him. Epistemic modals²⁰ are incompatible with this situation, regardless of whether it is a possibility or a necessity modal. In other words, when we utter something like *Paul might/must be at home*, we not only assert something about our beliefs (and the worlds compatible with our beliefs), but we also convey that we are not in a position to assert the sentence without the modal, i.e. we do *not know* that a certain fact holds. In the following, I assume that an epistemic necessity modal is interpreted with respect to speaker's beliefs, a meaning we can paraphrase as follows:

²⁰ The issue of whether epistemic *must* is a regular necessity operator or conveys a weaker meaning is subject to a lot of debate in the literature. For a recent overview of the different positions, see von Stechow & Gillies (2009).

(a) *must*(*p*) is true at the world of utterance w_0 , iff for those worlds consistent with the set of the speaker's beliefs that come close to a certain ideal²¹, *p* is true at *w*

I will not discuss the meaning of epistemic modals in more detail, and just assume they have a meaning which satisfies the *non p*-worlds requirement. In Chapter 4, I come back to this issue and see that this meaning comes about as a result of strengthening: since in using an epistemic modal, we implicate that we are not in a position to assert the sentence without the modal, this implicature can be added to the meaning of the original claim, thus conveying that it is compatible with the speaker's beliefs that there are worlds in which *p* is not true. For now, I just assume that epistemic modals have a way of satisfying the constraint that is relevant for the licensing of *vreun*.

The previous discussion illustrated licensing under necessity modals, but the behavior of the possibility modal *a putea* 'can' is parallel: when construed with respect to an epistemic modal base, it licenses *vreun* (33), whereas sentences where the modal gets a permission reading, involving a deontic ordering source, preclude the use of *vreun* (34).

(33) (Din câte știu,) Marcel *poate* fi în ***vreo*** stațiune de ski, iarna merge
as many know.1SG Marcel can.3SG be in V-A resort of ski, winter.DEF go.3SG
des la munte.
often at mountain
'(As far as I know,) Marcel may be/can be in some ski resort, in the winter he often goes to the mountain.'

(34) (Ținând cont de normele editoriale,) **Poți* scrie ***vreun*** articol despre albine,
Taking account of norms.DEF editorial can.2SG write V-A article about bees,
publicăm orice.
publish.1PL anything
'(According to the editorial policy,) You can write some paper on bees, we publish anything.'

Similarly, if the ordering source concerns wishes or goals, *vreun* cannot be used, as shown by the ungrammaticality of the following examples:

²¹ The use of 'those worlds compatible with the speaker's beliefs that come close to a certain ideal' instead of the regular universal quantification is intended to convey that the meaning of epistemic *must* is weaker than that of a necessity modal. This position is in line with accounts of epistemic modals which try to implement this restriction into the truth-conditional meaning of the modal (e.g. Karttunen 1972, Kratzer 1991, Veltman 1985), but not uncontroversial (see von Stechow & Gillies 2009)

(35) *Ca să fiu fericită, *trebuie* să mănânc zilnic *vreo* prăjitură.

That SUBJ be.1SG happy, must SUBJ eat.1SG daily V-A cake

‘In order to be happy, I must have some cake every day.’

(36) *Ca să ajungi în centru, *poți* lua *vreun* autobuz.

That SUBJ get.2SG in center, can.2SG take V-A bus

‘To get downtown, you can take some bus.’

On the basis of the examples discussed in this section, I contend that the distribution of *vreun* in modal contexts is captured by the following generalization:

(ii) *vreun* is licensed in epistemic modal contexts

The proposal advocating *vreun* to be an epistemic indefinite accounts for this generalization without any further stipulation: *vreun* is only licensed in modal sentences involving quantification over epistemically accessible worlds, meaning worlds in a modal base determined by the set of propositions whose truth the epistemic agent has some evidence for. The licensing constraint imposes that the speaker should not be committed to the truth of the proposition under evaluation (in all of his doxastic alternatives), a condition which is satisfied under epistemic modals.

Having examined the distribution of *vreun* under modal verbs and having shown in what way the alternatives entertained by the speaker constitute the relevant licensing factor, I now turn to other non-polarity contexts of occurrence, namely hypotheticals, which I argue to behave in a similar way to epistemic modals. I will show that the distribution of *vreun* under hypothetical operators also conforms to the constraint formulated in (25).

2.2 Hypotheticals

The generalization in (ii), identifying epistemic modality as the crucial factor for the licensing of *vreun* is further supported in other ‘positive’ contexts. Farkas discusses licensing environments she calls *hypotheticals*, illustrated in (37)-(38), taken from Farkas (2002: 8):

(37) În balta din spatele cantonului, ceva plescăi scurt, *vreun* pește
 in pond.DEF from back.DEF station.DEF.GEN something splashed.3SG briefly V–A fish
 sau *vreo* rață.

or V–A duck

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

(38) E posibil ca Maria să se fi întâlnit cu *vreun* prieten și să fi
 Be.3SG possible that Maria SUBJ REFL BE met with V–A friend and SUBJ BE
 rămas cu el în oraș.

remained with him in town

'It is possible that Maria met some friend and stayed with him in town.'

As mentioned earlier in the discussion, Farkas argues that *vreun* DPs occur as part of a hypothesis on the identity of the referent noun. Crucially, the use of *vreun* involves no existential commitment with respect to the set denoted by the noun with which this determiner combines, i.e. it is not necessary that there is a duck or fish involved, or some friend such that Maria met that friend.

In this section, I introduce other facts that can be subsumed under the label *hypotheticals*: in all these contexts, the proposition containing *vreun* is part of a proposition making a certain claim, conveying a hypothesis with respect to some (contextually provided) epistemic modal base. I show that once again the key factor responsible for the licensing of *vreun* is the kind of alternatives that the speaker entertains. Importantly, in all hypothetical contexts, the speaker is not committed to the truth of the proposition containing *vreun* and entertains doxastic alternatives where the proposition is false. In particular, I focus on two environments which license *vreun* and, as I show in section 2.4 can also serve to rescue the occurrence of *vreun* in otherwise non-licensing contexts: the 'presumptive' mood and disjunction.

2.2.1 The presumptive mood

The presumptive mood is, together with the conditional and the subjunctive, traditionally described as a non-indicative, *irrealis* mood (*The Romanian Academy Grammar* 2006). Its morphological pattern is given in table 1 below, captured in (iii): it is formed from a modal marker (either conditional, future or subjunctive), that combines with the infinitive 'be' and then either with the present participle (gerund) yielding a present tense reading, or with the

past participle with a past reading.

Table 1: The Romanian presumptive

FORM	CONDITIONAL	FUTURE1	FUTURE2	SUBJUNCTIVE		NON-FINITE
1 PERSON SG	aş	voi	oi	SĂ	FI ‘BE’	GERUND (PRESENT)
2 PERSON SG	ai	vei	oi			
3 PERSON SG	ar	va	o			
1 PERSON PL	am	vom	om			PAST PARTICIPLE
2 PERSON PL	aţi	veţi	oţi			(PAST)
3 PERSON PL	ar	vor	or			

(iii) MOD + BE.Infinitive + GERUND (Present) / PAST PARTICIPLE (Past)

The four morphological possibilities illustrated in the table have different contexts of use, a matter that need not concern us here, the relevant point being that they all convey a meaning of *indirect evidentiality*²²; as shown by Irimia (2008): there is *indirect evidence* (either *hearsay/reported*- typically associated with the conditional form, or *inferential*, mainly with the ‘popular’ form labeled Future2) that a certain state of affairs might hold/might have held, as in the following example:

(39) *O fi venind /venit cu maşina.*

FUT2.3SG BE come.PRST.PART/PAST.PART with car.DEF

‘I guess (s)he is coming/came by car.’

Building on Izvorski (1997), Irimia (2008) analyzes Romanian indirect evidentials, and in particular presumptive forms, as epistemic modals, i.e. operators quantifying over epistemically accessible worlds²³. Adopting this account, let us focus on the connection between the presumptive and *vreun*. Consider the following contrast:

²² Evidentials are defined as functional item that contribute information regarding the means by which the speaker came to believe/know the proposition being asserted. There is an extensive body on literature on evidentiality, and the way it connects with epistemic modality (see e.g. Aikhenvald 2005, Faller 2002, 2006; Garrett 2000; Givon, 1982; De Haan, 2001; Izvorski, 1997; Kratzer, 1991; Palmer, 1986; Papafragou 2000).

²³ This is a simplification. Irimia (2008) actually shows that Romanian presumptive is not fully accounted for under Izvorski’s approach. By investigating the temporal and aspectual properties of each subcomponent in the presumptive paradigm, Irimia (2008) points out differences (mainly related to scope) between indirect evidentials and epistemic modals. She discusses the interaction between the perspective of knowledge at the moment of utterance (evaluation time) and the time of the possible state of affairs (orientation time). However, with respect to the truth of the proposition to which the presumptive contributes, the semantics ends up being that of epistemic modality, similar to English *might*, so this is the conclusion on which I build my analysis of the licensing of *vreun*. See also Soare (2009) for a syntactic implementation of the connection between evidentiality and epistemic modality, in particular the role of BE, in Romanian presumptive.

(40) *Mașina mea are **vreo** problemă la motor, pornește greu dimineața.
 Car.DEF mine have.3SG V-A problem at engine, start.3SG hard morning.DEF
 ‘My car has some engine problem, it takes time to start up in the morning.’

(41) Mașina mea o *fi* având **vreo** problemă la motor, pornește greu
 Car.DEF mine FUT2.3SG BE have.PRST.PART V-A problem at engine, start.3SG hard
 dimineața.
 morning.DEF
 ‘My car might have some engine problem, it takes time to start up in the morning.’

In the sentence in (40), the intended meaning is a hypothesis on the reason why the car doesn’t start up easily. The context might make salient this hypothetical meaning, but *vreun* is ruled out, and the indefinite article is used instead in combination with the noun *problem*²⁴. Now, as illustrated by (41), as soon as present tense is replaced by the presumptive (obtained from the Future2 auxiliary form), *vreun* is licensed. The following examples further illustrate this systematic pattern, namely that presumptive forms are appropriate licensors for *vreun*:

- (42) (The honey jar is missing)
- a. *A trecut **vreun** urs pe aici.
 HAVE.3G passed V-A bear PREP here
 (Intended reading) ‘Some bear has passed by.’
 - b. O *fi* trecut **vreun** urs pe aici.
 FUT2.3SG BE passed V-A bear PREP here
 ‘Some bear might have passed by.’

The above examples show that presumptive morphology, especially Future2-based, leads to acceptability of *vreun*. Due to its indirect evidentiality nature, the meaning of the proposition to which the presumptive attaches is that of a hypothesis, and as such, the presumptive cannot be used in contexts where the truth of *p* is entailed in the world of evaluation (the actual world), such as in the following examples:

²⁴ Some speakers sometimes try to rescue sentences with present tense where the intended meaning is clearly hypothetical, attributing a modal value to the present tense. However, licensing by present tense is not systematic and even speakers that can occasionally accept it judge the sentence marginal as compared to the one with the presumptive and find a sharp contrast between (40) and (41).

- (43) **Știu*/**Regret* *că* *oi* *fi având* (*vre*)*un* virus in
 know.1SG/regret.1SG that FUT2.1SG BE have.1SG.PRST.PART (V-)A virus in
 calculator, s-a uitat informaticianul la el.
 computer REFL-have.3SG looked informatician.DEF at it.
 ‘I know/regret I might have some virus in my computer, the informatician looked at
 it.’

The ungrammatical sentences in (43) show the presumptive cannot be embedded under factives, which entail the truth of the embedded proposition. In other words, the hypothetical meaning conveyed by the presumptive form is not compatible with a proposition which is established to be true, in a way similar to the English sentence *I know/regret the hypothesis that I have a virus in my computer*, which is odd. This is independent of the licensing of *vreun*, as indicated by the fact that the sentences would be ungrammatical even with an indefinite DP like *un virus* ‘a virus’.

These facts indicate that the crucial property of the presumptive is non-commitment of the speaker to the truth of the proposition to which the presumptive attaches. The core meaning component of Romanian presumptive is indirect evidentiality, which means that the speaker makes a certain claim on the basis on some (indirect) evidence available to him, but crucially, cannot rule out the possibility that something else might be the case. Just like in the case of epistemic modals, a presumptive form cannot be used in cases where knowledge of a certain fact is established, such as in a situation involving direct evidence (i.e. perceptual evidence such as witnessing a certain event), or in reports using factive verbs, as illustrated by the example in (43).

We have now established that in order for the presumptive to be used, it is crucial that the speaker allows the possibility that *p* might not hold. Getting back to *vreun*, my hypothesis on the licensing of *vreun* predicts that whenever the presumptive can be used, *vreun* will be licensed, a prediction that is borne out, as indicated by the examples above. As expected under my proposal, the lack of commitment always associated with the presumptive, makes this mood the prototypical licenser for *vreun*. After exploring the distribution of *vreun* in attitude contexts (section 2.3 below), I return to the connection between the possibility of using the presumptive under an attitude verb and the licensing of *vreun*, but for now, let me just conclude that on my account, the presumptive is expected to always be able to license *vreun*.

This is systematically the case with inferential evidentiality, realized by the Future2-

based presumptive forms, but the phenomenon is also attested with hearsay readings, associated with the conditional-based form. Although a first look at the empirical facts indicates that the licensing of *vreun* in this context is less frequent, one can find occurrences of *vreun* with *hearsay* presumptive, especially in combination with the *hearsay* evidential *cică*²⁵:

- (44) *Cică ar fi apărut vreun nou virus extrem de periculos.*
 EVID. COND.3SG BE appeared V-A new virus extremely PREP dangerous
 ‘(I hear/People say) A new, extremely dangerous virus has appeared’

Without getting into further details on the semantics of presumptive forms, I conclude *vreun* is licensed by the indirect evidentiality meaning component of these contexts, which can be analyzed as amounting to epistemic modality: ‘on the basis of the available indirect evidence, it is consistent with the speaker’s beliefs that *p* holds’.

2.2.2 Disjunctions

Most positive contexts of occurrence of *vreun* involve disjunctions. The following set of examples illustrates this use:

- (45) *În primele clipe, mi-am imaginat o tragedie familială sau vreun*
 In first.DEF moments, REFL-have.1SG imagined a tragedy familial or V-A
dezastru financiar.
 disaster financial
 ‘In the first moments, I imagined a family tragedy *or some* financial disaster’.

- (46) *E plecat în vacanță, fie la mare, fie în vreo stațiune de munte.*
 Be.3SG gone on holiday, BE.SUBJ.3SG at sea, BE.SUBJ.3SG in V-A resort OF mountain
 ‘He is away on holiday, either by the seaside, or in some mountain resort’

Furthermore, speakers have the tendency to add disjunctions or an overt existential quantifier, like *ceva* ‘something’²⁶ (or both) to improve the acceptability of *vreun* in other contexts. Consider the contrast in (47)-(48):

²⁵ Apart from Irimia’s (2008) work on presumptive, I am not aware of any work on Romanian evidentiality, in particular adverbs or particles. I rely on my own intuitions and assume *cică* is a hearsay evidential particle.

²⁶ The use of the existential quantifier *ceva* ‘something’ is not productive for all speakers. Some use this strategy quite systematically, whereas others find it marginal. The case of disjunction is not subject to this speaker variation, and is one of the most frequent licensing contexts in attested examples, together with the presumptive.

(47) **De obicei* îmi trimite *vreo* felicitare de Crăciun.
 of habit CL.DAT send.3SG V-A greeting for Christmas
 ‘Usually she sends me a greeting card on Christmas.’

(48) *De obicei* îmi trimite *vreun* mesaj sau *vreo* felicitare (*ceva*) de Crăciun.
 of habit CL.DAT send.3SG V-A message or V-A greeting (something) for Christmas
 ‘Usually, she sends me a message or a greeting card (or something) on Christmas.’

Habitual operators like *de obicei* ‘usually’ do not license *vreun*, as shown in (47). However, as soon as we add a disjunction, or an existential quantifier like *ceva* ‘something’, *vreun* can be used. What is the property of disjunctions to which *vreun* is sensitive? Following the line of thinking I have pursued so far, I argue it is the modal component of disjunctions that serves as a licenser for *vreun*. In particular, I adopt the analysis in Zimmermann (2000), who analyzes disjunctions as lists of *epistemic* possibilities. Intuitively, a disjunction is interpreted as if it were a list of answers, construed as a conjunction of propositions/alternatives, to a (hypothetical) question like (49)b, with a resulting meaning paraphrased as in (49)d.

- (49) a. S_1 [or] S_2 . . . or S_n .
 b. Q: What might be the case?
 c. A: S_1 [and] S_2 . . . [and] S_n .
 d. Paraphrase : S_1 might be the case, . . . , and S_n might be the case.²⁷

In order to understand the modal mechanism underlying the use of disjunctions, consider the following sentence (Zimmermann 2000:267):

- (50) a. Mr. X is in Regent’s Park or in Victoria or in the City.
 b. $\Diamond$ Mr X is in Regent’s Park & $\Diamond$ Mr X is in Victoria & $\Diamond$ Mr X is in the City.

The interpretation of this sentence, represented in (50)b and corresponding to our intuition, is something like *It is possible that Mr X is in Regent’s Park and it is possible that Mr X is in Victoria and it is possible that Mr X is in the City*. Relativizing this to speaker’s knowledge (*in view of the evidence available to the speaker*), we have the usual semantics for epistemic modality: *p* might hold and *q* might hold, meaning there are possible worlds where *p* holds

²⁷ According to whether we are dealing with an open or a closed disjunction, there can be an additional meaning component, usually associated with lists of possibility, namely *exhaustivity*: *S_1 might be the case,and S_n might be the case, and nothing else might be the case*. As the main goal of this section is to see how the hypothesis I propose captures the distribution of *vreun*, I set aside for the time being the connection between *vreun* and exhaustivity, an issue that will be carefully addressed in the analysis I put forward in the next chapter.

and possible worlds where q holds, where p and q are propositions corresponding to each disjunct. Importantly, the speaker is not committed to the truth of either of the two propositions: accordingly, among the speaker's doxastic alternatives, there are non p -worlds and non q -worlds.

This property makes disjunctions a suitable licenser for *vreun*, as predicted by the licensing constraint I have proposed in (25), requiring that the speaker entertains alternatives where the proposition under evaluation does not hold. Since the interpretation of a disjunction involves epistemic modality, which we have previously seen to satisfy the constraint to which *vreun* is subject, the behavior of *vreun* under disjunctions is fully captured.

Before moving on with the discussion of the licensing of *vreun*, let me just make a little more precise the analysis of disjunctions that I have in mind. In particular, I have adopted the account in Zimmermann (2000), which equates disjunctions with lists of *epistemic* alternatives. An immediate question that this assumption raises, in view of the previous discussion of modal contexts, is what is the analysis of disjunction in deontic contexts and how does *vreun* behave in such cases. The following example shows that *vreun* is ruled out under disjunctions involving deontic alternatives:

(51) *Până mâine, *trebuie* să citesc ***vreun*** articol *sau* să scriu ***vreun*** eseu.

Until tomorrow, must SUBJ read.1SG V-A article or SUBJ write.1SG V-A essay

'By tomorrow, I have to read some paper or write some essay.'

The ungrammaticality of the sentence in (51) indicates that not any kind of disjunction serves as a licenser for *vreun*. This has two implications: first, with respect to Zimmermann's analysis, one can argue that not all disjunctions are lists of epistemic alternatives. More specifically, it is only in the absence of an overt modal that we construe 'or' as a list of epistemic alternatives. This is also the view defended in Geurts (2005), who argues that disjunctions are conjunctions of modal propositions, and the modal they associate with is by default, "all things being equal [...] epistemic and existential" (Geurts 2005:394). Second, this provides further support to the hypothesis I'm defending, namely that it is only doxastic alternatives that are relevant for the licensing of *vreun*. The distribution of *vreun* in this environment thus conforms to the pattern already established in the case of overt modal verbs, a similarity which is not surprising once we adopt a modal account of disjunctions.

In the remainder of this chapter, I take the distribution of *vreun* in the scope of disjunctions to mean licensing in situations where disjunctions can be construed as involving epistemic alternatives. Whenever this is the case, I assume the speaker entertains alternatives

compatible with the truth of either of the disjuncts, a situation that allows *vreun* to be licensed.

2.2.3 Hypotheticals as epistemic modals

Summarizing the discussion so far, I have shown that the distribution of *vreun* under modals and in hypothetical contexts is predicted by the licensing constraint I propose, repeated below as (52):

(52) Licensing pattern: Op [...*vreun*...]

Licensing constraint: Op *p* entails that the epistemic agent's doxastic alternatives include *non p*-worlds

All these contexts involve epistemic modality, which I have shown to be the only type of modality which can license *vreun*: both presumptive mood and disjunctions are epistemic modal contexts, where the truth of a proposition is evaluated with respect to the evidence available to the speaker. The context has to make it clear that the proposition containing *vreun* is not the only alternative entertained by the speaker. Crucially, when the speaker is committed to the truth of *p* (the proposition containing *vreun*), meaning he has knowledge of *p*, *vreun* is ruled out. As mentioned earlier, in a situation where I see Paul at the window, I cannot felicitously utter 'Paul must be at home' (under the epistemic interpretation) or a sentence with a disjunction like 'Paul is at home or at work'. Direct evidence (i.e. perceptual evidence such as witnessing a certain event) in this case amounts to knowledge, and as such rules out the occurrence of *vreun*.

The use of an epistemic modal amounts to quantification over worlds consistent with the speaker's beliefs, which include *p*-worlds and *non p*-worlds, a property that automatically satisfies the requirement to which the distribution of *vreun* is sensitive. In case the modal is a universal quantifier, the '*non p*-worlds constraint' is minimally satisfied by the world of utterance, where I have argued that it is crucial that the speaker does not have *knowledge of p*, i.e. is not committed to the truth of *p* in the world of utterance. Similarly, the use of a disjunction, and sometimes the presence of a bare existential quantifier like *ceva* 'something', ensure that the requirement in (52) is satisfied: the disjunctions overtly introduce an alternative, and the existential quantifier (signals/) is compatible with lack of knowledge, and thus the possibility that a different alternative holds.

It is interesting to notice that even without the presence of a marker that signals the

hypothetical meaning component, the context can sometimes render this use salient enough and thus license *vreun*, as in the example below:

- (53) Imediat am simțit un miros proaspăt...***vreun*** parfum scump.
 Immediately have.1SG felt a scent fresh V-A perfume expensive
 ‘I immediately felt a fresh scent, some expensive perfume’

In (53), the DP *vreun parfum* is interpreted as conveying a possible source for the previously mentioned scent; although there is no overt modality marker, the context is clearly hypothetical. However, it should be noted that this use is possible due to the ellipsis of the verbal form. In case the verb were overt, and in the absence of an overt modal verb, the sentence would only be acceptable with a presumptive verbal form, conveying a meaning equivalent to *it might be/it might have been an expensive perfume*.

Summing up, the empirical facts considered so far thus converge: the licensing of *vreun* is sensitive to the type of epistemic alternatives entertained by the speaker. I now turn to the distributional pattern in another context involving quantification over possible worlds, namely attitude-embedding predicates and show that the behavior of *vreun* is also predicted by the constraint in (52).

2.3 Attitude predicates

I have argued that the licensing of *vreun* in its epistemic use depends on the availability of a propositional operator quantifying over possible worlds which does not entail the truth of the embedded proposition. In addition to modals, one other context that is particularly relevant in this perspective is the scope of propositional attitude verbs.

Attitude verbs like *believe*, *know*, *suspect*, *regret*, *hope*, *want* etc express relations between individuals (the attitude holder) and propositions (sets of worlds). For example, a sentence like *Mary believes that Peter went to London* claims that Mary believes that the proposition ‘Peter went to London’ is true. In other words, in the worlds that are compatible with Mary’s beliefs, Peter went to London. In the framework of possible world semantics, the standard analysis of propositional attitudes (ever since Hintikka 1962) maintains that the semantic value of a verb like *believe* involves a function that maps an individual *x* and a world *w* to the set of worlds compatible with what *x* believes in *w* (*x*’s doxastic alternatives). To say that an individual *x* *believes* a proposition in a world *w* is to say that, when we look at the value that this function yields for *x* and *w*, we find that it contains only worlds in which the proposition in question is true. In a Kratzer-style semantics similar to the one assumed for

modal verbs, attitude verbs are argued to be sensitive to two parameters of interpretation, i.e. conversational backgrounds (e.g. von Stechow 1999). One parameter is the set of worlds that constitute the ‘modal base’, and another parameter provides an ordering among these worlds. The attitude predicate makes a claim about those worlds in the modal base that maximally satisfy the preferences given by the ordering source. Propositional attitudes then differ with respect to the types of worlds and the ordering relation that is relevant among those worlds. For example, for predicates like *want* or *wish*, the ordering will be one of ‘preference’, in relation to the attitude holder’s wishes.

Attitude verbs pattern differently from one another with respect to the licensing of semantically-dependent polarity items, and despite several attempts (cf in particular work by Giannakidou (1999, 2006), or von Stechow (1999)), no uniform cross-linguistic behavior has been established. An often-noted pattern, first observed in Giannakidou (1995) and then confirmed for other languages, (including Greek, Spanish, Catalan, and Russian as shown in Haspelmath (1997), Pereltsvaig (2000), among others) is the distinction between belief-related attitudes like *believe*, *know*, or *dream* and volitional/directive verbs like *want* or *suggest*. However, different polarity items show different patterns with respect to this distinction. For example, some polarity items, such as *any*, are licensed in the scope of some attitude verbs, like *regret* or *to be surprised*, but ruled out from the complement of both epistemic verbs like *know* and volitionals like *wish*. Other polarity items, such as Greek *kanenas*, have been argued to be sensitive to whether the predicate entails the truth of the complement proposition, an issue I will come back to (Chapter 3). Accordingly, this determiner is ungrammatical in the scope of *believe* or *regret*, but licensed under *want* or *insist* (see in particular Giannakidou (2006)). Once we start looking at further classes of attitude verbs, the patterns become even more intricate. The emerging conclusion is that each class of polarity items that can occur under attitude predicates has its own (possibly different) distributional constraints.

2.3.1 Epistemic verbs

With this background in mind, let us now focus on the licensing of *vreun* under proposition-embedding predicates. An important fact, previously unnoticed, is that *vreun* is licensed under *epistemic* verbs like *a crede*²⁸ ‘believe’ (54) or *a bănuî* ‘to suppose’ (55):

²⁸ The Romanian verb *a crede* literally means ‘to believe’, but is commonly used in attitude contexts where English would resort to *think*. The equivalent verb *a se gândi* ‘to think’ is not very frequent, and conveys a more ‘hypothetical meaning’, similar to *suppose*. In order to avoid any confusion, I use the verb *believe* in the glosses

(54) *Cred* *că* *a* *intrat* *vreun* *hoț*.

Believe.1SG that have.3SG entered V-A burglar

‘I believe some/a burgler was in.’

(55) *Bănuiesc* *că* *ai* *participat* *deja* *la* *vreun* *colocviu*.

Suppose.1SG that have.2SG participated already at V-A colloquium

‘I suppose you have already attended some colloquium.’

Once again, I use the label *epistemic* in a broad sense, to designate predicates that involve quantification over worlds compatible with the attitude holder’s beliefs or knowledge, (what is known to him or what is consistent with his beliefs, in view of the available evidence). Recall that the crucial factor I take to be responsible for the licensing of *vreun* under operators evaluated with respect to an epistemic modal base is the kind of entailment they lead to²⁹. Specifically, I have argued that when the speaker’s doxastic alternatives contain *non p*-worlds, *vreun* can occur. Under this hypothesis, the licensing of *vreun* in (54)-(55) receives a natural explanation: for example, in the former sentence, *I believe that a burglar was in* does not entail the truth of the proposition *a burglar was in*. The speaker might very well believe it, but nothing guarantees the truth of the complement of the embedding predicate in the world of utterance.³⁰ In fact, if the proposition under consideration is established to be true, the speaker couldn’t use *believe* (in the sense of *think*). To illustrate this with the same context as in the case of epistemic modals, if I see Paul at the window of his house, I cannot truthfully utter *I believe Paul is at home*, or at least the sentence wouldn’t express anything related to whether at the time of utterance, I consider the proposition ‘Paul is at home’ to be true or not (but rather something related to my previous expectations, a meaning we could paraphrase as *Now I believe Paul is at home, before I didn’t*). Likewise, verbs like *suppose* or *assume* also entail that the speaker is not committed to the truth of the embedded proposition.

I provide for sentences involving *a crede*, but the reader should bear in mind that the difference one finds in English between *believe* and *think* is not present in Romanian.

²⁹ A terminological remark: to my knowledge, the notion that comes closest to the generalization discussed here is that of VERIDICALITY, i.e. the property of attitude predicates that *entail* the truth of their complement. This notion is to be distinguished from FACTIVITY, the property of attitudes which *presuppose* the truth of their complement (Montague 1969). However, in the literature on polarity items, in particular in Giannakidou’s influential work, the notion of veridicality is used in a different way, which concerns the beliefs of an attitude holder, in ways that don’t capture the distinctions relevant for *vreun*. I will discuss the difference between Giannakidou’s approach and mine in the next chapter, and show that the assumed notion of (non)veridicality, despite its initial appeal, cannot fully integrate the distributional pattern of *vreun*. For now, in order to avoid any confusion, I stick to the more intuitive, neutral term of truth-entailment.

³⁰ One way to make this meaning salient is to imagine that these sentences contain a modifier like *merely*: *I merely believe/think that a burglar was in, I don’t know it for sure*.

Furthermore, in line with the generalization defended throughout this section, we expect epistemic predicates that entail *p* not to be able to license *vreun*, a prediction that is borne out, as attested by the following contrast:

- (56) *Cred* *că am vreun virus în calculator, nu mai răspunde la comenzi.*
 Believe.1SG that have.1SG V-A virus in computer NEG more respond.3SG to commands
 ‘I believe I have some virus in my computer, it doesn’t respond to commands anymore.’

- (57) **Știu* *că am vreun virus în calculator, s-a uitat*
 know.1SG that have.1SG V-A virus in computer, REFL-have.3SG looked
 informaticianul la el.
 informatician.DEF at it.
 ‘I know I have some virus in my computer, the informatician looked at it.’

In the sentence (56), the speaker is expressing his belief on the basis of the evidence available to him and conveys a meaning we could paraphrase as (for all *x* knows) ‘in all worlds compatible with *x*’s beliefs, there is a virus in *x*’s computer’. The truth of *p* is *not entailed*: it might very well be the case that there is no virus and the computer problem comes from a different source. Hence, the sentence is compatible with a continuation like *but maybe I’m wrong*. In contrast to this, (57) with the verb *know* clearly says that the proposition ‘there is a virus in *x*’s computer’ must hold in all worlds epistemically accessible from the world of evaluation, including the actual world. Accordingly, a continuation like *but maybe I’m wrong* is not possible. To put it differently, *believe that p* does not entail *p* (and thus, does not rule out the possibility that *not p* might hold), unlike *know that p*, which does entail *p* (and as such, rules out *not p*). The contrast with respect to the licensing of *vreun* is expected under the assumption that the relevant factor is the existence of *non p*-worlds among the speaker’s doxastic alternatives: *believe* satisfies this requirement, whereas *know* does not.

This distinction captures the contrast between verbs like *a crede* ‘believe’, *a bănuî* ‘assume’, *a-și închipui* ‘to picture=to imagine, assume’, *a se gândi* ‘to think’ which license *vreun* in their embedded clause, and *a ști* ‘to know’, *a afla* ‘to find out’, *a descoperi* ‘to discover’, *a-și aminti* ‘to remember’ which rule out *vreun*. Similarly, emotive factive predicates, which express the speaker’s feeling or attitude with respect to a certain established fact, uniformly rule out the occurrence of *vreun* in their complement, as illustrated in the following examples for the predicate *bine că* ‘(it’s) good that’, given in (58), and factives like

a regreta ‘to regret’ (59) or *a se bucura* ‘to be glad’³¹.

- (58) **Bine că* și-a cumpărat *vreo* carte despre Utrecht. [Farkas 2002:16]
good that CL.DAT.–have.3SG bought V-A book about Utrecht
‘It’s good that she bought herself a book about Utrecht.’

- (59) **Regret că* am pierdut *vreun* curs în timpul grevei.
Regret.1SG that have.1SG missed V-A class in time.DEF strike.GEN
‘I regret having missed any class during the strike.’

Summarizing the distribution of *vreun* under attitude verbs, we have seen that verbs that don’t entail the truth of the embedded proposition license *vreun*, whereas factives uniformly rule out its occurrence.

2.3.2 ‘Want’ versus ‘hope’

Recall, however, that the constraint I have posited for *vreun* does not merely require the speaker not to be committed to *p*, but rather something stronger, namely that the speaker be committed to the possibility that *not p* is true in some of his doxastic alternatives. Up to this point, I have provided no justification for this specific formulation, and the licensing facts considered so far (modals and *belief* verbs) might be argued to follow from a weaker version of this hypothesis. However, a closer look at the distribution of *vreun* under volitionals reveals a crucial contrast which shows that it is not enough for a predicate not to entail the truth of its complement proposition to count as a licenser. To see this, consider the following sentences:

³¹ However, some speakers I’ve consulted accept *vreun* in the scope of the factive *a se mira* ‘to be surprised/astonished’ (i):

(i) *Mă mir că e vreun* film românesc în oraș, rar se întâmplă.

‘I’m surprised there is some Romanian movie in town, it rarely happens.’

I will ignore this fact for two reasons: first, based on their comments, I suspect that the speakers who accepted it forced a ‘doubt/disbelief’-reading like ‘I would be surprised if’ (i.e. a non-factive reading), and second, it is only the speakers that have the more ‘liberal’ distribution of *vreun* that accept (i), most speakers (including me) reject the sentence.

(60) * *Vreau* să cumpăr *vreo* carte despre Olanda. [Farkas 2002:10]

want.1SG SUBJ buy V-A book about Holland
 ‘I want to buy a book about Holland’.

(61) a. *Sper* că ai adus *vreun* cadou.

Hope.1SG that have.2SG brought V-A present
 ‘I hope you brought some present’

b. *Sper* că ai întrebat *vreun* localnic cum e vremea în perioada

Hope.1SG that have.2SG asked V-A local how is weather.DEF in period
 asta a anului.
 this of year.GEN

‘I hope you asked some local how is the weather this time of the year.’

(62) *Prefer* să întreb *vreun* student, în perioada asta ei sunt cel mai bine informați.

Prefer.1SG SUBJ ask V-A student in period this they are the more well informed
 ‘I prefer to ask some student, these days they are the most well-informed’

These sentences illustrate the distribution of *vreun* under volitional verbs *want*, *hope* and *prefer*, uniformly interpreted with respect to a doxastic modal base and expressing that the worlds in which the embedded proposition *p* holds are ranked high with respect to the attitude holder’s preferences (Heim (1992), von Stechow (1999)). A further shared property is that none of these three predicates entails the truth of the embedded proposition. However, the examples in (60)-(62) show that these verbs differ with respect to their ability to license *vreun*: this determiner is ruled out in the complement of *want*, but perfectly legitimate under *hope* and *prefer*.

Under the hypothesis that *vreun* is licensed only by predicates that do not entail the truth of the proposition which they take as their argument, the non-occurrence of *vreun* under *want* is surprising. Moreover, the three volitionals under consideration have a very similar semantics, but a non-uniform licensing behavior. The challenge is thus twofold: first, we need to establish the relevant distinction among volitional verbs and second, look for the common thread between belief verbs and *hope* and *prefer* that is responsible for the licensing of *vreun*.

The difference between *want* and *hope/prefer* seems puzzling, but a closer examination of their semantics shows that in fact, unlike *want*, *hope* has an epistemic meaning component (in a sense to be made more precise shortly), and *prefer* imposes the existence of

more than one alternative, two (related) properties which allow them to serve as licensors for *vreun*. In particular, *vreun* requires that the speaker's doxastic alternatives include worlds in which *p* does not hold. We will now see that the semantics of *hope* and *prefer* always satisfies this requirement, whereas *want* can also be used in situations where the embedded proposition is established to be true in all of the epistemic agent's belief-worlds. As predicted by the 'non *p*-worlds' constraint that I'm defending, this crucial difference leads to the ungrammaticality of *vreun* under *want*.

Let us first focus on *hope*, and the way it differs from *want*. In discussing the semantics of preference verbs that allow V2 complements in Germanic, Scheffler (2008) (building on Truckenbrodt (2006)) identifies "an epistemic component" in the meaning of *hope*, a property that *want* lacks. The contrast that is relevant for our present purposes is the one in (63)³², ³³ which shows that *want* is compatible with prior knowledge of the embedded proposition *p* (63)a, while '*hope*' is not (63)b:

(63) It is raining and

a. # I hope it is raining/#that is what I hope.

b. ✓ I want it to be raining/✓that is what I want.

The contrast between these two examples shows that knowledge of a fact, such as looking by the window and noticing that it rains, makes the use of *hope* infelicitous to refer to this fact, a restriction which does not apply to *want*. The use of perceptual evidence makes it easier to think of facts that are established to hold and thus makes the difference between the two

³² The discussion of the contrasts between *hope* and *want* is based on Scheffler (2008: 117 and seq), from whom I borrow all relevant examples (some of them are attributed to Truckenbrodt (2006)). For ease of exposition, I use English sentences only, although the semantic properties are originally discussed for German, where the distinction is relevant for V2 order in embedded clauses.

³³ The presence of what she calls "epistemic meaning component" in the semantics of *hope*, but not in that of *want* is further illustrated by two other contrasts, which are not directly relevant to the discussion on *vreun*:

(i) the two predicates differ with respect to whether they allow a *counterfactual* use, i.e., whether they are compatible with knowledge of the negated embedded proposition *p*:

[Scenario: Uwe has to teach two days per week every semester. He is asking his wife for her preferences about when he should teach next semester. She says:]

a. * I *hope* that you don't have to work at all.

b. I *want* you not to have to work at all.

The sentence in (b) shows that counterfactuality is compatible with *want*, but not with *hope* (a), which requires that the embedded proposition be considered possible. When the context clearly rules this out, *hope* cannot be used.

(ii) Verbs that involve an epistemic component can be used as answers to information questions:

Is Peter coming today?

a. ✓ I *hope* he's coming today/ ✓ I *hope* so.

b. # I *want* him to come today.

Questions about facts of the world (whether Peter is coming or not) can be answered using the verb *hope*, as a result of the fact that its complement proposition is necessarily considered possible by the speaker. This meaning component is absent in the semantics of *want*, which is at best irrelevant as an answer to a question like (ii).

predicates salient.

On the basis of contrasts of this kind³⁴, Scheffler (2008) concludes that *hope* has an epistemic component, i.e. it implies that at the time of evaluation the epistemic agent considers that both p and $\neg p$ can hold. In contrast to this, the use of *want* does not convey anything on whether the speaker considers p to be likely or not. Of course, *want* can also be used in cases where p is merely considered possible, that is, it does not entail that the proposition is necessarily true in all of the epistemic agent's doxastic alternatives, but the important point is that nothing in its meaning imposes this, as made clear by its use in situations where it is clear that the proposition below *want* holds, as in (63).

Getting back to *vreun*, I argue that it is precisely the epistemicity of *hope* that makes it an appropriate licenser. Recall that *vreun* can be used whenever the embedding operator entails that the worlds consistent with the epistemic agent's beliefs include *non p*-worlds. Crucially, *want* does not trigger the required entailment, as attested by the example in (63)b. In view of this, I argue *vreun* can occur in the complement of *hope* precisely because this verb requires that at the time of evaluation the truth-value of p is not yet settled, and as such, both p and $\neg p$ are possible. In a sense, the semantics of *hope* entails the existence of alternatives to p , that is worlds where something other than p might be the case, and as such allows the occurrence of *vreun*. On the other hand, *want* does not impose the existence of *non p*-worlds, or else it couldn't be felicitously be used in situations which establish p to hold. This, I argue, is the key difference to which the distribution of *vreun* is sensitive.

The grammaticality of *vreun* under *hope*, but not under *want* provides important support for the licensing hypothesis given in (25) (repeated as (52)), which imposes that the epistemic agent be committed to the possibility that *not p* be true in some of his doxastic alternatives. Crucially, a weaker formulation, merely requiring that the epistemic agent does not commit himself to the truth of the embedded proposition, couldn't capture the licensing difference between these two volitional verbs. This contrast, I claim, imposes a strong requirement, namely the existence of *non p*-worlds among the worlds entertained by the epistemic agent.

Finally, let us now consider the only other attitude verb where speakers generally

³⁴ A further difference between *hope* and *want* is their use as parentheticals in so-called *slifting* constructions: *Peter is coming today, I hope* versus *#Peter is coming today, I want*. This use makes verbs like *hope* similar to evidentials, which also convey an epistemic meaning.

accept *vreun*³⁵, namely *a prefera* ‘to prefer’, illustrated in the following example:

(64) *Prefer* să întreb ***vreun*** student, în perioada asta ei sunt cel mai bine informați.

Prefer. 1SG SUBJ ask V-A student in period this they are the more well informed

‘I prefer to ask some student, these days they are the most well-informed’

I have argued so far that the contrast between attitude verbs like *hope* and *want* can be reduced to whether they entail that the epistemic agent’s doxastic alternatives include worlds in which *p* does not hold. In addition, recall that *vreun* is possible under *prefer* (as illustrated above in the sentence in (64)), a verb that clearly involves the attitude holder’s desires, just like *want*. The question is how does *prefer* line up with the licensing generalization I have defended in this chapter? At first sight, not so well: the epistemic meaning component associated with *hope* is not present in the semantics of *prefer*, which, just like *want*, could be used in a context like (63), where a certain fact is established to hold (*It’s raining and I prefer it to be raining/that’s what I prefer*). Does this constitute a serious challenge to the position advocated here? I believe the situation is less problematic than it might initially look. On the assumption that the crucial factor is the entailment of existence of other alternatives (which thus allow the proposition containing *vreun* not to hold in all of the alternatives entertained by the epistemic agent) the answer is clearly no. In particular, I argue that the reason why *prefer* can license *vreun* is that its meaning requires that in addition to the embedded proposition, other alternatives have to be present in the context. The following examples illustrate this behavior:

(65) It’s sunny outside. Anda enters the room and says:

a. I *want* to go for a walk.

b. #I *prefer* to go for a walk.

(66) It’s sunny outside and we are considering different options for enjoying the weather: going for a walk, having a picnic in the park or taking the boat for a cruise on the river. Anda says:

³⁵ Other verbs like *a sugera* ‘to suggest’ and *a sfătui* ‘to advise’ give mixed results: there is both cross-speaker variation and also variation for the same speaker in different contexts. The emerging pattern, also conforming to my own intuitions, is that there is a contrast between these two verbs: *vreun* seems systematically better under *advise*. However, the variation is such that I will ignore these facts in the remainder of this thesis and leave the detailed investigation of the licensing conditions of *vreun* under these verbs for future research.

- a. I *want* to go for a walk.
- b. I *prefer* to go for a walk.

Both *want* and *prefer* express the attitude holder's desires, and as such are interpreted with respect to a bouletic ordering source: among the epistemic agent's doxastic alternatives, worlds in which *p* holds are ranked higher with respect to his preferences. There is, however, an additional meaning component that sets these two predicates apart. As illustrated by the contrast between the contexts in (65) and (66), *prefer* can only be felicitously used when the context makes obvious the existence of other propositions, alternatives to the proposition *p* embedded under *prefer*. The use of *prefer* in out-of-the-blue situations (such as (65)) is odd. On the other hand, *want* is compatible with the existence of other alternatives, but does not require them. This is the crucial difference between *want* and *prefer* that I take to be relevant for the licensing of *vreun*. Since the existence of other alternatives is always associated with the predicate *prefer*, the requirement that there be *non p*-worlds among the epistemic agent's belief worlds is satisfied and hence *vreun* is licensed. *P*-worlds are ranked high among his doxastic alternatives, but *non p*-worlds are also included. Consequently, I maintain that the hypothesis defended so far correctly captures the distribution of *vreun* under volitional predicates, and can fully integrate the contrast between *want* and *hope/prefer*.

Before concluding this section, let me just supplement the overview of the interaction of *vreun* and attitude predicates with further examples pointing out that only verbs interpreted with respect to an agent's doxastic alternatives are relevant. Accordingly, *vreun* is correctly predicted to be ruled out under intentionals like *a intenționa* 'to intend' or *a insista* 'to insist' (67) and verbs of obligation like *a ruga* 'to ask', *a cere* 'to request', *a ordona* 'to order' (68), a pattern that is not surprising in view of the discussion of deontic modals, which also uniformly preclude the use of *vreun*. Neither deontic modals, nor attitude verbs quantifying over worlds related to an agent's future course of action are interpreted with respect to the epistemic agent's beliefs, and thus cannot satisfy the licensing constraint responsible for the distribution of *vreun*:

- (67) *Paul a *insistat* să invităm ***vreun*** francez cu noi.
 Paul have.3SG insisted SUBJ invite.1PL V-A Frenchman with us
 'Paul insisted that we invite some Frenchman with us.'

(68) *Roxana *m-a rugat/mi-a cerut/ mi-a ordonat* să aduc
 Roxana me-have.3SG asked/me-have.3SG requested/me-have.3SG ordered SUBJ bring
vreun cadou.

V-A present

‘Roxana asked/requested/ordered me to bring some present.’

Summing up our discussion of attitude verbs, I have shown that the distribution of *vreun* is captured by the licensing constraint previously put forward, and repeated below:

- (i) Licensing constraint: Op *p* entails that the epistemic agent’s doxastic alternatives include *non p*-worlds

To put it differently, it follows from the semantics of all licensing attitude verbs that at the time of evaluation, the speaker (the epistemic agent) admits the possibility that *p*, the proposition containing *vreun*, might not hold, i.e. is not true in some of his belief worlds. Accordingly, *vreun* is only licensed in the complement of non truth-entailing epistemic verbs, or verbs that involve an epistemic meaning component, whose common property is that the truth of the embedded proposition *p* is not entailed, but rather *p* is considered to be one possible alternative among other alternatives in the context³⁶. Epistemic verbs like *believe*, *suppose*, *assume* introduce this meaning, whereas in the case of verbs like *prefer*, we have seen it can only be felicitously used when the context provides the alternatives. Finally, *hope* was shown to be possible only in cases where both *p* and $\neg p$ are among the epistemic agent’s alternatives: crucially, it cannot be the case that we know *p* holds (or we know that $\neg p$ holds, an aspect which is not directly relevant here), a property that makes *hope* an appropriate licenser for *vreun*.

The study of the distribution of *vreun* in attitude contexts has pointed out the necessity to consider the precise semantic properties of the embedding verb, in particular its entailments. This is not an easy task, and it should be clear that the previous discussion is not exhaustive and that these contexts require a more detailed investigation. In particular, so far, I have not addressed issues such as the epistemic agent for whom the relevant entailments have to hold: the speaker *versus* the attitude holder, or scope interactions when other operators (e.g. downward-entailing, modals) are present, an issue I will briefly come back to later in this chapter. Setting aside these aspects, the empirical facts under consideration provided support

³⁶ This generalization is unidirectional, i.e. it is not enough for a verb to involve an epistemic meaning component to serve as a licenser for *vreun*. For example, according to Scheffler’s partition *a pretinde* ‘to claim’ or *a auzi* ‘to hear’ are epistemic in the relevant sense, but still, they cannot license *vreun*.

for the previously established connection between *vreun* and epistemic modality and revealed interesting contrasts among volitionals concerning the possibility that the proposition containing *vreun* is false. These facts are entirely predicted by the hypothesis on the crucial role of *non p*-worlds among the epistemic agent's doxastic alternatives.

2.4 Rescuing effects

In the previous sections, I have argued that the distribution of *vreun* in non-polarity contexts depends on whether the embedding operator entails the existence of *non p*-worlds among the speaker's doxastic alternatives. Whether one says 'John must have left the country' or 'I believe John has left the country', despite the (possibly high) degree of certainty of the speaker, the semantics of the embedding operator does not entail that *not p* is ruled out in all relevant worlds, a property of epistemic modals and attitude verbs that leads to the licensing of *vreun*.

The interaction between epistemic modality triggers (presumptive forms and disjunctions) and attitude verbs provides strong empirical support for this hypothesis. There are two sets of data that argue in favor of the crucial role of epistemic modality associated with the presumptive. As discussed in section 2.2.1 the basic property of the presumptive is that, just like any other epistemic modal, it cannot be used to describe facts which are established to hold. First, when the complement of a non-licensing verb allows an embedded presumptive form³⁷, *vreun* is licensed, as attested by the following contrast³⁸:

- (69) *Profesoara *spune*/ *pretinde* că Tudor a lovit ***vreun*** copil la școală.
Teacher.DEF say.3SG/claim.3SG that Tudor have.3SG hit V-A child at school
'The teacher says/claims that Tudor has hit some child at school.'

³⁷ The facts discussed here are an over-simplification. A proper discussion should take into account the fact that presumptive forms can only occur in the complement of indicative-embedding verbs (as opposed to verbs that take subjunctive complements, where presumptives cannot be used) or the distinctions between the different presumptive paradigms, some of which are homonymous with the perfect conditional/subjunctive. Accordingly, there might well be independent reasons to rule out/in certain sentences discussed here, but abstracting away from these issues, I argue there is a strong connection between the presumptive (especially future2-based) and the licensing of *vreun*, and take the existence of epistemic alternatives associated with the presumptive to be the relevant factor.

³⁸ There is speaker variation on the acceptability of the embedding of presumptive forms under attitude verbs, independently of the licensing of *vreun*. For a recent discussion on the licensing conditions of these temporal forms, see Brasoveanu (2006) or Brasoveanu & Farkas (2006). I will not address in detail the restrictions on the availability of the embedded presumptive. The main point defended here is that speakers that *do* allow an embedded presumptive get a sharp contrast between sentences *with* and sentences *without* the presumptive as far as the licensing of *vreun* is concerned.

(70) Profesoara *spune/ pretinde* că Tudor *ar fi* lovit ***vreun*** copil la școală.

Teacher.DEF say.3SG/claim.3SG that Tudor have.COND.3SG BE hit V-A child at school

‘The teacher says/claims that apparently Tudor has hit some child at school.’

The sentence in (69) shows that *vreun* is ruled out in the complement of assertion verbs like *a spune* ‘to say’ or *a pretinde* ‘to claim’. However, when the embedded verbal form is the conditional-based presumptive, typically associated with a reportative reading, *vreun* is licensed (70). The reason, I claim, is the type of entailment triggered by the presumptive: the speaker reports a certain claim (that Tudor has hit some child in school), without fully endorsing it. Accordingly, it is consistent with the speaker’s beliefs in the world of evaluation that this claim might be false. What these examples show is that whenever embedded presumptive is possible, it can serve as a licenser for *vreun*. These facts follow the pattern we saw in the previous section: *vreun* is only allowed in environments that are incompatible with the speaker believing that the embedded proposition is necessarily true (in all of the alternatives she entertains).

The following sentences provide some further similar examples:

(71) *Am *visat/auzit* că s-a instalat ***vreun*** irlandez prin zonă.

have.1SG dreamt/heard that REFL-have.3SG installed V-A Irishman in area

‘I dreamt/heard that some Irishman had moved in the neighborhood.’

(72) Am *visat/auzit* că s-ar *fi* instalat ***vreun*** irlandez prin

have.1SG dreamt/heard that REFL-have.COND.3SG BE installed V-A Irishman in zonă.

area

‘I dreamt/heard that some Irishman had moved in the neighborhood.’

There is an additional set of examples that illustrate the connection between the presence of the presumptive and the distribution of *vreun*. Recall that *vreun* is ruled out in the complement of factive verbs or volitionals like *want*. However, as predicted by the hypothesis that the speaker’s beliefs determine the licensing of this item, the presumptive form of the matrix verb, just like any other presumptive construction, licenses the use of *vreun*, as illustrated by (73) for *want* and (74) for the factive *find out*:

(73) (I think Tudor went shopping.)

O fi vrut /vrând să-și cumpere vreun joc pe calculator.
FUT2.3SG BE want.PAST.PART/PRST.PART SUBJ-CL.3SG buy V-A game on computer
'He might have wanted/want to buy some computer game.'

(74) (Why is Irina upset?)

O fi aflat că și-a picat vreun examen
FUT2.3SG BE find-out.PAST.PART. that CL-have.3SG failed V-A exam
'She might have found out that she failed some exam./I guess she found out that she failed some exam.'

The examples above show that the use of the presumptive form yields a hypothetical-like meaning, equivalent to that obtained by adding an overt modal like *might*. The interpretation amounts to quantification over the speaker's beliefs and conveys the meaning that he is not committed to the truth of the proposition containing *vreun*, and it is consistent with his beliefs that this proposition is false.

Finally, recall that disjunctions are also argued to associate with epistemic alternatives (see section 2.2.2), a property that allow them to license *vreun*. If it is consistent with the speaker's beliefs that *p or q* hold, among his doxastic alternatives there are *non p*-worlds and *non q*-worlds. Under this analysis, we expect disjunctions to also be able to rescue occurrences of *vreun* in non-licensing contexts. The following contrast shows that this prediction is borne out:

(75) **Vreau să cumpăr vreo carte despre Brâncuși.*

want.1SG SUBJ buy.1SG V-A book about Brâncuși

(76) *Vreau să cumpăr o/vreo carte sau vreun album despre Brâncuși.*

want.1SG SUBJ buy.1SG a/V-A book or V-A album about Brâncuși

'I want to buy a/some or some album about Brâncuși.'

The sentence in (76) shows that the presence of the disjunction licenses *vreun*, either in both disjuncts or in one of them only, a situation that indicates that the presence of epistemic alternatives overrides the fact that the complement of *want* is a non-licensing context.

The empirical facts presented so far support the claim that the determiner *vreun* can only occur under operators which entail that the proposition containing *vreun* is not true in all of the speaker's doxastic alternatives. Crucially, the epistemic agent must not be committed to *p*,

meaning he must allow the possibility that *not p* might hold. This is the common feature of all non-polarity licensing contexts considered up to now, which have all been argued to conform to the ‘*non p*-worlds requirement’.

I will now further explore its distribution by considering another arguably modal context, namely *imperatives*, which involve a non-truth-conditional meaning, and do not fully pattern with previously discussed epistemic modal contexts. Nevertheless, I show that imperatives that allow the occurrence *vreun* satisfy the licensing constraint I have defended so far.

2.5 Licensing in imperatives

Another non-polarity context which can be relevant when trying to situate *vreun* in the typology of semantically dependent items are imperatives. For example, a sentence like *Pick any card* licenses the use of *free-choice any* and conveys a meaning paraphrasable as ‘Pick a card, and every card is a possible choice’.

Farkas (2002) claims that *vreun* is not licensed in imperatives, as illustrated by the example in (77):

- (77) * Ia **vreo** prăjitură!
 Take V-A cookie
 ‘Have some cookie’

The ungrammaticality of (77) thus indicates a contrast between *vreun* and other dependent items licensed in non-polarity, ‘modalized’ contexts. However, a closer examination of the empirical facts reveals that there are imperatives which license the use of *vreun*, as illustrated by the following examples:

- (78) Vorbește cu **vreun** vecin, să primească el pachetul.
 Talk.2SG with V-A neighbor SUBJ receive.3SG he package.DEF
 ‘Talk to some neighbor, so that he receives the package.’

- (79) Verifică pe **vreun** site, nu sunt sigură că nu e o greșeală.
 Check.2SG on V-A site, NEG be.1SG sure that NEG be.3SG a mistake
 ‘Check on some website, I’m not sure it’s not a mistake.’

As indicated by the glosses of the sentences above, the English equivalents of these imperatives do not license *any*, but make use of the indefinite *some*, suggesting that we are dealing with a meaning different from *free-choice* (conveyed by English *any*). The licensing

of *vreun* in (78)-(79) indicates that Farkas' claim on the ungrammaticality of *vreun* in imperatives is inaccurate. Just like in the case of the environments discussed in previous sections, I present evidence that imperatives do not uniformly (anti-)license *vreun*, and it is only by looking at more fine-grained distinctions associated with the semantics of imperatives that we can gain a better understanding of what is relevant for the distribution of *vreun*. In particular, I argue that only imperatives that satisfy the licensing constraint previously put forward license *vreun*. More precisely, I show that they can be put together with the other licensing contexts by making use of the type of alternatives triggered by some kinds of imperatives.

2.5.1 Modalized imperatives

Imperatives can express various illocutionary forces, such as command, permission, advice, wish, threat, instruction, etc. The following sentences illustrate some of these uses:

- | | |
|---|---------------|
| (80) (What are you waiting for?) Call an ambulance immediately! | [command] |
| (81) (Where can I find a Kazakh speaker?) Ask someone at the embassy! | [advice] |
| (82) Have a nice day! | [wish] |
| (83) Keep out of the reach of children! | [instruction] |

The semantics of imperatives is problematic for at least two reasons: first, it is not obvious how to connect their meaning to truth-values. A sentence like *Come in!* cannot be felicitously followed by *That's (not) true*. The question is then what is the interpretation of an imperative: does it denote a proposition (with some additional pragmatically determined meaning), as claimed, by e.g. Han (2000), Schwager (2006), Aloni (2007), or does it lack truth-conditional content, and should be analyzed as property-denoting (Portner 2007)? The second problematic issue, also subject to a lot of debate in the literature, is what allows an imperative to convey so many different meanings. In particular, is there anything specific in the morpho-syntax of the imperative that yields these various meanings (as assumed in e.g. Han (2000) and Schwager (2006), or do they come out as a result of the context of use (Portner 2007)? Despite disagreement on how to answer these questions, the different analyses of the imperatives end up treating them on a par with modal sentences. More specifically, several accounts make use of meaning components typically associated with modals: a modal base and an ordering source (or equivalents thereof, such as in Portner's system whose account is based on Common Ground and addressee's To-Do list). The main difference among the existing accounts is whether there is a specific modal force associated with imperatives and the extent

to which is encoded in the syntax. Setting aside these issues, which are not directly relevant for the licensing of *vreun*, I will just assume that imperatives are ‘modalized’ propositions.

In a recent implementation of the ‘modal’ view of imperatives, Schwager (2006) argues they contain a covert modal operator which quantifies over worlds³⁹. Imperatives also have a non-truth-conditional additional meaning component, namely performativity, which leads to the speaker bestowing an obligation on the addressee. This use is felicitous only if certain presuppositions are met: first, the speaker is assumed to have some authority on the addressee, in virtue of which he can issue a command or request. Second, at the time of utterance, the speaker considers both the proposition below the imperative operator, p , and $\neg p$ to be possible. Issuing a command in a situation where the issue is already settled or the action already taken is meaningless. Moreover, when a speaker expresses an imperative, even though both p and $\neg p$ are possible, it is also presupposed that the speaker necessarily considers it to be better that p comes out as true. As far as the semantics of the imperative operator is concerned, Schwager assumes the modal semantics in Kratzer (1981) and posits that its interpretation involves two conversational backgrounds: a modal base and an ordering source. More precisely, the modal base of the imperative operator is what the hearer and speaker both consider to be possible future courses of events (a “conversational background of mutual joint belief” Schwager (2006:141)). The variety of readings of an imperative are the result of different choices of the ordering source, which is claimed to be obligatorily “preference-related”: either *deontic* - ‘in view of what the rules are’, *bouletic*-‘in view of x’s desires’ or *teleological*- ‘in view of what x’s goals are’. When using an imperative, on the basis of the common conversational ground, the speaker (assumed to have some authority on the matter) indicates to the addressee a certain future state of affairs, with respect to certain rules, desires or goals of (at least one of) the participants. Crucially, then, according to Schwager, imperatives never involve doxastic ordering sources, with reference to the participants state of knowledge or beliefs.

Under this proposal, the default usage of imperatives is that of commands. These are best analyzed in terms of deontic modality: quantification over possible worlds, with respect to an ideal set by an obligation/permission issued by the speaker. Abstracting away from the (important) differences between an imperative modal and an overt modal, which are not

³⁹ Schwager assumes that the default quantificational force of this modal is universal. As I will show later in this thesis, Schwager (2005) (as well as Schwager (2006) in the *Afterthoughts* chapter) considers an alternative view where universal force is derived from an existential operator which gets exhaustified. Since the goal of this section is to establish the relevant empirical generalization, for the time being, I abstract away from the issue of quantificational force and focus on other meaning components of an imperative.

directly relevant to the present discussion, we can assume that an imperative can sometimes be equivalent to a modal sentence, as in the following examples:

- (84) a. Shut up!
 b. You must shut up.
 c. In view of what the rules are, it is necessary that you shut up.
- (85) a. Come in!
 b. You may come in.
 c. In view of what the rules are, it is possible that you come in.

In both cases, the sentences can have a paraphrase of the type *in view of what the rules are*, (with the additional component that the obligation/permission is issued by the speaker) which typically associates with deontic modality (see section 2.1.). The difference lies in the quantificational force involved: universal quantification in case of an obligation, or existential quantification over worlds for permission readings, where it suffices that there is a world in which the proposition denoted by the imperative holds.

Getting back to *vreun*, recall that its licensing is determined by the speaker's belief worlds, which must include worlds in which the proposition containing *vreun* is not true. Now, once we assume typical imperatives are to be analyzed as deontic modals, we expect *vreun* to be incompatible with any kind of imperative which has a deontic reading. This prediction is borne out: *vreun* is not licensed in imperatives that are interpreted as commands or permissions. The sentences below illustrate this behavior:

- (86) *Cheamă **vreun** doctor!
 Call.2SG V-A doctor
 ‘Call some doctor.’
- (87) (If you don't want to come alone to the party)
 *Invită **vreun** prieten, nu mă deranjează⁴⁰.
 invite.2SG V-A friend, NEG REFL bother.3SG
 ‘(If you don't want to come alone to the party,) invite some friend, I don't mind’

The incompatibility between *vreun* and deontic modality is not surprising, we have already seen that the same pattern holds in the case of modal or attitude verbs involving obligations.

⁴⁰ Some speakers reinterpret the sentence as a suggestion imperative, and thus might accept *vreun*. If the context makes salient the permission interpretation, the example is clearly ruled out.

Similarly, *vreun* is ruled out in imperatives that are used as wishes, as illustrated by the ungrammaticality of the following example:

(88) A is leaving for a competition. B says:

*Întoarce-te cu *vreo* medalie!

Return.2SG-REFL with V-A medal

‘Come back with some medal!’

In this case, the speaker is not issuing a permission or an obligation on the addressee: instead, the proposition expressed by the imperative, *that you come back with a medal*, holds in possible worlds that are ranked high with respect to the speaker’s wishes. Accordingly, it can be argued that in addition to deontic ordering sources, *bouletic* ordering sources also rule out *vreun*.

The fact that preference-related ordering sources (always part of the meaning of an imperative) render *vreun* ungrammatical is not surprising under the hypothesis that the epistemic use of *vreun* involves reference to the speaker’s beliefs. Recall that I have argued that *vreun* is only licensed in contexts where the speaker considers *not p* to be possible in some of his doxastic alternatives. In the case of imperatives, this requirement is trivially satisfied: as shown by Schwager (2006), it is part of the presuppositional components of an imperative that at the time he issues a command, the speaker considers both *p* and $\neg p$ to be possible. However, an imperative doesn’t merely convey something about what the speaker believes to be possible or not, but also has an additional, non-epistemic, meaning component, namely the performative use: crucially, the speaker is assumed to have some authority, which entitles him to issue a command, and which ensures that *p*-worlds are ranked higher than *non p*-worlds. The discussion on volitional verbs has already shown that operators interpreted with respect to a preference-related ordering source license *vreun* only when they entail the existence of *non p*-worlds (as in the case of *hope* and *prefer*). Typical imperatives (expressing commands) do not give rise to such an entailment: one can very well issue a command or a wish without having in mind other possible things the addressee could do.

Following this line of reasoning, and in conformity with the licensing constraint previously established, we expect *vreun* to be possible in imperatives only in those cases which clearly entail the existence of alternatives to *p*, the modalized proposition. More precisely, if an imperative clearly suggests that the speaker considers other propositions to be possible courses of action for the addressee, *vreun* is predicted to be possible. In order to see that this prediction is indeed borne out, let us now focus on the relevant licensing imperatives,

as in the example in (89):

(89) Vorbește cu **vreun** vecin, să primească el pachetul.

Talk.2SG with V-A neighbor SUBJ receive.3SG he package.DEF

‘Talk to some neighbor, so that he receives the package.’

This sentence could be felicitously used in a context like the following:

- (i) A will be away for the next couple of days, but is waiting for the delivery of an important package. A is wondering what to do not to miss the delivery. B utters (89).

In this situation, the meaning conveyed by the imperative is something similar to a suggestion. The same illocutionary force can be argued to be associated with other imperatives where *vreun* is used, illustrated below:

(90) Verifică pe **vreun** site, nu sunt sigură că nu e o greșeală.

Check.2SG on V-A site, NEG be.1SG sure that NEG be.3SG a mistake

‘Check on some website, I’m not sure it’s not a mistake.’

(91) E grevă în universități săptămâna viitoare? De unde să știu? Du-te

Be.3SG strike in universities week.DEF next from where SUBJ know.1SG go.2SG-REFL

și întreabă **vreun** student!

and ask.2SG V-A student

‘Are the universities on strike next week? How should I know? Go and ask some student!’

In all these cases, the speaker is making a suggestion to the addressee, in relation to a certain (possibly common) contextually-defined goal: either to find an information, or to solve a certain problem.

The generalization I would like to advance in order to capture this behavior is the following: *vreun* is licensed in imperatives that express a possible course of action for the addressee and entail the existence of other (equally relevant in view of a certain goal) courses of action. This use of imperatives can be brought out by adding phrases like *one thing you could do* or *for example*⁴¹. As an illustration, let us consider in detail an example where *vreun*

⁴¹ Imperatives containing an overt modifier like *for example* are discussed in Schwager (2005), who analyzes it as an *antiexhaustifier*: its addition conveys the meaning « that the speaker doesn't exclude that other propositions than the expressed argument proposition stand in the same relation to the background » (Schwager 2005:4)

is licensed⁴²:

(92) Where could I find a recipe of poppy seed cake?

Uită-te în *vreo* carte de bucate cu rețete din Europa de Est!

Look.2SG-REFL in V-A cookbook with recipes from Europe of East

‘Look in some cookbook with recipes from Eastern Europe!’

In using the imperative in (92), the speaker is conveying a meaning like ‘one thing you could do is look in a cookbook from Eastern Europe’. Crucially, the context has to be such that other, alternative, courses of action are possible. One situation in which the sentence could be uttered is with a possible continuation of the kind ‘or maybe in an Indian cookbook, I think they also have poppy seed desserts’. Another possible continuation is one where the variation is ensured by an alternative not involving cookbooks at all, something like ‘or ask Anamaria’s mother, I hear she has an excellent recipe’. In this situation, the alternative to the proposition *p* ‘that you look in a cookbook from Eastern Europe’ would be the proposition *q* ‘that you ask A’s mother’. Both these alternatives are interpreted with respect to a teleological ordering source: in view of your goal (to find a recipe of poppy seed cake), it is possible that you do *p* or *q*.

Summing up, I have argued that imperatives that license *vreun* must be compatible with the existence of alternatives other than *p*: whenever the context makes it clear that the proposition expressed by the imperative is the only possible option, as seems to always be the case for wishes or commands, *vreun* is ruled out. On the other hand, imperatives expressing suggestions/advice clearly allow for other possible courses of action, thus satisfying the requirement that the speaker allows for *non p*-worlds. Since these are the only imperatives which entail the existence of propositions other than *p* among the worlds considered as possible by the speaker, the hypothesis defended here correctly predicts that these are the only imperatives that license *vreun*.

One way to implement the relevant distinction between the different types of imperatives is to adopt the terminology in Aloni (2007)⁴³ for imperatives involving *any* and disjunctive imperatives of the form *Do a or y!*, who distinguishes *choice-offering* from

⁴² There is quite a lot of variation among speakers concerning the acceptability of *vreun* in imperatives. Usually, speakers prefer the use of the simple indefinite determiner. However, even speakers that have the tendency to reject *vreun* in imperatives get a contrast between obligation/permission-like imperatives and those amenable to the meaning *one thing you could do*. The judgements reported in this section are those of speakers (including me) that accept *vreun* in certain types of imperatives, when the context makes clear the existence of other possible alternatives, in a sense I’ll make precise later in this chapter.

⁴³ The terms of *alternative-presenting* and *choice-offering* are attributed to Aquist (1965).

alternative-presenting readings of imperatives. The crucial difference that is relevant for the present discussion is that only the latter is compatible with a continuation of the type *don't do b*. The former use is illustrated in the following example (Aloni 2007: 85):

(93) GRANDMA: Take *any* card!

(Kid gets up to pick a card.)

GRANDMA: ??? Don't you dare take the ace!

In this situation, the choice is limited to the set of cards present in the context and the sentence conveys *freedom of choice* with respect to the card to be picked up. When this freedom of choice is denied, the result is unacceptable. Contrast this with the following example⁴⁴:

(94) Talk to *some* neighbor, that he receives the package! But don't even think about talking to Peter, he is never willing to help.

The use of *some* in this sentence (parallel to the one involving *vreun*) brings out the *alternative-presenting* meaning of the imperative, that I glossed earlier as '*one thing you could do*'. This is compatible with a situation where the choice among the set denoted by the noun, the set of neighbors, is either not limited to a contextually identifiable limited set (the speaker might very well not know the identity or the number of neighbors the hearer has), and crucially, is compatible with a situation where one of the members of the set is excluded. This is in contrast to imperatives that license *free-choice items* like *any*, for which the *alternative-presenting* reading is not available.

Getting back to the distribution of *vreun* in imperatives, I advance the following generalization:

(iv) *vreun* can only occur in alternative-presenting imperatives

This generalization is fully expected under the hypothesis that the distribution of *vreun* is sensitive to the alternatives entertained by the epistemic agent. We have already seen that all licensing contexts require that the speaker be committed to the possibility that *not p* might be

⁴⁴ Aloni illustrates the contrast with disjunctive imperatives of the kind *Stop that foolishness or leave the room!* As far as *free-choice any* is concerned, she argues that the (weaker) *alternative-presenting* reading is not possible in imperatives using *any*, as the constraints associated with this sensitive item wouldn't be satisfied (widening & strengthening, along the lines of Kadmon & Landman (1993)). Since disjunctions independently license *vreun*, disjunctive imperatives wouldn't help us understand the licensing constraints of *vreun*; consequently, I make use of the distinction between *any* and *some*, in order to keep the discussion close to the semantics of determiners. I am not aware of any analysis of imperatives or of *some* that uses this contrast for polarity-sensitive items, but I think it makes the intuition very clear.

the case, in some of his beliefs worlds. In the case of imperatives, this requirement is only satisfied in alternative-presenting imperatives.

Without further exploring the semantics of the different kinds of imperatives, I take the distinction between choice-offering and alternative-presenting interpretation to be relevant for the acceptability of *vreun* in this environment⁴⁵. Imperatives are ambiguous sentences, so in order to see what kind of reading is available, we need to add modifiers like *one thing you should do* or continuations excluding one of the members of the set associated with *vreun* (like *but not ...*). The crucial point is that whenever an imperative entails the existence of other possible courses of action, *vreun* is licensed.

Further empirical support for the ban on a restricted set comes from the speakers' tendency to improve an imperative with *vreun* by adding *ceva* 'something' or a disjunction, as in the following sentences:

(95) (Sabina is lately pretty upset and I'm wondering how to help, Mira says:)

a. Cumpără-i **vreo** floare, ceva, asta o să o înveselească.

Buy.2SG.CL V-A flower something, this FUT. CL cheer.up.3SG

'Buy her a flower (or) something, that will cheer her up.'

b. Invit-o la **vreun** film sau la **vreo** petrecere, oriunde, numai să uite

Invite.2SG.CL at V-A movie or at V-A party, anywhere, only SUBJ forget.3SG
de griji.

of worries

'Invite her to some movie or some party, anywhere, as long as she forgets her
worries.'

The use of *vreun* in these sentences conveys the meaning that the choice of the alternative satisfying the imperative could involve a member of the (open) set denoted by the noun, or the member of a different (possibly undetermined) set. Some speakers need to make this meaning component explicit in order to license *vreun*. The improvement of acceptability in contexts with disjunctions or bare existentials indicates that imperatives pattern with all other licensing contexts by requiring alternatives to be available and thus ensuring that the speaker is

⁴⁵ It is interesting to notice that the meaning of alternative-presenting imperatives is equivalent to suggestions making use of the modal *might*: *You might look in some book with recipes from Eastern Europe/ You might talk to some neighbor, so that he picks up the package*. Apart from these suggestion-like uses, on which I am not aware of any analysis, *might* is considered to be an unambiguous epistemic modal. This issue is not directly relevant to the licensing of *vreun*, but it does indicate that there are interesting connections between epistemic modals and alternative-presenting readings of imperatives, which deserve further investigation.

not committed to the truth of the proposition where *vreun* occurs. When the embedding operator entails that its complement proposition is not the only one entertained by the speaker, i.e. there are doxastic alternatives where *p* is not true (and some other, equally relevant, proposition might hold), *vreun* is licensed.

2.5.2 Imperative and declarative (IaDs)

In addition to the alternative-presenting imperatives, there is another imperative form that licenses *vreun*, namely what Schwager (2006) calls Imperative and declarative (IaDs), illustrated in the following example⁴⁶:

- (96) a. Study hard and you will pass the class. =
 Study hard. If you do, you will pass the class.
 b. Ignore your homework and you will fail the class. ≠
 Ignore your homework. If you do, you will fail the class.

IaDs involve the coordination of an imperative form and a declarative, with the second conjunct often being the consequent of the first, either desirable or undesirable. The cases where the imperative in the first conjunct has a directive force are called Type I IaDs ((96)a) and the cases where the speaker is trying to get the addressee to *not* do what the imperative says are Type II IaDs ((96)b).⁴⁷

As far as *vreun* is concerned, it is only licensed in Type II IaDs, as in the sentences below:

- (97) Incalcă tu **vreo** regulă de circulație și ai să vezi ce amendă plătești!⁴⁸
 Break.2SG you V-A rule of circulation and FUT.2SG SUBJ see.2SG what fine pay.2SG
 ‘Break some driving rule and you’ll see what fine you’ll pay’
- (98) Lasă tu **vreun** geam deschis și o să vezi ce curent o să fie!
 Leave.2SG you V-A window open and FUT SUBJ see.2SG what draft FUT. SUBJ be.3SG
 ‘Leave some window open and you’ll see how windy it gets’

⁴⁶ I am grateful to Sabine Iatridou (p.c.) for pointing out to me the relevance of this type of imperatives.

⁴⁷ The terms are taken from Iatridou (2008), class notes for *Imperatives* course at EALing.

⁴⁸ Some speakers, including me, systematically add *numai* ‘only’ in type II IaDs, with undesirable consequents. A similar pattern seems to hold in Greek, as pointed out to me by Sabine Iatridou (p.c.).

- (99) ??/*Cumpără-i *vreo* floare și o să se înveselească
 Buy.2SG.CL V-A flower and FUT. SUBJ REFL cheer.up.3SG
 ‘Buy her some flower and she will cheer up.’

As shown by (99), the imperative forms coordinated with a desirable consequent are judged highly degraded or completely unacceptable by speakers.

This kind of imperatives clearly differ from the alternative-presenting ones previously argued to license *vreun*. I follow Han (2000), Schwager (2006) and Russell (2007) and assume that the reason why *vreun* is licensed in this environment is that Conjunct1 of an IaD is/becomes a conditional antecedent. As such, Conjunct1 refers to hypothetically possible worlds and Conjunct2 is the consequent. Under this account, a sentence like *Come closer and I’ll shoot* is interpreted as *If you come closer, then I’ll shoot*.⁴⁹ One argument in favor of this conditional analysis is the licensing of NPIs in Conjunct1 of sequences of this kind, first noted by Bolinger (1967) and illustrated in (101)-(102):

- (100) *Come *any* closer.
 (101) Come *any* closer and I’ll shoot.
 (102) *Lift a finger* to help her and you’ll be sorry.
 (103) *Do eat *any* raw pork and you’ll contract trichinosis.
 (104) **Anyone* turn out the light and I’ll show you my slides.

The occurrence of an NPI in (101)-(102) sets them apart from usual imperatives, illustrated in (100), and from type I IaDs, as in the sentences in (103)-(104) (from Russell 2007), where NPI *any* is ruled out. The insertion of *do* (103) or of an overt subject (104) ensures that we are dealing with a Type I IaD, i.e. an imperative with directive force. Note that this kind of IaD can also ultimately have a conditional-like reading *If you study hard, you will pass the exam*. The important distinction is that Type II IaDs are conditional-like in the first place (they are not ‘real’, directive imperatives), whereas type I IaDs are cases of speech act conjunction where the first conjunct is an imperative and the second conjunct is modally subordinated to the first. (Schwager 2006, Russell 2007): *Do study hard! If you do, you will pass the exam*.

Adopting this line of thinking, I take the licensing of *vreun* in these imperatives as an instance of NPI-licensing, similar to the environments discussed in section 1.1.

⁴⁹ An interesting note: in the formalization of the idea that IaDs (both Type I and Type II) are amenable to conditionals, Han (2000) argues that Conjunct1 is interpreted like a *might*-statement, introducing a hypothetical possibility, about which Conjunct2 then makes a modally subordinated claim. Accordingly, a sentence like *Come closer and I’ll shoot* ends up being interpreted as *You might come closer and then I’ll shoot*.

To sum up the distribution of *vreun* in imperatives, we have seen two different patterns, which can be assimilated to the previously established generalizations. On the one hand, Type II IaDs are NPI-licensing contexts and as such, do not constitute a different licensing environment. As far as other types of imperatives are concerned, I have adopted the assumption that imperatives are ambiguous modalized propositions, and have shown that the occurrence of epistemic *vreun* depends on the interpretation of the imperative. More specifically, I have shown that imperatives involving deontic modality uniformly rule out *vreun* and presented evidence that only suggestion-like imperatives license the occurrence of *vreun*. Furthermore, I have implemented this intuition by arguing that this item is only licensed in alternative-presenting imperatives, i.e. in contexts where the proposition containing the determiner is one among other possible courses of action entertained by the speaker. Only imperatives that clearly convey this interpretation can thus satisfy the requirement responsible for the licensing of *vreun*, namely that the embedding operator entails that the speaker is not committed to p in all of his doxastic alternatives. On this account, imperatives that license epistemic *vreun* pattern with other non-polarity contexts of occurrence, which consequently can all be subsumed under a single requirement.

3 Summary

This chapter presented an overview of the distribution of the determiner *vreun* and establishes two basic generalizations about the contexts where it is licensed, repeated below:

(a) *vreun* is a negative polarity item: *vreun* is licensed in negative-polarity contexts

(b) *vreun* is an epistemic item Licensing pattern: Op [...*vreun*...]

Licensing constraint: Op p entails that the epistemic agent's doxastic alternatives include *non p*-worlds

These two generalizations reduce its occurrences to two semantic licensing environments: negative polarity contexts and the scope of operators quantifying over possible worlds, which entail that the epistemic agent is committed to the possibility that *not p* holds in some of his beliefs worlds. The following table presents a more complete overview of the distribution of

*vreun*⁵⁰:

Contexts	<i>Vreun</i> -indefinites
Questions	✓
If-antecedents	✓
Restrictor of a universal (over individuals/times)	✓
<i>Before</i> -clauses	✓
Scope of <i>without</i>	✓
Scope of downward-entailing operators	✓
Scope of negative predicates	✓
Scope of sentential negation	✓
Epistemic modals	✓
Hypotheticals-presumptive	✓
Disjunctions	✓
Scope of epistemic(-alternative-entailing) attitude predicates	✓
Scope of <i>hope</i>	✓
Scope of <i>prefer</i>	✓
<i>Alternative-presenting</i> imperatives	✓
(Type II) Imperative and declarative (IaDs)	✓
Affirmative/Existential sentences	*
If-consequents	*
Scope of universal quantifier	*
Non-epistemic modals	*
Generics	*
<i>Choice-offering</i> imperatives	*
Scope of volitional predicates	*
Factive verbs	*

Table 1 The distribution of *vreun*

As far as the NPI-behavior is concerned, we have seen it occurs in all typical polarity contexts, usually analyzed as involving downward-entailing operators, an issue I discuss in the next chapter. I have also considered in more detail licensing by sentential negation and argued the exclusion in simple negative sentences can be attributed to the fact that Romanian is a negative concord language.

Next, I have argued that *vreun* occurs in another kind of semantic licensing environment, determined by the kind of beliefs the epistemic agent has, and have labeled this use *epistemic*. The study of non-polarity contexts revealed that the licensing of epistemic *vreun* is sensitive to the semantic properties of the operator under which *vreun* occurs, and I have pursued the hypothesis that all licensing operators entail the existence of doxastic alternatives entertained by the speaker in which the proposition containing *vreun*, *p*, might not hold. This requirement is satisfied in the scope of overt epistemic modals, of contexts dubbed

⁵⁰ There is one context of occurrence, mentioned by Farkas under the label *frequentative imperfectives*, which involve existential/random quantification over times. I address the licensing of *vreun* in this environment and the way it squares with the established generalization in Chapter 3, after considering in more detail the analysis developed by Farkas.

hypotheticals (presumptive, disjunctions) or of certain attitude-embedding predicates like *believe*, *assume* or *hope*. Furthermore, we have examined the distribution of *vreun* in imperatives, previously claimed to be non-licensing contexts (Farkas 2002) and argued that alternative-presenting imperatives allow the occurrence of *vreun* precisely in virtue of the fact that they trigger the existence of alternatives other than the modalized proposition embedded under the imperative operator.

Now that we have established that *vreun* is subject to these generalizations, our next task will be to understand the type of overlap exhibited by *vreun* and to answer the numerous questions it raises, already formulated in Chapter 1. In particular, an immediate question is how to relate these generalizations. Is there a common property of the licensing contexts to which the interpretation of *vreun* is sensitive? Are we dealing with distinct uses, two different *vreun* items, depending on whether it occurs in a polarity or non-polarity environment? Is there a way to unify these two uses under a single label (e.g. nonveridicality, as proposed by Giannakidou (1997, 2009)) and to see the licensing of *vreun* in these two types of environments as following from a single property? Furthermore, we need to integrate *vreun* into a typology of semantically dependent items, a task which I have shown in Chapter 1 to be far from trivial. Once we have a better sense of the empirical pattern, we have to draw the consequences of these generalizations for the models of polarity-sensitivity proposed in the literature. More precisely, while most of the literature on polarity items has focused in downward-entailing and modal contexts, the distribution of *vreun* draws attention on a different kind of licensing environment, which has received much less attention. This is the object of the next chapter, where I compare the constraints on the distribution of *vreun* with similar restrictions argued to be relevant for other (classes of) polarity-sensitive items.

Chapter 3

Previous analyses and related items

The goal of this chapter is to make sense of the empirical facts previously introduced, that I have argued to be captured by the following generalizations:

(1) **(a) *vreun* is a negative polarity item:** *vreun* is licensed in negative-polarity contexts

(b) *vreun* is an epistemic item Licensing pattern: Op [...*vreun*...]

Licensing constraint: Op *p* entails that the epistemic agent's doxastic alternatives include *non p*-worlds

The following table presents a more complete overview of the distributional pattern of *vreun* established in the previous chapter:

Contexts	<i>Vreun</i> -indefinites
Questions	✓
If-antecedents	✓
Restrictor of a universal (over individuals/times)	✓
<i>Before</i> -clauses	✓
Scope of <i>without</i>	✓
Scope of downward-entailing operators	✓
Scope of negative predicates	✓
Scope of sentential negation	✓
Epistemic modals	✓
Hypotheticals: <i>presumptive</i>	✓
Disjunctions	✓
Scope of 'epistemic' attitude predicates	✓
Scope of <i>hope</i>	✓
Scope of <i>prefer</i>	✓
<i>Alternative-presenting</i> imperatives	✓
(Type II) Imperative and declarative (IaDs)	✓
Affirmative/Existential sentences	*
If-consequents	*
Scope of universal quantifier	*
Non-epistemic modals	*
Generics	*
<i>Choice-offering</i> imperatives	*
Scope of volitional predicates	*
Factive verbs	*

Table 1 The distribution of *vreun*

The complex distribution of *vreun* indicates that it functions both as a negative polarity item, occurring in typical negative polarity contexts, and as an epistemic item sensitive to the speaker's doxastic alternatives, in 'positive', i.e. non-polarity contexts. An immediate

question this kind of overlap raises is whether we are dealing with an ambiguous item, or rather two different uses of a single item, which we could subsume under a unifying label, and whose meaning makes it compatible with both negative and non-negative contexts. In this chapter, I provide a detailed discussion of both types of answers present in the literature: an ambiguity approach, which assumes the existence of two *vreun* items (Farkas 2005), in section 1) and a more uniform account in terms of nonveridicality, along the lines of Giannakidou (1999, 2009). I show that neither of these approaches can fully integrate the pattern summarized in table 1 above, the first reason being that part of the data discussed in the previous chapter represent new empirical facts (such as, for example, the occurrence in the scope of epistemic modals, of epistemic verbs, or in imperatives). Accordingly, the analyses proposed by Farkas and Giannakidou are only meant to account for a subset of the licensing environments, and therefore need to be extended in order to accommodate the full distributional pattern. Setting aside incompleteness, a more serious challenge comes from the fact that the licensing conditions posited in either of these two accounts make wrong predictions regarding the distribution of *vreun*.

The next step in making sense of the licensing pattern of *vreun* is to consider its similarities and differences with other semantically dependent determiners, and in particular items argued to be sensitive to the presence of epistemic alternatives, such as existential FCIs, French singular *quelque* (Corblin 2004, Jayez & Tovenca 2005, 2007, 2008) or Spanish *algun* (Alonso-Ovalle & Menendez-Benito 2009). On the basis of the noted similarities and differences, I maintain that the distribution of *vreun* is regulated by semantic constraints, rather than conditions of use, and conclude that we need a theory of polarity sensitivity which can account for its ungrammaticality in the absence of an appropriate licensor, as presented in Chapter 4. This comparison contributes to situating *vreun* in the landscape of dependent items, and leads to a better understanding of the challenges it raises to current analyses of polarity phenomena.

1 The ambiguity approach: Farkas 2005

The first observation concerning the distribution of *vreun* is that it shares uses of both typical polarity items, such as English *any* or *ever*, and of ‘existential’ items like *some*, when it occurs in non-polarity contexts (e.g. hypotheticals). A possible way to account for this situation is to assume that in fact there is no single lexical entry for *vreun*, but rather its occurrences in both polarity and non-polarity environments reflect a lexical ambiguity. This is

the position defended in Farkas (2005), on the basis of the facts introduced in Farkas (2002), which represents the first attempt to provide a detailed description of the distribution of *vreun*.

1.1 The proposal

In this section, I introduce the analysis of *vreun* developed in Farkas (2005), which is part of an attempt to provide a uniform account for all items covering the uses of English *any*. Farkas generalizes the scalar analysis developed in Lee & Horn (1994), Horn (2000), based on the assumption that polarity items denote low points on a certain scale (be it a quality or quantity scale), and puts forward a unified account of several dependent determiners in Romanian. In the framework Farkas adopts, determiners introduce variables (discourse referents) in the semantic representation. Special determiners come with additional restrictions, such as domain restrictions or constraints on how to assign values to the variable they introduce, responsible for their distribution and interpretation. With respect to special determiners (which in the terminology adopted here correspond to polarity items), Farkas imports insights from the scalar account, (also generalized in Kratzer & Shimoyama 2002 or Menendez-Benito 2005, among others), and assumes they introduce special variables which require the introduction of a set of alternatives. In trying to identify the different equivalents of *any* in Romanian, she discusses several classes of elements, labeled *undifferentiated choice items* (UCIs), whose interpretation involves a set of alternatives (that constitute possible values for this expression⁵¹). The notion of undifferentiated choice item is meant to subsume uses of both negative polarity (existential) and free-choice (universal) *any*, whose distribution in Romanian is covered by several morphologically distinct paradigms: *negative concord items* (*n-words*) and *vreun* as existential UCIs (mainly the equivalents of NPI *any*) and the *ori*-series as universal UCIs (similar to free-choice *any*).

The defining property of UCIs is the fact that they denote a set of maximal non-differentiated alternatives. On this account, alternatives represent assignment function/situation pairs and they are *maximal*, meaning they include all possible values of the relevant (individual) variable within the limits of contextual linguistic or extra-linguistic restrictions⁵². Since the set of alternatives is assumed to be maximal, it follows that it includes even the least likely ones, and as such, items of this kind give rise to *widening*. This ‘maximality’ property of the set of alternatives is therefore a way of implementing the domain

⁵¹ Alternatives of this kind are also called *verifying*: they verify the expression in which the item occurs.

⁵² Contextual restrictions, either on the individuals or on the situations, are directly built into the semantics of these items *via* the individual and the situation variables.

widening effect typically attributed to polarity items like *any* (Kadmon & Landman 1993), which I have shown in Chapter 1 to be the core component of scalar approaches to polarity sensitivity.

Farkas also suggests, following Giannakidou's (2001) account of free-choice items, that alternatives differ from each other with respect to the values of both the individual and the situation variable, which means that the choice of an alternative (an individual – situation variable pair) excludes any other choice. Formally, UCIs introduce a variable subject to the *mutual exclusivity requirement*⁵³ which imposes strict co-variation between the individual and the situation variable for each pair in the set. Crucially however, alternatives are equal, i.e. any choice of alternative is a good value assignment.

In this set-up, the restrictions on the interpretation of an NP are encoded as a [UC] (undifferentiated choice) feature carried by the determiner. What is specific to *vreun* is that it is also marked as necessarily existential and thus carries both a [UC] and an [∃] feature, a licensing feature which requires that the indefinite be in the scope of an existential quantifier. These features encode the interpretive requirements that constrain the distribution of *vreun*. According to Farkas, its necessarily narrow scope, together with the presence of the situation variable which needs to vary for each individual value chosen by the assignment function are responsible for its exclusion from simple affirmative sentences (where the variation requirement is not satisfied) and its restriction to polarity contexts.

Farkas' work has the merit of introducing *vreun* in the literature on polarity items, and as such drawing attention on less known types of semantic dependencies. The (2005) paper constitutes the first attempt to account for the distribution of *vreun* and the first articulated proposal on how it could integrate into the realm of dependent determiners. However, while I share most of the intuitions on the distribution of *vreun* detailed in Farkas' papers, I argue that there are several problems with the specific implementation she develops. In particular, I present evidence that her analysis treats on a par *vreun* and free-choice items, both analyzed as UCIs, a unifying account that makes wrong empirical predictions. In the following, I focus on the interaction with necessity modals and argue that Farkas wrongly predicts subtriggering effects in these contexts, and more generally, cannot capture the distinctions that I have argued to be relevant for the licensing of *vreun* in modal contexts.

⁵³ The *mutual exclusivity requirement* is formally defined as follows (Farkas 2005:11):

(i) A set of alternatives *F* is *mutually exclusive* iff for any two pairs $\langle v_i, s_j \rangle$ and $\langle v_{i'}, s_{j'} \rangle$ it provides, $i' \neq i$ and $j' \neq j$.

1.2 *Vreun* under necessity modals

A key feature of undifferentiated choice items, and consequently of UCI *vreun*, is that the alternatives they bring about differ from one another with respect to the value assigned both to the individual and to the situation variable. This is implemented as the *mutual exclusivity*, also called *variation*, condition. In order for this variation constraint to be satisfied, there has to be an operator which ranges over a set of situations or worlds and which binds the situation variable contributed by the UCI, a requirement that cannot be met in episodic sentences, which consequently preclude the use of UCIs. This is a long-standing observation in the literature on free-choice items (e.g. Dayal 1998, Giannakidou 2001, Jayez & Tovenca 2002, Menendez-Benito 2005) which are typically licensed in modal contexts, where the presence of an operator quantifying over worlds/situations allows the variation condition to be satisfied. This kind of constraint is generally assumed to account for the contrast between the ungrammaticality of free-choice items in episodic sentences, illustrated in (1) below, where there is no operator that can ensure variation between individuals and situations where I saw them in the garden, and their licensing in intensional contexts, such as the generic sentence in (2):

(1) *I saw *anybody* in the garden.

(2) *Any* bird flies.

On this proposal, the mutual exclusivity condition on the alternatives also ensures that a UCI cannot occur in the scope of a necessity modal, which would bind the situation variable associated with the UCI. In order to illustrate this restriction, Farkas gives the example in (3), where the necessity modal *must* requires the choice of flowers picked by the addressee be constant across permitted worlds, a situation that is incompatible with the use of an UCI, whose value needs to vary across worlds:

(3) #You *must* pick *any flower* (in this bunch).

Crucially for our present concerns, Farkas explicitly predicts any UCI to be sensitive to this requirement. To use her own words: “given our treatment of *vreun* and *ori* [i.e. free-choice] indefinites, we expect both to be sensitive to this distinction” [Farkas 2005:17]. As an illustration, Farkas provides the sentences in (4) with free-choice *orice* ‘any’ and *vreun* under

the necessity modal *trebuie* ‘must’⁵⁴:

- (4) #*Trebuie* să culegi **orice** floare/*vreo* floare. [Farkas 2005:17]
must SUBJ pick.2SG any flower/V-A flower.
‘You must pick any flower/some flower.’

According to Farkas, one way to rescue this configuration is by allowing the verifying values to vary, something which happens if the descriptive content of the noun is further restricted, as in a sentence like (5) below:

- (5) You must pick up *any flower you find*.

In this case, Farkas argues, the situation variable is bound NP-internally. Consequently, the alternatives involve a pairing of flowers and situations in which you find that flower. Flowers you find differ across situations of finding them and thus the flowers you must pick vary as well. The mutual exclusivity requirement is thus claimed to be satisfied. This is a way of implementing the crucial assumption in Dayal’s (1995) proposal on *subtriggering*, namely that an appropriate (NP-internal) closure of the situation variable ensures the variation required by free-choice *any*. According to Farkas, this requirement holds for any item bearing a [UC] feature, such as free-choice *ori* (given in Chapter 1, section 3) items and *vreun* in Romanian.

The analysis advocated by Farkas relies on the assumption that both free-choice items and *vreun* are UCIs. As such, this account makes two important predictions: first, both types of items are expected to be uniformly ruled out under necessity modals; second, subtriggering should rescue their occurrence in these contexts. In the following, I show that neither of these predictions is borne out: first, I focus on subtriggering effects and argue that they do not occur with *vreun*, contrary to Farkas’ claim. Next, I return to the distribution of *vreun* under modals, which I have argued in Chapter 2 to be sensitive to the type of modal base involved, regardless of the distinction necessity *versus* possibility modal. Farkas’ proposal cannot derive this important generalization.

The rescuing effect of subtriggering is well-known for free-choice items, though not

⁵⁴ Farkas marks these sentences as being odd rather than ungrammatical, as attested by the use of ‘#’. Whereas I agree with this judgment for the free-choice item *orice*, I would certainly mark as ungrammatical the example involving *vreun*, which has a clearly deontic reading and as such, is ruled out. Note that Farkas (2002) marks sentences with *vreun* in the scope of necessity modals as being ungrammatical:

- (i) **Trebuie* să-mi cumpăr **vreo** carte despre Utrecht. [Farkas 2002 :16]
must SUBJ-me buy V-A book about Utrecht
‘I must buy myself a book about Utrecht.’

Farkas (p.c.) informs me that she also rejects *vreun* in the scope of non-epistemic necessity modals.

necessarily properly understood. However, by assuming a similar semantics for free-choice items like *orice* ‘any’ and a dependent (existential) determiner like *vreun*, both analyzed as UCIs, Farkas automatically predicts that the subtriggering facts carry over to *vreun*. Consequently, under this account, we expect sentences with *vreun* in the scope of necessity modals to be rescued, as in the case of the UCI in (5). This prediction is clearly not borne out, as illustrated by the ungrammaticality of the sentence in (6):

(6) **Trebuie* să scriu ***vreun*** articol despre ultimele alegeri.

Must SUBJ write.1SG V-A article about last.DEF elections

‘I must write some paper on the last elections.’

Irrespective of the presence of a post-nominal modifier, the sentence is ruled out. Even in modal contexts where we ensure the situation variable is internally bound and thus satisfies the mutual exclusivity requirement, *vreun* is not allowed under necessity modals, unlike what happens in the case of free-choice items, illustrated in (5).

In Farkas’ system, the only way to obtain a difference between a ‘universal’ free-choice like *any* and an existential item like *vreun* is in terms of scope: if the alternatives triggered by a UCI have widest scope, the result is universal interpretation, whereas when they are bound by an existential quantifier, the UCI acquires an existential reading⁵⁵. However,

there is no way in which scope could be put to work to derive the contrast between the rescuing effect of subtriggering in (5) and its absence in (6). On the one hand, this indicates that the difference between *universal* and *existential* UCIs cannot simply amount to wide *versus*

⁵⁵ More precisely, Farkas illustrates this scope difference with the two sentences in (a) and (b) below, which are claimed to have the interpretations in (i) and (ii): (Farkas 2005:15):

(a) *Dacă* pleacă ***vreun*** student, va fi rău.

If leaves v-a student will be bad

‘If a/any student leaves, it will be bad.’

(i) $\forall s: [\exists x_F: \text{student}(x_F) \text{ leave}(x_F, s)] [\exists s': s \leq s' \text{ bad}(s')]$

(b) *Dacă* pleacă ***orice*** student, va fi rău.

if leaves o-any student will be bad

‘If any student leaves, it will be bad.’

(ii) $x_F: \text{student}(x_F) [\forall s: [\text{student}(x_F) \ \& \ \text{leave}(x_F, s)] \exists s': s \leq s' \text{ bad}(s')]]$

According to the formula in (i), the existential quantifies over alternatives in the set $\mathcal{F}$ and for every situation quantified over by the universal (introduced by the conditional), there has to be a verifying alternative in $\mathcal{F}$. This means that for every situation in which there is a student who leaves, there is a situation in which things will be bad. In contrast to this, the same sentence with a universal UCI, given in (b), has the representation in (ii). In this case, the alternatives triggered by the universal UCI have wide scope and the sentence has the interpretation that for each individual-situation pair in the set of alternatives, the conditional must be satisfied, i.e. there is a situation in which things will be bad.

narrow scope of the alternatives with respect to other operators in the context. But, most importantly, these facts indicate that the distribution of *vreun* under necessity modals cannot be captured under an analysis in terms of mutually exclusive alternatives, which treats *vreun* as a UCI and thus incorrectly predicts subtriggering effects.

A related, and arguably more important shortcoming of Farkas' account is that it cannot integrate the interaction between *vreun* and modality. More specifically, her treatment of *vreun* as a UCI predicts it to be uniformly ruled out under necessity modals (in the absence of subtriggering), just as is usually the case for free-choice items⁵⁶, as attested by the example in (4). However, this prediction runs counter to empirical facts. In the previous chapter, I have already shown that the partition that is relevant in describing the occurrence of *vreun* under modal verbs is not in terms of *universal* (associated with necessity modals) *versus existential* (associated with possibility modals) quantification over accessible worlds, but rather epistemic *versus* non-epistemic modal bases. The following sentences illustrate this contrast in the scope of the necessity modal *trebuie* 'must', with an example where the modal is interpreted with respect to an epistemic modal base, as in (7), or with respect to a circumstantial base in (8):

- (7) Cu numele lui, *trebuie* să fie ***vreun*** aristocrat.
 With name.DEF his must SUBJ. be.3SG V-A aristocrat
 'Given his name, he must be some aristocrat.'

- (8) **Trebuie* să ies cu ***vreun*** prieten.
 must SUBJ go-out.1SG with V-A friend
 'I must go out with some friend.'

Accordingly, *vreun* cannot be argued to be uniformly ruled out in the scope of necessity modals, a situation which is completely unexpected under Farkas' proposal. My discussion of the constraints on the licensing of *vreun* has shown that any analysis that assumes that the relevant distinction is that between universal and possibility modals, on a par with free-choice items, misses an important empirical fact, namely the role of epistemic operators, i.e. operators interpreted with respect to the speaker's beliefs. More precisely, I have defended the hypothesis that in order for *vreun* to be licensed, the speaker's doxastic alternatives must include worlds where the proposition containing *vreun* does not hold. I have shown that this

⁵⁶ There are well-known cases of free-choice items under necessity modals, as discussed extensively in Jayez & Tovina (2002). This simplification doesn't bear on the discussion of Farkas' account.

kind of entailment can be triggered by both possibility and necessity modals, as long as they are interpreted with respect to an epistemic modal base.

Furthermore, as expected under my proposal, the presence of a post-nominal modifier is irrelevant to the (non-)licensing of *vreun*, so nothing else needs to be said on why subtriggering effects do not show up with this determiner. Nothing in what I have said so far argues in favor of a similar treatment of free-choice items and *vreun*, an issue to which I return in more detail in section 3. Once we acknowledge the crucial role of the entailments associated with the operators embedding *vreun*, the issue of subtriggering is obviously not connected to the licensing constraint responsible for the distribution of *vreun*. Consequently, I maintain that the hypothesis I'm advocating is superior in terms of empirical coverage and correctly captures the interaction between *vreun* and modal operators.

1.3 *Undifferentiated choice versus Random choice: two lexical items?*

In the previous subsection, I have presented Farkas' account of *vreun* as an undifferentiated choice item, assumed to be subject to the mutual exclusivity requirement. Setting aside for the time being the problems I have identified for UCI *vreun*, I now turn to another important aspect of her proposal, namely the assumption that *vreun* is an ambiguous item.

1.3.1 *Vreun as a Random Choice Item*

Farkas argues that the constraints governing the use of UCIs only partially account for the contexts where *vreun* is licensed. In particular, she discusses the occurrence of *vreun* in two further, non-polarity, environments, for which a scalar analysis is not tenable. The relevant examples are given below, a case of frequentative imperfective in (9) and a hypothetical in (23) (Farkas 2002:137):

- (9) Din când în când trenul se oprea în *vreo* haltă
 From when in when train.DEF REFL stop.IMPERF.3SG in V-A station
 și câte un navetist deschidea un ochi.
 and DISTR a commuter open.IMPERF.3SG an eye
 'From time to time the train would stop in some station and a/some commuter would open an eye.'

- (10) În balta din spatele cantonului, ceva plescăi scurt, *vreun*
 in pond.DEF from back.DEF station.GEN something splashed.3SG briefly V-A
 pește sau *vreo* rață.
 fish or V-A duck

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

According to Farkas, in these contexts, *vreun* cannot be a UCI, “because of the clash between the open-ended nature of UC and the restricted situations that are involved”; intuitively, the pairing between the situations where a train stops and the situations where a commuter opens his eyes is random. In the second example, the choice of *vreun* stresses the uncertainty of the existence of a verifying value in the world of evaluation – there might be no duck involved, and there might be no fish. These interpretations are incompatible with the undifferentiated choice meaning assumed for other contexts of occurrence of *vreun*, where there have to be verifying alternatives and crucially, any alternative has to be able to constitute a possible value. In contrast to this, in the contexts above, what seems to be at stake is the possible *non-existence of an alternative* that would make the proposition true. Accordingly, Farkas posits the existence of a different type of *vreun*, called Random Choice [RC], and proposes that the non-UC uses of *vreun* are subject to the following requirement:

(11) *Uncertain Existential Requirement (UER)*

Non-UC *vreun* indefinites are unacceptable in case the existence of a verifying value for the NP is entailed at all relevant worlds/situations

This requirement is meant to capture the intuition that the contexts where *vreun* occurs do not presuppose the existence of a verifying value; in (9) for example, among the relevant situations (quantified over by the adverb ‘from time to time’), there might be stations where no train stops. Similarly, in the hypothetical use in (10), the speaker doesn’t commit herself to the existence of a duck or a fish in all possible worlds compatible with her beliefs, a restriction I have discussed extensively in the previous chapter.

In order to account for the full range of distribution of *vreun*, Farkas argues that the Random Choice items involve contextual alternatives, which are *possible values consistent* with a certain context, at a particular time, subject to being narrowed down when further information is added and which do not necessarily exhaust the domain of the NP. In addition, as a random choice item, *vreun* requires these alternatives to be non-differentiated. Therefore, the uses of *vreun* as a UC and as an RC item share the requirement that alternatives count as

equal. They differ with respect to the types of alternatives involved: maximal set of *verifying* alternatives (of equal contextual salience), i.e. actual values, for the former, and contextual alternatives, (merely) possible values, for the latter.

Summing up, the analysis proposed in Farkas (2005), based on the description of the empirical facts in Farkas (2002), relies on the assumption that *vreun* requires the introduction of a set of alternatives. Depending on the type of alternatives it brings about (*verifying* in the case of UCIs and *contextual* in the case of RCIs), and the way these alternatives interact with operators in the context, *vreun* is subject to different requirements, namely *mutual exclusivity* in typical polarity or free-choice contexts and *uncertain existence* in frequentative imperfectives or hypothetical contexts.

1.3.2 Problems with the lexical ambiguity hypothesis

An important consequence of this proposal is that it amounts to the treatment of *vreun* as an ambiguous element. More precisely, it posits the existence of two different lexical items *vreun*, undifferentiated choice and random choice, which share the fact that they trigger non-differentiated alternatives, but the connection between the two uses seems accidental. In the following, I will compare Farkas' proposal with mine and argue that the lexical ambiguity assumption is both unnecessary and problematic.

In the previous chapter, I have argued that *vreun* is licensed in two types of contexts: negative polarity and in the scope of operators entailing the existence of doxastic alternatives where the proposition where *vreun* occurs might be false. On this proposal, *vreun* is a dependent determiner, with a single lexical entry, which has an NPI use and an epistemic use. In Chapter 4, I defend the hypothesis that both these uses can be derived from a single semantic property, namely domain widening. What is important at this point is to bear in mind that I do not assume there are two distinct lexical items *vreun*, but rather that the two uses develop from the same underlying property.

Now, focusing on how the two proposals capture the distribution of *vreun*, I argue that my hypothesis squares much better with the range of data introduced in this thesis. More precisely, Farkas' ambiguity approach makes it difficult to extend her analysis to the full set of licensing environments previously identified, as we would have to decide whether it is the undifferentiated or the random choice *vreun* that is being licensed. Since there are no clear tests to distinguish them, the extension is not straightforward. I will illustrate this problem with several different environments and show that my partition between the NPI use and the epistemic use captures the empirical facts without any further assumptions.

Let us first focus on negative polarity contexts, where I have argued that *vreun* is no different from typical NPIs. One piece of evidence in favor of this claim comes from the licensing of *vreun* under **sentential negation**. Recall from the discussion in Chapter 2, section 1.2, that the occurrence of *vreun* under sentential negation is determined by pragmatic factors, related to the fact that Romanian typically resorts to negative concord in negative clauses. More precisely, *vreun* is allowed to occur in the scope of clausemate negation either to yield a domain widening effect or to avoid an ambiguity between a double negation and a negative concord reading, which would arise from the use of two negative concord items. Crucially, I have shown that this behavior is typical of NPIs cross-linguistically. In contrast to this, on the basis of the non-occurrence of *vreun* in simple negative sentences such as *I don't have any friend*, Farkas (2002) dismisses an NPI-analysis for *vreun*. In her (2005) paper, she doesn't address anymore the issue of sentential negation, and it is unclear how she would account for the negative clauses where *vreun* *does* occur, in other words, whether she would assume that *vreun* behaves as a UCI (triggering a set of maximal mutually exclusive alternative) or a RCI for. Farkas gives no clear elements on how to distinguish the two classes, apart from saying they associate with different types of alternatives. If it is a UCI, this might provide an explanation for the domain-widening effect triggered by *vreun*, but one still has to account for the difference with free-choice items, which do not usually occur under sentential negation. On the other hand, the uncertainty of existence requirement would also be satisfied here, so it is hard to see how we could decide between a UC and a RC *vreun*. Whatever the choice between the two options would be, Farkas would still need to add things on why *vreun* only occurs under sentential negation in 'special' situations, unlike, for instance, UCI *any*. Now, on my proposal, the role of pragmatic factors and the use of *vreun* in precisely those contexts where there is an extra reason to override the competition with negative concord, such as ambiguous sentences, follows naturally from the hypothesis that *vreun* behaves like a regular NPI (in a negative concord language), and consequently nothing else needs to be added to explain its interaction with sentential negation.

The interaction with **universal quantification** for what Farkas calls random choice *vreun* is also problematic. Recall that on her account, RC *vreun* is used whenever the existence of a verifying value is not asserted or presupposed (the *uncertain existence requirement*). In support of this condition, Farkas advances that universal quantification over situations makes *vreun* infelicitous, as in the following example:

- (12) #*De fiecare dată când trenul se oprea în vreo haltă ...*
 OF each time when train.DEF REFL stop.IMPERF.3SG in V-A station ...
 ‘Every time the train would stop in some station...’

According to Farkas, universal quantification over situations entails the existence of a value for the DP *vreo haltă* ‘some station’ in all train-stopping situations, thus violating the ‘uncertain existence’ constraint. However, the empirical claim is clearly wrong, as illustrated by the sentences in (13)-(14):

- (13) *De fiecare dată când scriu pe vreun blog, îmi schimb pseudonimul.*
 OF each time when write.1SG on V-A blog, CL change.1SG pseudonym.DEF
 ‘Every time I write on some blog, I change my pseudonym.’

- (14) *Ori de câte ori/Când are vreo conferință, e foarte stresat.*
 times OF DISTR times/when have.3SG V-A conference, be.3SG very stressed
 ‘Anytime/When(ever) he has some conference, he is very stressed.’

Both attested examples and speakers’ judgments converge on the fact that this context of occurrence is frequent, contrary to what Farkas defends. The sentences above involve universal quantification over situations and *vreun* can successfully occur here. In fact, a close look at attested examples reveals that the occurrences in time-clauses with universal quantifiers like *ori de câte ori* ‘anytime’, *când* ‘when’ and *de fiecare dată* ‘every time’, yielding an interpretation equivalent to ‘whenever’, represent a common licensing context. As already shown in the previous chapter, this situation is fully captured by the generalization establishing that *vreun* is licensed in typical negative polarity contexts: the restrictor of a universal quantifier (in this case, over times) is a downward-entailing context, and as such qualifies as an NPI-licensing environment. On the basis of these facts, I argue that Farkas’ ‘uncertain existence requirement’ cannot explain the distribution of *vreun* in the restrictor of universal quantifiers over times, whereas the hypothesis that *vreun* behaves like a typical NPI offers a natural way of integrating these facts.

Let us now turn to the distribution of *vreun* in **non-polarity contexts**. In the previous chapter, I have shown that Farkas’ claim that *vreun* is ruled out in imperatives is inaccurate and argued that it can occur in suggestion-like, alternative-presenting imperatives, such as the one illustrated in (15):

(15) Vorbește cu **vreun** vecin, să primească el pachetul.

Talk.2SG with V-A neighbor SUBJ receive.3SG he package.DEF

‘Talk to some neighbor, so that he receives the package.’

Once again, it is not straightforward to determine whether this occurrence involves a UCI, typically licensed in (all) imperatives, or an RCI, licensed in virtue of the fact that the existence of neighbors in all relevant worlds is not entailed by this kind of imperative. A similar objection applies to other non-polarity cases, such as the licensing under *hope*, illustrated in (80), contrasting with the ungrammaticality of (17):

(16) *Sper* că ai adus **vreun** cadou.

Hope.1SG that have.2SG brought V-A present

‘I hope you brought some present.’

(17) **Vreau* să aduci **vreun** cadou.

want.1SG SUBJ bring.2SG V-A present

‘I want you to bring some present.’

According to Farkas, the uncertain existential requirement “renders *vreun* indefinites infelicitous within the scope of *want* under the assumption that the relevant situations here are worlds ranked relatively high according to the subject’s priorities”. However, *hope* also expresses something on what the subject would like to be the case, that is, it ranks worlds according to the subject’s preferences. Consequently, the occurrence of *vreun* under this attitude verb is clearly not expected. Now, let us wonder what could be responsible for this licensing under Farkas’ proposal. Taking very seriously the analogy Farkas establishes between the use of *any* and UCI *vreun*, and given that *any* can occur under *hope* (e.g. *I hope anyone responds to my invitation*), we should analyze this occurrence as an instance of UCI *vreun*. On the other hand, I have shown that *hope* entails that the speaker is not committed to the truth of the embedded proposition in all his belief worlds, a constraint presumably rather similar in spirit to the uncertainty of existence characterizing random choice items. Once again, we are confronted with the difficulty of deciding between the two items, and since the choice seems rather arbitrary, this makes it hard to see the predictions of Farkas’ account for the behavior of *vreun*. If there are contexts where both can in principle occur and we have no way of setting the two apart, it is hard to see how a speaker could ever learn the distribution and the licensing constraints on each type of *vreun*. Instead, I take this confusing situation to indicate that the distinction Farkas assumes is on the wrong track. Whether or not the details

of this analysis could be worked out in the end so that it integrates the full range of empirical facts is a different issue. My claim here is that the present account makes wrong predictions and, as mentioned before, assumes an unnecessary lexical ambiguity.

On my proposal, none of the aforementioned problems arises: *vreun* functions as an NPI in negative polarity contexts (as argued extensively in Chapter 2, section 1) and as an epistemic determiner in non-polarity contexts. Moreover, the licensing constraint relevant for the epistemic use captures a wider range of data and accounts for otherwise puzzling contrasts, such as the one between *want* and *hope/prefer* or between epistemic and non-epistemic modals. In order to see whether *vreun* can be licensed in a non-polarity context or not, we only have to check whether *vreun* is in the scope of an operator entailing that the speaker's alternatives include worlds where the proposition containing *vreun* does not hold. Consequently, we have a way of predicting the environments where this determiner can occur. This requirement also predicts the rescuing effects discussed in Chapter 2, section 2.4, where I have shown that the presence of the presumptive mood or of a disjunction, both arguably similar to epistemic modals, rescue the occurrence of *vreun* in otherwise non-licensing contexts (i.e. under an attitude verb like *hear* or *want*).

The licensing constraint that I have posited for the epistemic use of *vreun*, that we could call the '*non p*-worlds requirement' is meant to capture the same intuition as Farkas' *uncertain existential requirement*. Glossing over the differences and simplifying at this point, both constraints amount to imposing that the truth of the proposition containing *vreun* is not entailed in all relevant worlds. On the basis of the problems raised by the distinction between undifferentiated choice and random choice *vreun*, and in particular in view of the unclear range of applicability of the requirement on the 'uncertainty of existence', I maintain that the semantic licensing constraint on the use of *vreun* as an epistemic determiner offers a more straightforward and insightful way of putting together a large(r) set of data.

Before I conclude the discussion of this account, I would like to point out a context of occurrence of *vreun* which is arguably problematic for both my hypothesis and Farkas'. In particular, there is one context where *vreun* occurs which partly motivated Farkas' postulating the *uncertain existential requirement* and which my proposal fails to capture in a straightforward way, labeled *frequentative imperfective* and illustrated in (9) above, repeated below as (18):

- (18) Din când în când trenul se oprea în *vreo* haltă
 From when in when train.DEF REFL stop.IMPERF.3SG in V-A station
 și câte un navetist deschidea un ochi.
 and DISTR a commuter open.IMPERF.3SG an eye
 'From time to time the train would stop in some station and a/some commuter would open an eye.'

As described by Farkas, these contexts convey the meaning there is random pairing between situations where the train stops and situations where a commuter would open his eyes. Importantly, Farkas attributes this effect to the use of the imperfective, which emphasizes the fact that among the relevant situations (quantified over by the adverb ‘from time to time’), there might be some where no trains stops: the existence of a value for the *vreun* DP is not entailed in all worlds. Now, my proposal is based on the assumption that the relevant licensing factor is the existence of *non p*-worlds among the speaker’s doxastic alternatives. Granted, this hypothesis doesn’t easily capture the random pairing that seems to be at stake in this context. While I have not worked out an analysis of these sentences that could easily fit with the constraint I have argued to be responsible for the use of *vreun* as an epistemic determiner, I would like, however, to point out that Farkas’ description of the facts is not completely adequate. More precisely, I contend that *vreun* in time-clauses is not licensed by the imperfective *per se*, but rather by the modal component that one can single out in the licensing cases. This component can be associated with the imperfective, but also with the present, and optionally an adverb expressing existential quantification over times. To see this, consider the following examples illustrating habitual-like time-clauses which involve existential quantification, typically signaled by an existential quantificational adverb like *uneori* ‘sometimes’ or *din când în când* ‘from time to time’:

- (19) (*Uneori*) chiar se întâmpla/întâmplă să-și amintească de *vreun*
 Sometimes even REFL happen.IMPERF.3SG/PRESENT.3SG SUBJ remember.3SG of V-A
 gest de-al lui.
 gesture of-his
 ‘(Sometimes,) she would even remember some gesture of his.’

- (20) *Uneori/ Din când in când vreun vecin mai chefliu o lungeste*
 Sometimes/from when in when V-A neighbor more jolly CL lengthen.3SG
până mai târziu în noapte.
 until more late in night
 ‘Sometimes/From time to time, (it happens that) some jolly neighbor parties until late in the night.’

These sentences refer to more than one event of a certain type, and the intuition behind the acceptable habitual cases is they all have a meaning paraphrasable as *Sometimes it happens/happened that...* The licensing cases all involve existential quantification (meaning there are also situations/events which are of a different kind, i.e. non-partying events in the case of (20)) in combination with an imperfective or a present tense form, which both can have a modal meaning component (see e.g. Bhatt (1999), Ippolito (2004), Hacquard (2006)). This latter factor is crucial for the licensing of *vreun*, as indicated by the following example:

- (21) **Uneori vreun vecin mai chefliu a lungit-o până mai*
 Sometimes V-A neighbor more jolly have.3SG lengthened.CL until more
târziu în noapte.
 late in night
 ‘Sometimes, some jolly neighbor partied until late in the night.’

The ungrammaticality of the sentence in (21), with a past tense verbal form, shows that it is not the existential adverbial *per se* that licenses *vreun*. The use of the present or that of the imperfective ensures that the pairing between situations described and members of the set denoted by the restriction is random. In other words, *vreun* is licensed in contexts where there is no precise list of pairings, partying event - neighbor. The perfective aspect associated with past tense in (21) does not seem to allow this ‘random pairing’ reading. The sentence would be acceptable with a simple indefinite (optionally modified by the distributivity marker *câte*), but precludes the use of the determiner *vreun*.

At this stage of investigation, I cannot offer a precise characterization of the temporal clauses where *vreun* is acceptable and a full-fledged proposal on how these contexts can be put together with the other licensing environments. However, one thing the examples above clearly show is that imperfective is not necessarily the (only) licensing factor, and in order to

provide an appropriate description of the distribution of *vreun* in time-clauses⁵⁷, one should explore the semantic properties of the temporal markers present⁵⁸, be they adverbs, aspectual morphology or periphrases like *it happens that*. Depending on what the exact characterization of the relevant markers turns out to be, I expect there to be ways to articulate it with the analysis I develop for the other licensing contexts. I leave this matter open for now, but despite this complication, I maintain that this set of data does not suffice to postulate a different lexical item *vreun*, such as Farkas' *random choice* item.

At first sight, the fact that I have reduced the distribution of *vreun* to two types of environments could also be taken as positing that *vreun* is an ambiguous item. However, my claim all along has been that we are dealing with two different *uses* of the same item: a use as an NPI and a use as an epistemic determiner. This is different from saying that there are two distinct lexical items, which introduce variables subject to different licensing constraints. I think that the lexical ambiguity assumption adds little to our knowledge of polarity sensitive items, as it amounts to saying that Romanian has a determiner that functions as a UCI and a determiner that requires random value assignment to the variable it introduces, and the two expressions happen to have the same pronunciation. Now, as Farkas acknowledges, there is a common thread to these two items, namely the connection with alternatives. Ideally, one would like to exploit this (or some other) shared property and derive the full pattern of distribution in table 1 above from a possibly unique source of semantic dependency. Such an

⁵⁷ Other facts that deserve some further consideration, such as the licensing of *vreun* in certain kinds of habituals, illustrated below:

- (1) Când ajung/ajungeam la facultate, vorbesc/vorbeam cu **vreun**
 When arrive.1SG./arrive.IMPERF.1SG at university talk.1SG/talk.IMPERF.1SG with V-A coleg,
 beau/beam o cafea și mă apuc/mă apucam de
 colleague, drink.1SG/drink.IMPERF.1SG a coffee and CL start.1SG/start.IMPERF.1SG of lucru.
 work
 'When I get/got at the university, I (would) talk to some colleague, (would) have a coffee and (would) get to work.'
- (2) Când era supărată/Seara, își suna **vreun** prieten
 When be.IMPERF.3SG upset /evening.DEF CL call.IMPERF.3SG V-A friend
 și ieșea în oraș.
 and go.out.IMPERF.3SG in town
 'When she was upset/In the evening, she would call some friend and would go out.'

These sentences refer to series of events and typically make use of the imperfective, which conveys generalizations over past events, but the use of present tense is also easily possible. In these examples, *vreun* is interpreted in the scope of an operator we could paraphrase as *typically*, rather than *whenever*, associated with universal quantification. The empirical facts require further investigation in order to establish the licensing factor.

⁵⁸ A complete picture of the licensing of *vreun* should also look in more detail at the interaction with mood. In this thesis, I only address issues concerning the presumptive and leave the study of the conditional and subjunctive for future research.

approach has arguably more potential in explaining why it is precisely negative polarity and ‘epistemic modal’ contexts that license *vreun*, and as such, lead to a better understanding of parameters of semantic variation in the area of polarity-sensitive items. One such line of reasoning, that is relevant to the present discussion, has been pursued by Giannakidou (1998 and subsequent work), who claims that *vreun*, as well as other instances of dependent items, are licensed by nonveridical operators. To my knowledge, this is the only mention of *vreun* as an item whose distribution would be derivable from a unique licensing constraint, so the following section will be devoted to the discussion of this proposal. However, despite the initial appeal of a unifying system⁵⁹, I will show that Giannakidou cannot account for the distribution of *vreun*.

2 A unifying account: nonveridicality

In the previous section, I have pointed out the problems with the ambiguity approach to *vreun* pursued by Farkas. In addition to the empirical problems it raises, one can also wonder whether the assumption that there are two different lexical entries associated with *vreun* is necessary. If possible, an analysis which assumes a unified semantics for *vreun* in both negative and positive contexts would be preferable.

The main intuition in Farkas’ analysis relates *vreun* to weak existential commitment. More precisely, when *vreun* is used, not only is the existence of a verifying value neither asserted nor presupposed, but it could very well be the case there is no such verifying entity. Under my hypothesis on the licensing of *vreun* in non-polarity contexts, the licensing operator entails the existence of *non p*-worlds among speaker’s doxastic alternatives, i.e. the speaker is not committed to the truth of the proposition where *vreun* occurs, and thereby is not committed to the existence of an individual satisfying the existential claim. In the literature on (semantically) dependent items, this ‘non-existence’ property has been previously noticed for some determiners in Salish (Matthewson 1998), Greek (Giannakidou 1998, 2009), or related to so-called *epistemically non-specific* (Haspelmith 1997), *epistemic* (Jayez & Tovenia 2005, 2008) or *modalized* indefinites in Romance (Alonso-Ovalle & Menendez-Benito 2009). Abstracting away from important differences among these items, the crucial property they

⁵⁹ By unifying system, I mean a system that would account for both uses of *vreun*. It should not be taken to claim that Giannakidou’s account of polarity in general is unifying: as I have mentioned in Chapter 1, in addition to referential deficiency, she assumes other sources of deficiency, such as scalarity, referentiality or speaker commitment.

share is that they do not (easily) introduce a discourse referent the speaker could identify, a possibility they only acquire under some special conditions. As stated by Matthewson, these items do not necessarily entail non-existence, but “merely fail to positively assert the existence of an entity” (Matthewson 1998:179). The analysis developed in Giannakidou (1998, 1999, 2009) tries to implement this property and embed it into a more general account of polarity sensitivity based on the notion of (non)veridicality. In this perspective, indefinites that cannot be linked to discourse referents are referentially deficient, and as such, their distribution is restricted to nonveridical contexts, which allow the dependent item not to refer. Before discussing how *vreun* could be accounted for in this framework, I first present the main aspects of Giannakidou’s system.

2.1 Nonveridicality and dependent reference

According to Giannakidou (1995 and following), the distribution of polarity items cross-linguistically can be reduced to sensitivity to (non)veridicality. The notion of *veridicality* is related to truth and was first used in Montague (1969) in reference to perception verbs which entail the existence of individuals involved in their complement. For example, the verb *hear* is veridical: if I hear a girl singing, the girl must exist. The connection between veridicality and polarity items goes back to Giannakidou (1994) and Zwarts (1995) who argue that nonveridicality is the crucial property responsible for the licensing of polarity items. Intuitively, veridical operators express certainty and an individual’s commitment to the truth of a proposition, whereas nonveridical ones express uncertainty and lack of commitment. The formal definition of this notion is given in (22) (taken from Giannakidou 2009:12):

(22) **(Non)veridicality** for propositional operators

- i. A propositional operator F is veridical iff Fp entails or presupposes that p is true in some individual’s epistemic model $M_E(x)$; otherwise F is nonveridical.
- ii. A nonveridical operator F is *antiveridical* iff Fp entails that *not* p in some individual’s epistemic model: $Fp \rightarrow \neg p$ in some $M_E(x)$.

Nonveridicality as defined above captures unknown or undefined truth-value of the proposition with which the nonveridical operator combines. Nonveridical functions include questions, imperatives, modals, volitional verbs like *want*, *insist*, or disjunctions. On the basis of a sentence like *Did Mary call a friend?* or *Mary wanted to call a friend*, we cannot infer that the proposition *Mary called a friend* actually holds. A stronger form of nonveridicality is negation, which is called an *antiveridical* operator, defined as in (22)ii: *NOT* p does not entail

that the truth of p is not known or established, but that p is false.

In the theory of polarity-sensitivity mainly developed by Giannakidou, following also Zwarts (1995), polarity items are licensed by nonveridical operators, of which downward entailing operators represent a subset. According to Giannakidou, nonveridicality-based approaches have a broader empirical coverage with respect to the attested classes of NPIs, as it can successfully integrate polarity-licensing contexts which are not downward entailing, such as modals or disjunctions. A clear illustration of this is the case of the Greek NPI *kanenas*, whose distribution is summarized in the table below, taken from Giannakidou (1999: 414):

Contexts	<i>Non-emphatics</i>
Negation	✓
<i>Before</i> -clauses	✓
<i>Without</i> -clauses	✓
Questions	✓
If-antecedents	✓
Restrictor of a universal	✓
<i>Too</i> -clauses	✓
<i>S</i> -comparatives	✓
Superlatives	✓
Future particle/ <i>will</i>	✓
Strong intensional verbs	✓
Imperatives	✓
Habituals	✓
Disjunctions	✓
<i>Perhaps</i>	✓
Downward entailing DPs	✓
<i>Only</i>	*
Affirmative/Existential sentences	*
Weak intensional predicates	*
Perception, comissive, aspectual verbs	*
Factive verbs	*

Table 2 Distribution of *kanenas*

Kanenas is a non-specific existential, roughly meaning *some or other*, part of the larger class of Greek polarity items called ‘non-emphatics’. The table above shows that downward entailment cannot be responsible for the full distribution of *kanenas*, as licensing in imperatives, disjunctions or modal verbs would remain unaccounted for. Instead, Giannakidou argues, this pattern of occurrence can uniformly be captured in terms of nonveridicality, which is the semantic property common to all these licensing contexts.

Let us see more specifically how licensing is assumed to work in this framework. The crucial assumption is that *kanenas* denotes a dependent existential, whose deficiency resides in the fact that the assignment function cannot give it a value in a main context. This type of

item introduces a dependent (also called *non-deictic*) variable, x_d , which crucially cannot be interpreted as a free variable. In order for this variable to be well-formed, it needs to be in the scope of a nonveridical operator⁶⁰. The difference between the affirmative sentence in (23) and its negated version in (24) illustrates the relevant contrast between main context and embedding under nonveridical operators:

(23) *Idha *kanenan*.
saw.1SG anybody

(24) *Dhen idha kanenan*.
NEG saw.1SG anybody
'I didn't see anybody'

In the case of (23), the use of *kanenas* introduces a dependent variable x_d , which is bound by existential closure. The sentence then gets the representation under (25), which according to Giannakidou is undefined, as the variable associated with the indefinite would be forced to introduce a discourse referent:

(25) $[[\exists x_d \text{person}(x_d) \wedge \text{saw}(I, x_d)]]^g = \text{undefined}$

When embedded under nonveridical operators, like negation, represented in (26), the indefinite does not introduce a discourse referent and is therefore licensed.

(26) $[[\neg \exists x_d \text{person}(x_d) \wedge \text{saw}(I, x_d)]]^g = 1$ iff no value a assigned to x_d by g is such that a is a person in c and I saw a .

Importantly, *kanenas*-indefinites *can* introduce discourse referents, as illustrated by the conditional in (27), but it is crucial that they cannot do so in main contexts, where the assignment function g cannot assign values to this kind of variables. Accordingly, dependent variables of this kind are only licit when embedded under nonveridical operators.

(27) An dhis *kanenan_i*, pes *tu_i* na me perimeni.
'If you see anybody, tell him to wait for me.'

This way of implementing dependent reference thus derives the necessarily narrow scope of *kanenas*-indefinites with respect to the operators that license them, and connects polarity-

⁶⁰ According to Giannakidou, there are two other strategies to make dependent variables licit, which are not relevant for the type of polarity items discussed in this section: binding (responsible for the well-formedness of the world variable associated with free-choice items) and co-reference (exploited by embedded subjunctives)

sensitivity to the more general phenomenon of non-specificity or ‘decreased referentiality’ (Partee 2008).

Now that we have seen how *kanenas*-indefinites are licensed, let us consider the possibility of extending this account to *vreun*-indefinites.

2.2 *Vreun* as a nonveridical item?

Recall from the discussion of the distribution of *vreun* in the previous chapter, summarized in table 1 above, that this determiner occurs both in negative polarity contexts and non-polarity, positive contexts. This latter type includes hypotheticals, imperfectives, disjunctions and modal operators. Giannakidou argues that nonveridicality is precisely the kind of semantic property that captures this mixed licensing pattern. Giannakidou (1997:68 & 1999:381) actually mentions the similarity in distribution between Greek NPIs *kanenas* licensed by nonveridicality and *vreun*. The occurrence in negative polarity contexts follows directly from the hypothesis that *vreun* is sensitive to nonveridicality, as downward entailing contexts constitute a subset of the nonveridical ones (Zwarts 1995). Let us now examine how this notion would apply to the non-polarity contexts where *vreun* is licensed, which I discussed in the previous chapter. The following sentences illustrate further occurrences in arguably nonveridical contexts, such as possibility operators (28), habituals involving *anytime/whenever* (29), or disjunctions (30):

(28) *Poate ai făcut vre-o greșeală.*

Maybe have.2SG made v-a mistake

‘Maybe you’ve made some mistake.’

(29) *Ori de câte ori făcea vre-o greșeală, suferea cumplit.*

times OF DISTR times make.IMPERF.3SG V-A mistake suffer.IMPERF.3SG terribly

‘Anytime he made some mistake, he was suffering terribly.’

(30) *În primele clipe, mi-am imaginat o tragedie familială sau vreun*

In first.DEF moments, REFL-have.1SG imagined a tragedy familial or V-A
dezastru financiar.

disaster financial

‘In the first moments, I imagined a family tragedy or **some** financial disaster’

In this framework, all of these operators create nonveridical contexts. Take for example the

sentence in (28), with a possibility operator: the proposition ‘maybe you’ve made some mistake’ does not entail the truth of the proposition ‘you’ve made a mistake’. Following Giannakidou (1999), a similar conclusion can be maintained for the other licensing operators in the sentences above.

On the basis of the distribution of *vreun* discussed so far, it seems that nonveridicality is the semantic property to which *vreun* is sensitive. Although this hypothesis is appealing, insofar as it allows a unifying analysis of *vreun* in negative and positive contexts, I will show that an analysis along the lines of Giannakidou is in fact not tenable. I argue against a nonveridicality-based approach on the basis of two types of arguments: first, I show that nonveridicality predicts the occurrence of *vreun* in contexts where this item is ungrammatical (section 2.2.1), and second, there are contexts that Giannakidou analyzes as veridical, where *vreun* is licensed (section 2.2.2).

2.2.1 Non-occurrence in nonveridical contexts

If *vreun* is sensitive to nonveridicality and Giannakidou is right in treating it on a par with the Greek item *kanenas*, we expect it to be able to occur in all contexts which embed a proposition whose truth is neither asserted nor presupposed. This is clearly not the case, as illustrated by the ungrammaticality of the following examples, already given in the previous chapter:

(31) *Alege *vreo* carte!

Choose V-A book

‘Choose some/any book.’

(32) **Vreau* să cumpăr *vreo* carte despre dinozauri.

want.1SG SUBJ buy.1SG V-A book on dinosaurs

‘I want to buy some book on dinosaurs.’

(33) **Trebuie* să ies cu *vreun* prieten.

must SUBJ go-out.1SG with V-A friend

‘I must go out with some friend.’

Contrary to what a nonveridicality approach predicts, *vreun* cannot occur in imperatives like the one in (31), scope of the intensional verb *want* (32), or modal *must* (33). All these contexts are nonveridical, i.e. they do not entail the truth of the embedded proposition, and license the

Greek item *kanenas*, assumed to closely resemble *vreun*, which is, however, ruled out.

A closer look at the licensing pattern under propositional attitude verbs indicates that they constitute a strong counter-argument against a nonveridicality-based approach. In addition to volitional *want*, Giannakidou (2009) shows that NPI-licensing in Greek propositional attitude verbs is correlated with mood choice, and both phenomena display sensitivity to (non)veridicality. More precisely, verbs that take an indicative complement are veridical and disallow NPIs, whereas verbs that take subjunctive or infinitival complements license NPIs. The former class includes, in Giannakidou's terminology, *assertive* verbs like *leo* 'say', *dhiavazo* 'read', *isxirizome* 'to claim', *fiction* verbs like *onirevome* 'to dream', *epistemics* like *pistevo* 'believe', *nomizo* 'think' and different types of (semi-)factives like *xerome* 'be glad', *gnorizo* 'know', *metaniono* 'regret' or *thimame* 'remember'. On the other hand, NPIs can occur in the subjunctive complements of *volitional* verbs like *thelo* 'want', *elpizo* 'hope', *skopevo* 'plan', *directives* like *dhiatazo* 'order', *protino* 'suggest', *modals* like *prepi* 'must', *bori* 'may' or *permissives* like *epitrepo* 'allow'. The following set of sentences illustrate the relevant contrast between the two classes of verbs with respect to the licensing of the polarity item *kanenas* (taken from Giannakidou 2009:13):

(34) * O Pavlos *pistevi* oti idhe me ***kanenan***.

the Paul believe.3sg that saw.3SG NPI

*'Paul believes that he saw anybody.'

(35) I Ariaðni *epemine* na afiso ***kanenan*** na perasi mesa.

the Ariadne insisted.3SG SUBJ let.1SG NPI-person SUBJ come.3SG in

'Ariadne insisted that I allow anyone in.'

The assumption that one semantic property, namely (non)veridicality, regulates both mood choice and NPI-licensing is attractive, as the correlation seems to be present in other languages, including Romance and Russian (Haspelmath 1997, Quer 1998, Borschev *et al.* 2007). The situation in Romanian, however, is different and cannot be integrated in this pattern. There are several empirical facts that run against Giannakidou's account and which cast doubt on the validity of this correlation for *vreun*-indefinites, and for NPI-licensing in general. First, as illustrated by the sentence with the volitional verb *want* in (32), there are nonveridical verbs that take a subjunctive complement, but which rule out *vreun*. The same conclusion holds for directives like *insist* (36) or permissive verbs like *allow* (37), as shown by the ungrammaticality of the following sentences:

- (36) * Tudor a *insistat* să aduc ***vreun*** cadou.
 Tudor have.3SG insisted SUBJ bring.1SG V-A present
 ‘Tudor insisted that I bring some present.’

- (37) * Legea *permite* să călătorești în ***vreo*** țară străină.
 Law.def allow.3SG SUBJ. travel.2SG in V-A country foreign
 ‘The laws allows you to travel in a/some foreign country’

These verbs are nonveridical, but nevertheless, they cannot license *vreun*. The distribution of *vreun* under modals illustrates an even more intricate pattern, which is completely unpredicted by the nonveridicality account. Recall that I have previously established that modals do not uniformly license *vreun*, and it is only epistemic readings of modal verbs that can serve as licensors. The following sentences illustrate this contrast:

- (38) Cu numele lui, *trebuie* să fie ***vreun*** aristocrat.
 With name.DEF his must SUBJ. be.3SG V-A aristocrate
 ‘Given his name, he must be some aristocrate.’

- (39) **Trebuie* să scriu ***vreun*** articol despre ultimele alegeri.
 must SUBJ write.1SG V-A article about last.DEF elections
 ‘I must write a paper about the last elections.’

- (40) *Trebuie* că are Anca ***vreo*** soluție, ea mereu ne ajută.⁶¹
 must that have.3SG Anca V-A solution, she always CL help.3SG
 ‘Anca must have a solution, she always helps us out.’

Both sentences (38) and (39) involve the nonveridical modal *must* which combines with a subjunctive complement, but they differ with respect to the licensing of *vreun*. Furthermore, in the sentence in (40), *must* takes an indicative complement, which nevertheless licenses *vreun*. I have already established that the distribution in modal contexts is governed by the availability of an epistemic interpretation, so the only point that is relevant at this stage of the discussion is that nonveridicality cannot capture the above contrast: all occurrences of *must*

⁶¹ The acceptability of *trebuie* ‘must’ taking an indicative complement might be subject to (possibly dialectal) variation, although quite frequent for many speakers (including me). The point on which all speakers agree is that the construction can only have an epistemic reading. The pattern is potentially relevant for the discussion of indicative *versus* subjunctive complements, but is not crucial to the arguments developed against Giannakidou’s account for NPI-licensing.

are nonveridical and therefore should uniformly license *vreun*, contrary to fact. In addition, note that in (40) the necessity modal *trebuie* ‘must’ takes an indicative complement, a property which, following Giannakidou’s line of thinking, indicates that it should be treated as veridical, and as such should not qualify as a licenser for *vreun*, an expectation clearly not borne out.

A second case which goes against the correlation between mood-choice and NPI-licensing is illustrated by the verb *a spera* ‘hope’, which can also take both indicative and subjunctive complements and licenses *vreun* in both cases:

- (41) *Sper* *să* *fie* ***vreun*** magazin deschis la ora *asta*.
 hope.1SG SUBJ be.3SG V-A store open at hour this
 ‘I hope there is some store open at this hour.’

- (42) *Sper* *că* *mi-* *ai* lăsat ***vreo*** prăjitură.
 hope.1SG that CL.DAT-have.2SG left V-A cake
 ‘I hope you left some cake for me.’

Whereas the sentence in (41) is predicted by Giannakidou’s account, the indicative mood in (42) is not expected, as we are dealing with a nonveridical context. Note that this latter case does not constitute a counter-argument to the specific hypothesis that *vreun*’s distribution is governed by nonveridicality, but runs against the necessary correlation between subjunctive and NPI-licensing in Romanian. The exact nature of this connection in Romanian need not concern us and for the rest of the discussion, I will be primarily concerned with the relevance of nonveridicality for the licensing of *vreun*.

The arguments discussed so far all point out to the same conclusion: nonveridicality is too broad to capture the distribution of *vreun*. A licensing constraint in terms of nonveridical operators is too weak, meaning it predicts the licensing of *vreun* in contexts which preclude its use. In view of this situation, one could make use of the well-accepted hypothesis that some classes of NPIs are subject to stricter licensing, and argue that *kanenas* and *vreun* illustrate precisely this. Giannakidou’s account does not necessarily predict that all dependent items occur in all nonveridical contexts, but rather that all licensors are nonveridical operators. While the distinction between epistemic and non-epistemic modals remains mysterious under this account, it could be attributed to some kind of additional constraint responsible for the distribution of *vreun*. However, even if such a hypothesis could be in principle tenable, there are further, arguably more serious, problems with the nonveridicality

approach, as I will show in the next subsection.

2.2.2 Occurrence of *vreun* in veridical contexts

Recall that veridical verbs take indicative complements which preclude the occurrence of NPIs like *kanenas*. The epistemic verb *believe* was shown to illustrate this behavior in Greek (34). Once again, *kanenas* and *vreun* differ with respect to this licensing context, as *vreun* can easily occur in the scope of the indicative-embedding verb *a crede* ‘to believe’, as illustrated by the following examples:

- (43) *Petre crede* *că Maria se căsătorise cu vreun suedez.*
 Petre believe.IMPERF.3SG that Maria REFL. marry.PLUPERF.3sg with V-A Swedish
 ‘Peter believed Maria had married some Swedish’
- (44) *Cred* *că a intrat vreun hoț.*
 Believe.1SG that have.3SG entered V-A thief
 ‘I believe a/some thief entered’.

According to Giannakidou, epistemic verbs like *believe* are veridical. Propositions are interpreted with respect to a subject’s epistemic model. If Peter believes that proposition *p* holds, with *p* being ‘Mary married a Swedish’, then it must be the case that Peter is committed to the truth of the embedded proposition *p*. To put it differently, the set of worlds which are compatible with Peter’s beliefs must be a subset of the worlds where the proposition *p* is true. For the sentence in (43) to be true, all of Peter’s doxastic alternatives have to be such that *p* is true. As pointed out by Giannakidou, this situation holds even in cases where the speaker knows that *p* is false, the crucial matter being Peter’s belief worlds. Since the proposition holds in (at least) one individual’s epistemic model (i.e. in all his belief worlds), the verb *believe* is a veridical operator. And as such, this context should rule out polarity items like *vreun*, a prediction which is clearly not borne out for the Romanian verb *a crede* ‘believe’. There are other verbs that behave similarly, like *a bănuî* ‘assume’, *a-și închipui* ‘to imagine=assume’, *a se gândi* ‘to think’ which all involve belief worlds, and are veridical, in Giannakidou’s sense. All these verbs take indicative complements and license the presence of *vreun* in the embedded clause, a situation unexpected if nonveridicality is indeed the notion regulating the licensing of polarity items. Under my hypothesis, none of these verbs entails the truth of its complement in all relevant worlds, and I have shown that whenever a speaker uses these predicates, she allows for the existence of *non p*-worlds among her doxastic alternatives, i.e. is not committed to the truth of *p*.

A possible way to account for this licensing pattern⁶² is to make use of a further distinction among veridical predicates, namely that between *strong* and *weak* veridicality (Giannakidou 1999, 2009). *Strongly* veridical verbs are true not only in the attitude holder's epistemic model, but also in the worlds in the speaker's model. This is the case of factive verbs, whose complement is presupposed to be true, and as such holds for every discourse participant. In contrast to this, *weakly* veridical verbs require that the embedded proposition hold in the attitude holder's model only. Accordingly, the proposition only has to be true for the individual that believes it. At first glance, this distinction seems to solve the puzzle of the licensing of *vreun* under a veridical verb like *believe*. However, once we adopt this hypothesis, we expect *vreun* to occur in the complement of all *weakly veridical* verbs, such as *say* or *dream*, a prediction once again not borne out, as attested by the ungrammaticality of the following sentence:

- (45) *Am *visat/spus* că s-a instalat ***vreun*** irlandez prin zonă.
 have.1SG dreamt/said that REFL-have.3SG installed V-A Irishman in area
 'I dreamt/said that some Irishman had moved in the neighborhood.'

These facts confirm the fact that veridicality cannot be the semantic property responsible for the licensing of *vreun*, and that, irrespectively of how we model this notion, the distribution of this item remains unaccounted for. Accordingly, on the basis of the arguments presented in this section, I conclude that Giannakidou's approach in terms of nonveridicality cannot account for the distribution of *vreun*. Whereas it might well be the case that *kanenas* is sensitive to this semantic property, I have shown that the distribution of *vreun* is both more liberal (it occurs in veridical contexts) and more constrained (non-occurrence in nonveridical contexts) than that of *kanenas*. One could in principle argue that *vreun* requires a different version of (non)veridicality, and modify its definition in ways that might integrate verbs like *believe*. However, I have shown that weakening the notion of veridicality wouldn't provide a solution either. Furthermore, this kind of adjustments would obscure the connection with other dependent items, both in Romanian and cross-linguistically, and would make it difficult to state the parameters of variation in the area of polarity items.

My conclusion is that *vreun*'s constrained distribution is not regulated by nonveridicality, a position that can be interpreted in two different ways. Either the lack of

⁶² This possibility was suggested to me by Anastasia Giannakidou (p.c.)

sensitivity of *vreun* to nonveridicality leads us to abandon the idea of a uniform (cross-linguistic) account for polarity phenomena, or alternatively, we maintain that a unifying theory *is* possible, but that nonveridicality is not the appropriate property underlying polarity sensitivity. This thesis advocates the latter position. More precisely, in Chapter 4, I put forward an analysis for *vreun* that relies on the main assumptions and elements in Chierchia's unifying approach to polarity, which takes domain widening to be the basic property responsible for the distribution of several classes of semantically dependent items. Accordingly, I believe that, at least as far as determiners are concerned, a unifying account of polarity phenomena is both empirically justified and theoretically desirable, so this is the direction I will pursue in the remainder of this dissertation. However, any such theory must tackle the attested empirical diversity, a challenge that is best met if we establish the exact parameters of semantic variation in the area of polarity items. In view of this goal, in the next section, I focus on the similarities and differences between *vreun* and several other (classes of) polarity items, a discussion that enables us to situate *vreun* in the cross-linguistic typology of dependent determiners and hence formulate in a more precise way the challenges it raises.

3 A typology of existential dependent indefinites

In Chapter 1, I situated *vreun* with respect to other items present in the landscape of polarity items in Romanian, focusing on the distributional pattern, and trying to understand the type of overlap of use it exhibits. I would now like to focus on the meaning of *vreun*, by providing a preliminary cross-linguistic comparison with other epistemic items, which seeks to establish to what extent the constraints we have identified for *vreun* are generalized.

Recall the main conclusions that emerged from the study of the properties of *vreun*: its distribution is restricted to negative polarity contexts and the scope of operators that entail the existence of epistemic alternatives. As far as its meaning is concerned, like all other dependent indefinites, *vreun* cannot be used to refer to a unique, identifiable individual among the members of the set denoted by the noun with which it combines. To see this, let us take a closer look at an example:

(46) (We are discussing the fact that Irina is late and try to provide an explanation for this.)

S-o *fi* *întâlnit* cu *vreun* prieten.

REFL- FUT2.3SG BE met with V-A friend

‘I guess she met some friend/She might have met some friend.’

The sentence in (46) involves a presumptive form, a typical licensing context, used in order to convey a hypothesis on the reason why Irina is late, and asserts that she might have met a friend of hers. The choice of *vreun* over a simple indefinite indicates that the speaker clearly has no particular friend of Irina’s in mind, and in fact, she could very well not know any of Irina’s friends. For example, she could assert the sentence on the basis of the fact that she knows Irina to be a very sociable girl, who has many friends and likes to spend time chatting with them. The ban on identification of a specific individual is made obvious by the unavailability of a continuation like *namely Marc*, which is clearly impossible. This meaning component is often mentioned in the literature on dependent determiners, under various labels such as *ignorance*, *anti-specificity/non-individuation* or *irreferentiality* (see among others Jayez & Tovenar 2002, 2005, 2006, Alonso-Ovalle & Menendez-Benito 2009). In the following, I will stick to the rather intuitive and frequent notion of *ignorance* to refer to this meaning component.

Importantly, this property is often linked to the so-called *free-choice* flavor, which conveys not only that the epistemic agent does not single out a member of the restriction set, but also that any member of this set is a possible value for the DP. This is the meaning component that is responsible for the universal-like reading conveyed by free-choice items like English *any*, Spanish *cualquiera* or Greek *opjodhipote*. In the example under consideration in (46), if *vreun* were to yield a free-choice effect, this would imply that any friend of Irina’s is such that she might have met that friend. Accordingly, the sentence shouldn’t admit a continuation like *but it can’t be Marc, he is out of town*, which would be in contradiction with the previously asserted free-choice among the set of friends. However, *vreun* easily admits this continuation, a property that I have already shown to be relevant for its distribution in imperatives (Chapter 2, section 2.5). In addition to the lack of universal-like readings for *vreun*, the discussion of the empirical facts concerning *vreun* revealed several other properties that set it apart from typical free-choice items. First, its distribution: *vreun* cannot occur in typical free-choice contexts, e.g. generics or (choice-offering) imperatives. Second, I have already shown (section 1.2) that it displays no subtriggering effects, one of the

hallmarks of free-choiceness. And finally, even when *vreun* does occur in contexts where free-choice *any* is possible, the interpretation is always existential. On the basis of these differences, it is obvious that *vreun* is not typical free-choice item, so I will not draw a more detailed parallel between these two types of polarity sensitive items. Instead, in the remainder of this section, I focus on the existential corner of polarity sensitive items, and try to establish the ways in which *vreun* resembles or differs from these items. This comparison enables us to delineate the areas of variation among existential dependent indefinites, a crucial step for any theory of polarity sensitivity.

In order to understand the source and kind of ignorance that *vreun* triggers, I compare its distribution and interpretation with that of three other dependent indefinites: existential free-choice items, the French singular *quelque* and Spanish *algun*⁶³. The choice of these particular determiners is motivated by the fact that they all seem to share two of the basic properties of *vreun*: they are existential and have been argued to involve some kind of dependency with respect to a subject's epistemic alternatives, in ways to be made precise later in the discussion. It should be mentioned that the comparison is not meant to be exhaustive. I rely on the information available in the literature, but it often happens that the papers discussing properties of these items only look at a subset of the contexts of occurrence, without always mentioning non-licensing contexts. Accordingly, the items considered in the following sections may very well have other properties that make it more or less similar to *vreun* than what I can suggest at this point of investigation. However, it can serve as a preliminary basis for understanding where to situate *vreun* in the cross-linguistic typology of polarity sensitive items.

3.1 *Vreun* versus existential free-choice items

The first type of existential determiners that bear some resemblance with *vreun* are existential free-choice items. The previous discussion only mentioned free-choice items whose distribution is restricted to modal contexts, and end up having a universal interpretation, as is usually the case for items like English *any* (Dayal 1995, 1998), Spanish *cualquiera* (Menendez-Benito 2005) or Greek *opjosdhipote* (Giannakidou 2001). As already mentioned in Chapter 1, recent work on dependent elements has pointed out the existence of a different

⁶³ In the following, I will not focus on the analyses of these items. The only point of this investigation is to situate the empirical properties on *vreun* with respect to the constraints relevant for other sensitive items discussed in the literature.

class of free-choice items, namely *existential* ones, such as German *irgendein* (Kratzer & Shimoyama 2002), Italian *un N qualsiasi/qualunque* (Chierchia 2006, Zamparelli 2007), French *un N quelconque* (Jayez & Tovenà 2002, 2006) or Romanian *un N oarecare* (Săvescu-Ciucivara 2005, Fălăuş 2008b, discussed in chapter 1, section 3). Recall that the defining property of these expressions is that they denote an existential, which triggers free-choice effects. To see this, consider the following sentences in Italian and German:

(47) a. *Puoi prendere **qualunque** dolce.* [Chierchia 2006:541]

(you) can take any sweet

b. *Puoi prendere **un** dolce **qualunque**.*

(you) can take a sweet whatever

(48) Mary *musste **irgendeinen** Mann heiraten.* [Kratzer & Shimoyama 2002:11]

Mary had-to IRGEND-one man marry.

(a) There was some man Mary had to marry, the speaker doesn't know or care who it was.

(b) Mary had to marry a man, any man was a permitted marriage option for her.

The first set of examples illustrates the difference between the universal-like free choice *qualunque dolce* 'any sweet' and the existential *un dolce qualunque* 'a sweet whatsoever' in the scope of a possibility modal. The sentence in (47)a conveys permission to take several sweets, whereas the one in (47)b expresses permission to take a single sweet (the existential component) and indicates that any sweet is a possible option (free-choice component). The same meaning is associated with the German *irgendein* in (48), whose existential free-choice reading relevant for the present discussion is paraphrased in (48)b: Mary must marry an individual, and any man is a permitted option.

3.1.1 *Un N quelconque*

In the following, I will contrast the empirical properties of *vreun* and existential free-choice items, by examining in more detail the meaning and distribution of the French item *un N quelconque*, discussed in Jayez & Tovenà (2002, 2006). The choice of French as an element of comparison is mainly motivated by the fact that we will address the properties of another allegedly similar determiner, namely singular *quelque* (Corblin 2004, Jayez & Tovenà 2008, 2009). Restricting the discussion to different instances of existential determiners within the same language makes it easier to see the locus of variation and sets the ground for the

comparison with *vreun*. The goal is to understand to what extent the constraints I have identified for *vreun* hold for other classes of items.

The fact that existential free-choice items share restrictions with both indefinites and free-choice items has been noted in Jayez & Tovenà's (2006) analysis of the properties of the French item *un N quelconque*, who identify the following constraints on its meaning (Jayez & Tovenà 2006:10):

- (49) (i) like **standard indefinites** it is not compatible with certain contexts in which the restriction domain is a singleton
 (ii) like **free-choice** items, all members of the restriction must be equivalent(

The former constraint captures the fact that the referent of *un N quelconque* cannot be identified by the epistemic agent, typically the speaker, as would be the case in (50), where it is the speaker who met someone, so it cannot be the case that the speaker doesn't know who she met. This 'ban on identification' is common to all *epistemic* indefinites, i.e. indefinites sensitive to speaker's knowledge. As illustrated in (51), even in situations where the speaker cannot identify the referent, it is important not to reduce the domain to a singleton.

- (50) * Hier j'ai croisé **un ami quelconque**.⁶⁴
 Yesterday I have.1SG met a friend whatever

- (51) ??Hier, Marie a rencontré **un collègue quelconque**, le seul qu'elle ait.
 'Yesterday, Mary met some colleague or other, the only one she has'

The condition in (49)ii is common to all free-choice items, and requires that all members of the evaluation set stay equivalent with respect to their possibility of satisfying or not satisfying the existential claim. Since *un N quelconque* is an epistemic item, this property is relativized with respect to the alternatives entertained by the epistemic agent, i.e. the speaker. This constraint has two consequences, or, rather, it manifests itself in two different ways: no member can be excluded (Jayez & Tovenà (2007) dub this the 'NO LOSER constraint') and no member can be imposed ('NO WINNER constraint'). This is responsible for the infelicity of the sentences in (53)-(54):

⁶⁴ The examples in this section are taken from Jayez & Tovenà (2006).

(52) Marie a rencontré **un** diplomate **quelconque**.

‘Mary met some diplomat or other.’

(53) NO WINNER is violated

??Marie a rencontré **un** diplomate **quelconque**, à savoir mon frère.

‘Mary met some diplomat or other, namely my brother.’

(54) NO LOSER is violated

??Marie a rencontré **un** diplomate **quelconque**, qui ne peut pas être mon frère.

‘Mary met some diplomat or other, who cannot be my brother.’

The continuation in (53) overtly singles out a member of the restriction set, as satisfying the existential claim, thus violating the NO WINNER constraint. The fact that the sentence disallows this type of continuation shows that *un N quelconque* is subject NO WINNER. Similarly, in (54), the exclusion of one member of the restriction set as a possible value for the DP *un diplomate quelconque* constitutes a violation of NO LOSER, and renders the sentence infelicitous. Jayez & Tovenà (2006) further note that the ‘equivalence’ constraint in (49) is relativized with respect to the speaker’s beliefs. This restriction plays a crucial role in the acceptability of (55) below, which is compatible with a situation where the attitude holder, namely Mary, actually has a particular book in mind. As long as it is not the case that there is a particular book that the speaker believes that Mary thinks John must read, the sentence is appropriate. In other words “*this prohibition affects the epistemic alternatives that the speaker attributes to Mary, not the alternatives Mary actually entertains*” (Jayez & Tovenà 2006:11)

(55) Marie pense qu’il est obligatoire que Jean lise **un** livre **quelconque**.

‘Mary thinks that John has to read some book or other.’

Summarizing, we have seen that the existential free-choice item *un N quelconque* shares restrictions of both indefinites and free-choice items. The crucial property is the requirement that the member of the restriction set stay equivalent with respect to their ability of satisfying the existential claim.

3.1.2 Differences between existential free-choice items and *vreun*

After this brief overview of the interpretation of existential free-choice items, exemplified by *un N quelconque*, let us see how it differs from *vreun*. I see at least two crucial points in which the two types of items diverge:

(A) Existential free-choice items can occur in any **type of modal** context, regardless of the type of modality involved. As an illustration, consider the presence of the deontic operators in (56)a-b:

(56) a. Il est *obligatoire* que Jean lise **un** livre *quelconque*.

‘John has to read some book or other.’

b. Tu *peux* consulter **un** fichier *quelconque*.

‘You may consult any file.’

A similar situation arises in Romanian, where the existential free-choice item *un N oarecare* can occur under any kind of modal operator, as shown in Chapter 1, section 2, and illustrated below with a necessity deontic modal (44) and an ability modal (44):

(57) *Necessity modals*

Maria *trebuie* să se căsătorească cu un doctor **oarecare** din sat.

Mary must subj refl marry with a doctor whatever from village

(i) ‘There is a certain doctor that Marry has to marry, but the speaker does not know about or doesn't know who he is.’

(ii) ‘Mary has to marry some doctor or other, any doctor is a possible choice.’

(58) *Ability modals*

Maria *poate* să rezolve o problemă **oarecare**.

Mary can SUBJ solve a problem whatever

(i) There is a certain problem that Mary can solve; the speaker does not know which problem it is.

(ii) No matter what problem Mary is faced with, she is able to solve it.

In contrast, I have argued in Chapter 2 that *vreun* is only possible in the scope of an epistemic modal. Accordingly, the Romanian sentences equivalent to (56) rule out the use of *vreun*, as shown in (59):

(59) a. *E *obligatoriu* ca Ion să citească **vreo** carte.

be.3SG obligatory that Ion SUBJ read V-A book

b. **Poți* consulta **vreun** fișier.

can.2SG consult V-A file

(B) existential free-choice items require that all the members of the evaluation set be

equivalent with respect to the possibility of satisfying or not satisfying the existential claim. As illustrated above, they obey both NO WINNER and **NO LOSER**. In contrast, *vreun* is subject to NO WINNER (as shown in (60)), but is compatible with a situation where a member of the domain of quantification is overtly excluded. The sentence in (61), which is a violation of the NO LOSER constraint, illustrates this property:

(60) NO WINNER is violated

??? E posibil ca Irina să se fi întâlnit cu **vreun** prieten, *si anume*
be.3SG possible that Irina SUBJ REFL BE met with V-A friend, and namely
Matei.

Matei

‘It’s possible that Maria met some friend, namely Matei’

(61) NO LOSER is violated

E posibil ca Irina să se fi întâlnit cu **vreun** prieten, *dar nu poate fi*
be.3SG possible that Irina SUBJ REFL BE met with V-A friend, but NEG can be
Matei, tocmai l-am văzut.

Matei, just CL-have.1SG seen

‘It’s possible that Maria met some friend, but it cannot be Matei, I have just seen him.’

The fact that the sentence in (61) allows a continuation which excludes a member of the restriction set thus shows that *vreun* is not subject to NO LOSER. In Chapter 2, section 2.5, I have shown that this property is crucial in understanding its distribution in imperatives, where this type of continuation ensures that the imperative has the alternative-presenting reading to which *vreun* is sensitive:

(62) NO LOSER is violated

Vorbește cu **vreun** vecin, să primească el pachetul. *Dar nu cu Petre*, e plecat.

Talk.2SG with V-A neighbor SUBJ receive.3SG he package but NEG Peter be.3SG left

‘Talk to some neighbor, so that he receives the package. But not to Peter, he is away.’

In other words, *vreun* does not require that all members of its domain of quantification be equivalent. It shares with existential free-choice items the ban on a singleton domain, which amounts to a ban on identification (NO WINNER), but it does not require that *all* members of this domain be possible values. This is a crucial difference between the two types of items, which needs to be accounted for.

Summing up, I have shown that *vreun* and existential free-choice items like *un N quelque* differ with respect to the type of modality to which they are sensitive, and with respect to the constraints they impose on the domain of quantification. On the basis of these two diverging properties, I conclude that *vreun* is not a typical existential free-choice item.

3.2 *Vreun* versus French *quelque*

One of the striking distributional features of *vreun* is its restriction to epistemic modal contexts. As such, we have seen that it differs from free-choice items, both ‘universal’ and existential, which can occur with non-epistemic modals. The question that arises is to what extent the restriction to epistemic modality is shared by other items cross-linguistically. In the following, I turn to investigate the properties of two dependent determiners which have been argued to be sensitive to epistemic modality, and which, as far as I can see, bare a close resemblance with *vreun* in this respect. One of them is Spanish *algún*, which I discuss in the section 3.3, and the other one is the singular French determiner *quelque*, on which I now focus.

3.2.1 *Quelque* as an epistemic item

The distribution of *quelque* has been recently examined in several papers by Jayez & Tovenà (2007, 2008a,b)⁶⁵, who build on observations in Culioli (1982) and Corblin (2004)⁶⁶. Like all other dependent items discussed in this section, *quelque* precludes interpretations where the identity of the referent of the NP is known by the speaker, or more generally by the epistemic agent. In addition, all studies agree on the strong connection between *quelque* and epistemic modality, a feature that makes this determiner very relevant for our discussion of *vreun*. The following sentences illustrate this behavior:

(63) ??Hier j’ai rencontré *quelque* amie

‘Yesterday I met some friend or other’

(64) Hier, Yolande a dû rencontrer *quelque* amie

‘Yesterday, Yolanda must have met some friend or other’

Jayez & Tovenà show that the epistemic source plays an important part in the distribution of

⁶⁵ All examples in this section are taken from Jayez & Tovenà (2007, 2008a).

⁶⁶ Other studies which note the connection between *vreun* and epistemic modality are Culioli (1984), Dobrovie Sorin (1985), Wilmet (1996)

quelque. More precisely, they argue that *quelque* qualifies the information source, which crucially has to be an inferential process. More precisely, “by using *quelque*, the speaker signals that she does not use perceptual or hearsay evidence containing the proposition expressed by the sentence” (Jayez & Tovenà 2007:4). This explains the infelicity of the following sentence:

(65) ??Yolande m’a dit qu’elle avait rencontré *quelque* amie.

‘Yolanda told me she had met some friend or other.’

In order to account for this restriction on the use of *quelque*, Jayez & Tovenà propose to analyze this determiner as a marker of *inferential evidentiality*⁶⁷: whenever the context ensures that the existential claim has been made on the basis of some inferential process, *quelque* can be used. Note that even in the absence of an overt modal, *quelque* is felicitous when the context makes available the evidential inferential interpretation:

(66) Il y a de la lumière dans le bureau; *quelque* idiot a oublié d’éteindre.

‘The light is on in the office; some idiot has forgotten to switch it off’

Accordingly, the use of *quelque* is argued to be subject to two constraints:

- (i) **C-Ignorance** which requires that the epistemic agent *ignore* which individual satisfies the description provided by the sentence
- (ii) **Evidentiality (C-inf)** which requires that the existential claim that some entity has a certain property be the result of an *inferential* processing.

This is very similar to what we have found for *vreun*. In particular, recall that *vreun* is licensed by presumptive mood (Chapter 2, section 2.2.1), a marker of indirect evidentiality:

(67) Mașina mea o fi având vreo problemă la motor, pornește greu

Car.DEF mine FUT2.3SG BE have.PRST.PART V-A problem at engine, start.3SG hard
dimineața.

morning.DEF

‘My car might have some engine problem, it takes time to start up in the morning.’

The sentence in (67) can only be used in a situation where the speaker makes a hypothesis on

⁶⁷ Evidentials are defined as functional item that contribute information regarding the means by which the speaker came to believe/know the proposition being asserted. There is an extensive body on literature on evidentiality, and the way it connects with epistemic modality (see e.g. Aikhenvald 2005, Faller 2002, 2006; Garrett 2000; Givon, 1982; De Haan, 2001; Izvorski, 1997; Kratzer, 1991; Palmer, 1986; Papafragou 2000).

the type of problems her car has, on the basis of some indirect evidence, or, for example, inferences based on past experience. Importantly, the sentence couldn't be used in a situation where the speaker can identify the precise engine problem of the car. *Vreun* and *quelque* thus seem to share the restriction on the source of evidence, which has to be indirect.

Moreover, just like *vreun*, *quelque* differs from existential free-choice items, by allowing violation of the NO LOSER constraint, as illustrated in (68), where the possibility that Mary be the friend met by Yolanda is overtly ruled out, without resulting in inappropriateness.

(68) NO LOSER is violated

Yolande a probablement rencontré *quelque* amie, *qui n'était pas Marie*.

'Yolanda probably met some friend or other, who was not Mary'

On the basis of these properties, we can see that both *quelque* and *vreun* are sensitive to epistemic modality and have a very similar distribution and meaning.

3.2.2 Differences between *vreun* and *quelque*

Despite these striking similarities, which are very interesting from the perspective of a unifying theory of semantic dependencies, there are two important differences between *quelque* and *vreun*: (A) distribution with respect to negation and (B) use with abstract nouns.

(A) *Quelque* cannot occur in the scope of **sentential negation**, a fact first noted in Corblin (2004). The embedding of *quelque* under negation results either in ungrammaticality (69) or obligatory wide scope with respect to negation (70):

(69) * Je n'ai pas mangé *quelque* pomme.⁶⁸

[Corblin 2004:101]

I not-have neg. eaten some apple

⁶⁸ French also has a related item *quelque N que ce soit*, which includes the domain widening marker 'que ce soit', and which can occur in polarity contexts, including negation. It is not clear to what extent this option affects the distribution of *quelque* N. A more detailed discussion of the different types of constructions including *quelque*, see Jayez & Tovenà (2008a).

(70) #Yolande n'a *pas* dû trouver *quelque* fichier [Jayez & Tovenà 2007:280]

'Yolanda must have not found some file'

??[neg > quelque] vs. [quelque > neg]

Note that despite the presence of an epistemic modal in (70), *quelque* needs to escape the scope of negation in order for the sentence to be acceptable. Closer investigation shows that this restriction only holds in the case of clausemate negation, as illustrated by the fact that the extraclausal negation in (71) is unproblematic:

(71) Je ne pense *pas* que Yolande ait trouvé *quelque* fichier.

'I don't think that Yolanda has found some file'

This situation is in sharp contrast with the interaction between negation and *vreun*. More specifically, in Chapter 2, section 1.2, I have provided evidence that *vreun* can occur in the scope of sentential negation, either in order to convey a domain widening effect, or to avoid an ambiguity that would arise from the co-occurrence of two n-words, as in (21):

(72) *Nimeni* nu a avut *vreo* informație despre cele întâmplate.

Nobody NEG have.3SG had V-A information about DEM.PL happened

'Nobody had any information about what had happened'

In Chapter 5, I will come back to the distribution of *vreun* in the scope of local negation and relate it to the properties of n-words. At this point, I take the behavior in the scope of sentential negation as an important distributional difference between the *vreun* and *quelque*⁶⁹.

(B) *Quelque* can combine with **abstract mass nouns**, which denote external qualities, feelings and dispositions. As illustrated by the episodic sentences in (73)-(74), this use is not subject to the usual constraints on *quelque*, which requires that the NP occurs in a modalized context:

(73) Yolande a montré *quelque* courage.

'Yolanda showed some courage.'

⁶⁹ It is not clear whether *quelque* behaves like a negative polarity item in other respects. It is licensed in some questions, or conditionals, but the facts need to be carefully investigated, in connection with other polarity items in the language. At any rate, *vreun* has an NPI-status which is much more straightforward than in the case of *quelque*.

(74) Il y a *quelque* hypocrisie à prétendre cela.

‘There is some hypocrisy in this claim.’

In contrast, *vreun* cannot combine with mass nouns, a context where Romanian resorts to an anteposed version of an existential free-choice *un oarecare*:

(75) Iolanda a făcut dovadă de un *oarecare* /**vreun* curaj.

Iolanda have.3SG made proof of a whatever V-A courage

‘Iolanda has shown some courage.’

The comparison between *vreun* and *quelque* reveals that the two items share sensitivity to epistemic modality, a restriction which can be related to indirect evidentiality. This is an important finding, which calls for further investigation: in particular, it raises the question of whether we are dealing with a cross-linguistic pattern, a ‘class’ of epistemic items. However, despite these similarities, it is clear that the distribution of *quelque* is both more restricted (as illustrated by the interaction with negation) and more liberal (the combination with abstract/mass nouns) than that of *vreun*. More empirical investigation is needed to establish to what extent the constraints identified for *vreun* carry over to *quelque*. Although at this point, I cannot reach firm conclusions on the type of pattern exhibited by *quelque*, in particular in negative polarity contexts, it is important to keep in mind that as far as epistemic modality is concerned, and the meaning available in these contexts, *quelque* and *vreun* are very similar.

3.3 *Vreun* versus Spanish *algun*

I now turn to the properties of another item that has been claimed to be sensitive to speaker’s ignorance, namely the Spanish determiner *algun*, discussed in a series of papers by Alonso-Ovalle & Menendez-Benito (2003, 2008, 2009)⁷⁰.

3.3.1 *Algun* as an epistemic item

The use of *algun* in an existential claim, as opposed to that of a simple indefinite, conveys that the speaker does not know the witness of this claim, i.e. does not identify a particular referent for the *algun* DP. The sentence in (76) for example, does not admit a continuation which explicitly singles out an individual satisfying the existential claim (a property which was previously referred to as ‘the NO WINNER constraint’):

⁷⁰ The examples in this section are taken from Alonso-Ovalle & Menendez-Benito (2009).

- (76) María se casó con *algún* estudiante del departamento de lingüística (#en Maria SE married with ALGUN student of the department of linguistics concreto con Pedro)
namely with Pedro
‘Maria married a linguistics student (# namely Pedro).’

Moreover, an important feature of *algún* is that unlike existential free-choice items, but crucially very much like *vreun* and *quelque*, it does not require that all individuals in the domain of quantification be possibilities. In other words, *algún* does not convey a free-choice effect. Once again, we can describe this situation by using the same metaphors as above: *algún* is not subject to the NO LOSER constraint. Alonso-Ovalle & Menendez-Benito make use of the following scenario to show this crucial difference:

- (77) SCENARIO. We are playing hide-and-seek and Juan is hiding. Pedro is convinced that Juan is not in the bathroom or in the kitchen, but for all Pedro knows, Juan could be in any of the other rooms in the house, or even outside the house (say, in the barn).
- a. Juan *puede* estar en *cualquier* parte de la casa
Juan may be in CUALQUIER part of the house
‘Juan may be anywhere in the house.’
 - b. Juan *puede* estar en *alguna* parte de la casa
Juan may be in ALGUNA part of the house
‘Juan may be in a part of the house.’

The sentence in (77)a, with a free-choice item, is false under this scenario, whereas the equivalent sentence with *algún*, in (77)b, is both true and appropriate in a situation where some possibilities are ruled out from the domain of quantification, i.e. the bathroom or the kitchen. According to Alonso-Ovalle & Menendez-Benito, *algún* does not trigger a free-choice effect, but imposes a weaker constraint, namely it requires that at least two individuals in its domain of quantification be possible values. In other words, the domain of *algún* cannot be a singleton. This requirement is dubbed “Modal Variation” and is highly reminiscent of what we have seen for *un N quelconque* or *quelque*.

Furthermore, *algún* is sensitive to epistemic modality⁷¹: all the scenarios discussed by Alonso-Ovalle & Menendez-Benito involve epistemic modals, be it necessity or possibility

⁷¹ Paula Menendez-Benito (p.c.) confirms this claim: for example, *algún* is not licensed by deontic modality.

modals. In many cases, the epistemic interpretation is recovered from the context, as in (78), which can only be used in situations where the speaker doesn't know which student Maria married:

- (78) Maria se caso con **algún** estudiante del departamento de linguística.
 Maria SE married with ALGUN student of the department of Linguistics
 'Maria married a/some Linguistics student.'

Romanian, on the other hand, the example in (79) shows that disallows the use of *vreun* in episodic sentences like (78), where the presumptive form of the verb would have to be used for *vreun* to be licensed, as illustrated in (80):

- (79) * Maria s-a căsătorit cu **vreun** student din departamentul de lingvistică.
 Maria RELF-have.3SG married with v-A student of the department of Linguistics
 'Maria married some Linguistics student.'
- (80) (Maria) s-o fi căsătorit cu **vreun** student din departamentul de lingvistică.
 Maria RELF-FUT2.3SG BE married with v-A student of the department of Linguistics
 'I guess Maria married some Linguistics student.'

This restriction might be independent of *vreun*, and is presumably related to the fact that Romanian has a specialized mood for conveying hypothetical meanings. Spanish does not have this option, so it might be the case that speakers rely much more on the information made available by the context⁷².

Once again, it looks like that *vreun* and *algun* share interpretive and distributional constraints. Just like in the case of *quelque*, the empirical facts need to be more closely and exhaustively investigated before we reach any firm conclusion. At this point, I can only offer some preliminary results on the differences between *algun* and *vreun*, enough to raise the question of cross-linguistic similarities and differences and as such, set the stage for discussion.

3.3.2 Differences between *vreun* and *algun*

I see two important differences between the two determiners: (A) distribution with respect to negation and (B) the status of the 'modal variation' component.

⁷² A similar point might be made for French, on the use of *quelque* in contexts without an overt marker, such as (66). This possibility was suggested to me by Lucia Tovená (p.c.)

(A) Like *quelque*, and unlike *vreun*, *algún* cannot occur in the scope of clausemate **sentential negation**:

- (81) **No* he leído ***algún*** artículo recientemente. [P. Menendez-Benito, p.c.]
 NEG have.1SG read ALGUN article recently

The example in (81) shows that *algún* is ruled out from the scope of sentential negation. Recall from Chapter 2, section 1.2, that *vreun* is in competition with n-words in negative sentences, a blocking effect which *vreun* can override to convey domain widening or to avoid an ambiguity. The blocking effect in Spanish seems much stronger, and the n-word *ningun* would have to be used to render the sentence grammatical. In Chapter 5, I come back to this contrast between Romanian and Spanish and offer some discussion of the reasons underlying it, by contrasting the properties of n-words in the two languages. For now, I only take the ungrammaticality of (81) as indicating a contrast between *vreun* and *algún* in the scope of sentential negation.

(B) A further interesting difference is the fact that the ‘modal variation’ effect can sometimes be **cancelled**.

- (82) Maria se caso con ***algún*** estudiante del departamento de linguistica. De hecho,
 Maria SE married with ALGUN student of the department of Linguistics In fact,
 sé exactamente con quién
 I know exactly with whom
 ‘Maria married a Linguistics student. In fact, I know exactly who!’

Although *algun* is typically used to convey that the speaker doesn’t identity the witness of the existential claim, this effect can be subsequently cancelled. Alonso-Ovalle & Menendez-Benito take this as providing support for the hypothesis that ‘modal variation’ is a conversational implicature. *Vreun* rules out such a continuation (and as far as I can see, so does *quelque*):

- (83) (Maria) s-o *fi căsătorit* cu ***vreun*** lingvist. # De fapt, știu cu cine.
 Maria RELF-FUT2.3SG BE married with v-A lingvist in fact know.1SG with whom
 ‘I guess Maria married some linguist. In fact, I know whom.’

The speaker cannot identify and single out an individual satisfying the existential claim. The constraint on *vreun* thus seems to be much stronger, and disallows continuations which cancel

the ‘ignorance by the speaker’ component.

A related difference comes from the fact that *algun* seems much less speaker-oriented than *vreun*. For instance, in the utterance in (84), the speaker can identify the referent of the *algun* phrase, but since Juan’s epistemic alternatives are such that there is variation among the individuals that can satisfy the claim, the sentence is felicitous:

(84) Juan sabe que Maria se caso con **algún** estudiante del departamento de linguistica.

Juan knows Maria SE married with ALGUN student of the department of Linguistics

El no sabe con quién, ¡pero yo sí!

he NEG know.3SG with whom, but I do

‘Juan knows that Maria married a Linguistics student. He doesn’t know who, but I do.’

On the other hand, *vreun* is not possible in this situation. First, note that it would be embedded under *know*, a factive verb, so it would be independently ruled out, but even in the scope of a licensing verb like *believe*, it is not enough that the attitude holder’s epistemic alternatives allow variation with respect to the identity of the individual satisfying the existential claim:

(85) *Paul *crede* că Maria s-a căsătorit cu **vreun** lingvist.

Paul believe.3SG that Maria REFL-have.3SG married with V-A linguist.

El nu știe cu cine, dar eu știu.

He NEG know.3SG with whom, but I know.1SG

‘Paul thinks that Maria married some linguist. He doesn’t know whom, but I do.’

These facts point out the necessity to explore issues concerning on the identity of the individual whose epistemic alternatives are relevant for the use of *algun* or *vreun*. In particular, whereas *vreun* (and presumably *quelque*) is speaker-oriented, *algun* seems to be more liberal in this respect, and allow for modal variation to be satisfied by some other epistemic agent in the context. Moreover, the fact that this effect can be easily canceled for *algun* casts doubt on the hypothesis that the two items require to the same extent that there be ignorance by an epistemic agent. *Algun* only seems to require a non-singleton domain and some epistemic modal operator (possibly covert). *Vreun*, on the other hand, has been shown to impose more strict constraints on the epistemic agent’s epistemic alternatives, which, crucially, must allow for the possibility that the proposition where *vreun* occurs might not hold. In addition, the two items diverge with respect to their distribution in negative sentences, a property that *algun* shares with *quelque*, and which I discuss in Chapter 5. All of

these differences need to be further investigated, in order to establish to what extent they are systematic and to determine the precise nature of the contrast between *vreun* and *algun*.

4 Summary

This chapter focused on the distributional overlap exhibited by *vreun*, which has previously been established to occur in both negative polarity and ‘epistemic modal’ contexts. In section 1, I argued against the analysis proposed in Farkas (2005) which assumes that *vreun* is lexically ambiguous between an undifferentiated choice and a random choice item. I have shown that the ambiguity approach is both unnecessary and problematic, and defended that my proposal on the licensing constraints on *vreun* has a better empirical coverage.

In section 2, I turned to a unifying account for *vreun*, in terms of nonveridicality, along the lines pursued by Giannakidou (1997, 1999). I have shown that this analysis cannot be extended to *vreun*, whose distribution is both more restricted and more liberal than the distribution of nonveridical items. In particular, this approach cannot incorporate the difference between epistemic and non-epistemic modal contexts which is I have shown to be crucial for the licensing of *vreun*.

Finally, in section 3, we tried to situate the pattern of distribution identified for *vreun* with respect to other sensitive items discussed in the literature (Jayez & Tovena (2007, 2008a,b), Alonso-Ovalle & Menendez-Benito (2003, 2008, 2009)). This preliminary cross-linguistic survey indicates the existence of a range of items (determiners) sensitive to epistemic modality, to which I refer as *epistemic* items, such as *quelque* and *algun*. The sensitivity to epistemic modality sets them apart from free-choice items, be they ‘universal’ or existential, which simply require a modal context, without further restrictions⁷³. Like all other dependent determiners, epistemic items cannot be used in situations where a single individual is identified as satisfying the existential claim (i.e. they satisfy the NO WINNER constraint), but can occur in contexts where a member of the restriction set is excluded as a possible value (and hence they are not subject to the NO LOSER constraint). As far as *quelque* is concerned, it has been argued to be sensitive to the source of evidence available to the epistemic agent, a conclusion which we have previously reached for *vreun*. Jayez & Tovena implement this restriction in terms of evidentiality, which is known to be related to epistemic modality (e.g.

⁷³ ‘Universal’ free-choice contexts do not easily occur under necessity modals, a point that need not concern us here. The main claim is that the restrictions on the contexts allowing epistemic items are clearly different from the ones that are responsible for the distribution of free-choice items.

Aikhenvald 2005), and as such establish a more direct connection between the meaning of epistemic items and their contexts of occurrence. I believe this is a promising line of investigation, which deserves further investigation.

The comparison between *vreun*, *quelque* and *algun* also revealed differences concerning their use in negative polarity contexts. In particular, neither *quelque* nor *algun* can occur in the scope of clausemate negation. *Vreun*, on the other hand, is able to occur in all negative polarity contexts, including sentential negation, whenever the speaker has reasons not to choose an n-word determiner. The precise pattern of distribution of *algun* and *quelque* remains to be properly investigated, in order to establish to what extent their use is possible in negative polarity contexts.

A final remark that needs to be made on the basis of this investigation is the fact that the distribution of *vreun* seems to be regulated by strong(er) constraints. More precisely, both the studies on *quelque* and the studies on *algun* rely on ‘pragmatic’ constraints, which require that the context of use of these items make available a certain interpretation. In the absence of the appropriate contextual factors (i.e. source of evidence, domain containing more than one individual), the use of these items is *infelicitous*. In contrast to this, I have argued that epistemic *vreun* is subject to a stricter, semantic constraint (that I have implemented in terms of ‘*non p*-worlds’ requirement), concerning the entailment properties of the licensing operator. Crucially, in the absence of a downward-entailing operator, or a propositional operator satisfying the ‘*non p*-worlds’ requirement, the use of *vreun* is not merely infelicitous, but results in *ungrammaticality*. I take the properties of *vreun* to support a theory of polarity in terms of licensing constraints, rather than accounts based on conditions of use. Despite differences among epistemic items, the discussion in this section indicated the existence of a pattern of polarity sensitivity (in the sense defined in Chapter 1) which needs to be accommodated and accounted for, a conclusion I have already defended for *vreun*. Empirical studies, preliminary as they may be at this stage of investigation, show that epistemic items share restrictions with other dependent items (like existential FCIs), and consequently, any account that seeks to establish parameters of variation in the area of polarity needs to ultimately integrate these facts. This conclusion also holds for unifying theories, such as the one I introduce in the next chapter, due to Chierchia (2006, 2008), which relies on the assumption that there is a unique source to polarity sensitivity (domain widening) and seeks to derive ungrammaticality from the type of inferences speakers make in using polarity items.

Chapter 4

A unified account of polarity sensitivity

In the previous chapters, we identified the constraints governing the distribution and interpretation of the dependent item *vreun*. This determiner is one example of a whole range of elements sensitive to epistemic modality, a pattern which has not received much attention in the literature on polarity items. The studies on *quelque* and *algun* focus on the interpretation of these elements, and on why certain contexts render the use of these elements infelicitous. Importantly, I have shown that the constraints responsible for the distribution of *vreun* cannot be reduced to whether an interpretation is available or not in a given context, but require *vreun* to be in the scope of a *licensing operator*. A downward entailing operator - responsible for licensing in polarity contexts, or an operator satisfying the *non p*-worlds requirement - responsible for licensing in non-polarity contexts. In the absence of such an operator, a sentence with *vreun* is not merely infelicitous, but clearly ungrammatical. Any account of *vreun* has to accommodate this restriction.

In this chapter, I present a unified theory of polarity due to Chierchia, which seeks to derive the distribution of several classes of polarity items from their meaning. More precisely, Chierchia (2006, 2008) develops an account of polarity sensitivity which relies on the assumption that there is a unique source of deficiency common to all types of polarity items, namely domain widening. After a detailed description of the proposal put forward by Chierchia, I explore the possibility of integrating *vreun* in this unified system.

1 The domain widening hypothesis

The domain widening hypothesis, first proposed by Kadmon & Landman (1993), relies on the intuition that expressions such as *every* or *some* are used with respect to a certain domain of quantification relevant in the context. When a speaker utters something like *Every politician approved the treaty*, she does not have in mind every possible politician in the world, but rather every politician in a certain, relevant, domain of discourse, e.g. in a given country. The universal quantifier *every* thus limits its consideration to a certain domain D of salient individuals.

Importing this insight into the semantics of polarity items like *any*, Kadmon & Landman analyze them as indefinites that impose the consideration of a broader domain of individuals⁷⁴ than the one which would be normally assumed. In other words, polarity items induce *widening* (along a contextually given dimension) of the set denoted by the noun with which they combine. Their restricted distribution is due to a *strengthening* constraint requiring that the widening triggered by the polarity item creates a stronger statement. More precisely, an expression like *any politician* extends the domain of individuals under consideration, including possibly marginal cases, relevant in the context of utterance, e.g. retired politicians. Under this view, polarity items are ‘marked’ counterparts of indefinites. Now, the hypothesis underlying all accounts of polarity implementing the domain widening property is that the extension of the domain of quantification is only appropriate in negative contexts. To see why, consider the following contrast:

- (1) a. I met *a/some* politician.
- b. *I met *any* politician

The use of an indefinite/an existential in the sentence in (1)a introduces a certain domain D of quantification including politicians that are relevant in the context and attributes a certain property to an individual in this domain. In addition to this plain existential meaning, the polarity item *any* in (1)b widens this domain and as such, leads to a statement that is weaker, conveying a meaning we could paraphrase as ‘I met someone in the set of all possible politicians’. The existential claim does not only hold for the initial domain of quantification (D), but is also taken to hold for any larger domain we could consider within the boundaries of the relevant context. This is clearly a weaker, i.e. less informative claim than the one conveyed by the sentence in (1)a, where this widening effect is absent. In a situation where the speaker wants to communicate that she met a politician, (1)b is needlessly uninformative. More generally, in positive contexts, the more constrained the quantificational domain of an existential is, the more informative is the sentence in which it occurs. In other words, domain widening in a positive context leads to a loss of information. To the extent that speakers prefer more informative claims, the use of a polarity item in this context is thus inappropriate. Polarity items are required to lead to a strengthened claim, and since this condition of use is clearly not satisfied in (1)b, the sentence is ruled out.

⁷⁴ The discussion in this chapter is generally restricted to polarity items that denote individuals or times, analyzed as marked counterparts of indefinites, but the approach adopted here also extends to adverbial or degree-denoting polarity items (also known as *minimizers* or *emphatic* polarity items).

Things are different in negative contexts, as shown by the following set of examples:

- (2) I didn't meet *a* politician.
- (3) I didn't meet *any* politician.

Contrary to what happens in positive contexts, here the use of *any* leads to a statement that is stronger, i.e. more informative than the equivalent sentence with a simple indefinite. If the assertion holds for the large domain *D*, and therefore means *I didn't meet a politician in D*, then, it necessarily holds for any domain *D'*, where *D'* is a subset of the wide domain *D*, for instance the domain of French politicians. Consequently, the *any*-statement entails, i.e. is logically stronger than its plain existential counterpart. The strengthening condition governing the distribution of polarity items is satisfied, hence the NPI is licensed.

This hypothesis provided a way to connect the meaning of NPIs with the independently established generalization that they are licensed in so-called downward-entailing contexts, i.e. contexts that allow inferences from larger sets to subsets (Ladusaw 1979). As we have seen, the crucial property of these contexts that is relevant for the licensing of polarity items is that they reverse the strength of an assertion. Just as illustrated in the examples above with sentential negation, scales of informativity are reversed in downward-entailing contexts, where the sentence containing a quantifier ranging over a *larger* domain of quantification entails (and hence is stronger, more informative than) the one with an item associated with a *smaller* domain. Consequently, it is (only) in such environments that exploiting the domain widening property of polarity items like *any* is permitted, as a result of the fact that the constraint to lead to a strengthened meaning is satisfied.

This 'functional' view of the meaning of *any* has the advantage of deriving the restrictions on the distribution of polarity items from their meaning. However, whereas the rationale behind the use of polarity items seems clear and intuitive, the key issue is how to turn it into a real 'grammatical' constraint. More precisely, we need to account for the fact that positive sentences like (1)b do not express merely weak or under-informative statements, but are plainly ruled out. Speakers may and, in fact, often choose to produce weak assertions without leading to inconsistency or ungrammaticality, so something more needs to be said on the phenomenon of polarity sensitivity. There have been several proposals in the literature on how to implement domain widening and derive the restricted distribution of polarity items. As we have just seen, Kadmon & Landman (1993) add the *strengthening* constraint to the lexical meaning of *any*, which restricts its use to statements that entail the corresponding statement with an indefinite article (without the widening). The notion of strength is defined in terms of

entailment; *any* is argued to be licensed only in contexts where widening makes the statement *stronger* (as is the case only in downward entailing environments). The accounts of Krifka (1995) and Lahiri (1998) share the intuition underlying the Kadmon & Landman proposal: while their accounts do not literally say that polarity items involve domain widening, they arrive at a similar effect *via* the assumption that polarity items are scalar items generating alternatives.

As previously mentioned, an important advantage of these analyses is that they seek to provide an explanation for why polarity items are restricted to downward entailing contexts. Rather than positing a licensing constraint that confines NPIs to certain environments, alternative-based accounts derive this connection in terms of informativity and non-contradictory meaning. However, this way of connecting general pragmatic considerations and strong distributional restrictions is problematic in at least two respects. First, it is inherently non-compositional. In particular, the strengthening requirement posited by Kadmon & Landman says that *any* must appear in an environment which creates a stronger statement as a result of the widening it induces. This is a global property of the environments that license *any* rather than a local property of *any* itself. In deciding on whether a polarity item is licensed or not in a given context, we therefore need to compare the statement containing the polarity item with the equivalent assertion containing a plain indefinite. In other words, it is only after the truth-conditional meaning is computed that we can check whether the strengthening constraint is satisfied and decide whether the result is grammatical or not. On standard assumptions on how semantic composition works, the way in which we arrive at the meaning of statements with polarity items is clearly non-compositional. Furthermore, domain widening approaches that seek to derive ungrammaticality from conditions of use are also problematic in view of the traditional division of labor between pragmatics and the computational system of grammar. More specifically, pragmatic principles can typically be overridden and consequently, we do not expect their non-observance to lead to ungrammatical sentences.

In connection to these problems, Chierchia (2004, 2006) proposes a reassessment of the ‘traditional’ model of grammar and assumes that pragmatic components can affect parts of the derivation. Chierchia argues that this ‘grammatical view’ of pragmatics provides a framework for a unitary, alternative-based approach to polarity sensitivity. In the remainder of this chapter, I discuss the specific implementation of the domain widening hypothesis as developed in Chierchia (2006, 2008). Before turning to the detailed presentation of the analysis of attested classes of polarity items, let us take a closer look at the the way

Chierchia's unified account of polarity sensitivity cashes out the intuition behind domain widening approaches and overcomes the aforementioned difficulties. His system is based on two important assumptions, the details of which I elaborate on in the following sections:

- (a) (scalar) implicatures are part of the computational system of grammar; they are linked to the presence of an exhaustification operator (and are thus expected to occur at any level of computation)
- (b) polarity items are alternative-introducing elements. These alternatives are always active, and thus need to be factored in *via* an appropriate exhaustification operator, identical to the one involved in implicature computation.

1.1 *Recursive pragmatics: the grammatical view of scalar implicatures*

On the traditional view of grammar, semantics deals with sentence meaning, i.e. its truth-conditions, whereas pragmatics is concerned with the use of this meaning, and involves aspects that are not overtly expressed, such as speakers' intentions and beliefs, contextual information etc. A typical example illustrating the difference between what is said and what is meant is provided by the following exchange:

(4) A: Are you going to Rebecca's party?

B: I have to work.

Usually, on uttering the sentence 'I have to work' as an answer to A's question, the speaker B *states* that she has to work and *implicates* that she is not going to Rebecca's party. The resulting meaning of the sentence is thus richer than the plain assertion, which only conveys something about B's obligations. Grice (1975) coined the term *implicature* for communicated non-truth-conditional meaning of a sentence and developed a theory that aims to explain how some of the overall, enriched meaning of an assertion comes about. More precisely, Grice posits a general Cooperative principle assumed to govern efficient communication, formulated as in (5), and a small set of maxims that speakers tend to follow in order to be cooperative, given in (6)-(9):

- (5) ***Cooperative Principle***. Contribute what is required by the accepted purpose of the conversation.

(6) **Maxim of Quantity**

- (i) Make your contribution to the conversation as informative as is required
- (ii) Do not make your contribution more informative than required

(7) **Maxim of Quality**

- (i) Do not say what you believe to be false
- (ii) Do not say what you don't have adequate evidence for

(8) **Maxim of Relation**

Be relevant

(9) **Maxim of Manner**

- (i) Avoid obscurity and ambiguity
- (ii) Be brief and orderly

Let me briefly illustrate how these maxims lead to enriched meanings, following the steps typically described in the literature (e.g. Gamut 1991). The basic idea is that utterances are interpreted with respect to a set of alternatives that the speaker could also have chosen. Implicatures arise via an inference process applied to these alternatives. The reasoning that leads to enrichment is best illustrated with sentences involving quantifiers, such as *many*, as in (10) below:

(10) *Many* tourists visited this museum.

- a. *Some* tourists visited this museum.
- b. *Many* tourists visited this museum.
- c. *All* tourists visited this museum.

On hearing the sentence in (10), the alternatives in (a-c) are typically considered. This gives rise to the (unconscious and automatic) inferential process in (11):

- (11) i. The speaker chose to utter (b) over (a) or (c), which would have also been relevant.
- ii. (c) entails (b), which entails (a) [the quantifiers form a scale].
- iii. Given that (c) is stronger than (b), if the speaker had the information that (c) holds, she would have said so. [Maxim of quantity].
- iv. The speaker has no evidence that (c) holds.
- v. The speaker is well informed on the relevant facts.
- Therefore
- vi. The speaker has evidence that it is not the case that (c) holds.

Thus, the sentence in (10) ends up meaning *Many but not all tourists visit this museum*. This type of implicature, also called *scalar* or *quantity* implicature, is triggered by the presence of the quantifier *many*, part of an informativeness or semantic strength scale $\langle all, most, many, some \rangle$, in which the element on the left (the higher point on the scale), in this example the quantifier *all*, in a certain sense entails the other elements on the same scale. Scales of this kind are generally assumed to be lexically constrained Horn (1989), and in addition to quantifiers, other typical cases involve numerals, modals $\langle must, can \rangle$, gradable adjectives like $\langle hot, warm, cold \rangle$ and sentential connectives $\langle and, or \rangle$. As the previous example shows, when we choose to utter a sentence with a given element on a scale, by an inferential process parallel to the one in (11) above, we implicate that the speaker believes that no stronger alternative on the relevant scale holds. We can view the sentence as having an enriched - and *strengthened* - meaning, which we get by adding the implicature to the assertion.

A more recent line of thought accepts that sentences of this kind have strengthened meanings, but differs slightly when it comes to explaining how the strengthened meanings are generated. This line of thought sees strengthening as a form of *exhaustification* of the assertion, roughly equivalent to the insertion of a silent *only* operator (for a recent overview of the motivation behind this assumption, see Chierchia, Fox & Spector 2009). In other words, the speaker only believes the statement she asserts and thus denies that she takes stronger alternatives to be true. This hypothesis entitles the intuitive move from the conclusion that *it is not the case that x believes that p* to *x believes that not p*, an inference best known as ‘the epistemic step’ (Sauerland 2005). Since the computation of implicatures leads the exclusion of stronger alternatives, the process of enrichment is also called *exhaustification* (Fox 2003). In this respect, it is similar to the interpretation of focus (Rooth 1985, 1992) and of answers to questions (Hamblin (1973), Groenendijk and Stokhof (1984)), which have both been argued to involve alternatives and an (*exhaustifying*) operator (roughly) meaning *only* that operates

on them. Let us take a closer look at the definition of this operator, which will be relevant for the discussion of polarity sensitivity. Building on proposals in Krifka (1995), Fox (2003), Chierchia (2006), Chierchia, Fox & Spector (2009) define the exhaustivity operator O , modeled on *only*, as follows⁷⁵: O_{ALT} applies to a proposition S and the set of its alternatives ALT and expresses the conjunction of the proposition S and of the negations of all the members in ALT that are not entailed by S . More formally:

$$(12) [[O_{ALT}(S)]]^w = 1 \text{ iff } [[S]]^w = 1 \wedge \forall \phi \in ALT (\phi(w) = 1 \rightarrow [[S]] \subseteq \phi)$$

Intuitively, when we strengthen the meaning of a proposition through the means of an operator defined as in (12), we say that the assertion holds and every alternative that is not entailed by the assertion is false.

Grice noted an important feature of scalar implicatures, namely the fact that they can be cancelled, as shown by the possible continuation of the sentence in (13):

(13) *Many* tourists visited this museum, in fact, *all* did.

This means that implicatures of this kind are not necessarily associated with the enrichment operator. But what is important on this proposal, and will prove crucial for Chierchia's account of polarity, is that when scalar implicatures *do* arise, i.e. when the scalar alternatives are relevant, they are factored in *via* an exhaustification operator⁷⁶. The point that is relevant for our present discussion is that, once we adopt an implementation that attributes enrichment to an exhaustification operator, we need to reconsider certain traditional assumptions on the division of labor between pragmatics and the computational system of grammar.

The Gricean approach to implicatures treats them as a pragmatic phenomenon, which crucially, is processed after the basic meaning of the sentence is derived. Under this view, implicatures, and in particular scalar implicatures, arise as a result of purely conversational principles. As we have just seen, when a hearer compares a sentence with a scalar item to its alternatives, her default strategy is to assume that any stronger alternative to the assertion, if there is one, must be false. Accordingly, pragmatic enrichment (usually dependent on context, discourse participants' intentions and beliefs etc.) takes place only *after* syntactic structures

⁷⁵ This is a simplification, sufficient for the purposes of the present discussion. The actual definition of the operator involves certain assumptions on the set of alternatives, as shown in detail in section 1.2.

⁷⁶ Importantly, it has also been shown (Levinson 2000), that sometimes implicatures are obligatory, even for scalar items (cf. Chierchia, Fox and Spector (2009) for a detailed discussion of this issue)

have been compositionally interpreted. In other words, pragmatics affects *complete* utterances and is thus a root, global phenomenon.

This traditional split between semantics and pragmatics has been recently challenged. In particular, Chierchia (2004) (building on insights in Landman 1998 and Levinson 2000), proposed a grammatical algorithm to generate implicatures, an algorithm where the production of implicatures is done alongside the compositional computation of truth-conditions (as a result of the insertion of an exhaustification operator). In support of this grammatical proposal, he extensively argues that the type of reasoning leading to calculation of implicatures also occurs in embedded propositions. More specifically, in addition to the assumption that implicatures are derived by an exhaustification operator that affects semantic derivation, on this view, implicatures can be computed at embedded sites. Consider the sentence in (14)a, with the stronger alternative in (14)b:

- (14) a. John *believes* that ***some*** students are waiting for him.
- b. John *believes* that ***every*** student is waiting for him.

Recall that enrichment consists in applying an operator that leads to negating stronger alternatives. Accordingly, when confronted with the sentence in (14)a, with the existential quantifier *some*, we want to exclude its stronger alternative, with the universal *every*. The exhaustification operator (and hence reasoning leading to exclusion of stronger alternatives) can in principle occur at two different levels, either below the epistemic verb *believe*, as in (15)a, or above, as in (15)b:

- (15) a. John *believes* that ***not every*** student is waiting for him.
- b. It is ***not*** the case that John *believes* that *every* student is waiting for him.

The second option, where the implicature (*not every*) is computed at the root level, is clearly weaker than the one derived at the embedded site: it asserts that it is *compatible* with John's beliefs that not every student is waiting for him. In order to get the stronger meaning triggered by (14)a, the *some, but not every* enriched meaning must come under the scope of *believe*, as illustrated in (15)a.

Chierchia, Fox & Spector (2009) provide more examples showing that this phenomenon is pervasive:

- (16) If you take salad **or** dessert, you pay \$ 20; but if you take **both** there is a surcharge.
- (17) If **most** of the students do well, I am happy; if **all** of them do well, I am even happier.
- (18) Every professor who fails **most** of the students will receive no raise; every professor who fails **all** of the students will be fired.
- (19) Exactly three students did **most** of the exercises; the rest did them **all**.

In all of these sentences, the implicatures associated with the scalar item, be it *or* as in (16) or *most* as in (17)-(19), must be computed at an embedded level, or else the overall utterance would be contradictory. For example, the sentence in (19) evidently does not entail that exactly three students did most (say, more than half) of the exercises, since in that case the continuation *the rest did them all* would be contradictory. Instead the interpretation must be *exactly three students did most but not all of the exercises*. Assuming that implicatures are derived by the syntactically projected exhaustification operator *O*, this type of example provides support in favor of its insertion at embedded levels in the derivation. Consequently, implicatures are part of the core grammar and can affect meaning at any level in the computation. This approach has become known as *the grammatical view of scalar implicatures* and is most recently defended in Chierchia, Fox & Spector (2009)⁷⁷. A similar, syntactic position of implicature calculation has been defended for other phenomena (see among others the free-choice reading of disjunction under modals Fox (2006) and Magri (2007)). This approach to the pragmatics/semantics interface, that Chierchia calls *recursive pragmatics*, relies on the crucial assumption that pragmatically motivated operators can be inserted at any level of computation and thus can affect the compositional derivation of the meaning of a sentence. This syntactic view of the computation of scalar implicatures makes two important predictions, that will be discussed in more detail in the following sections: the exhaustification operator can interact with other operators and moreover, if exhaustification is a grammatical process, scalar implicatures are derived by means of compositional rules which apply *recursively* to the constituents of a given sentence.

This reassessment of the distinction between pragmatics and semantics generated a lively debate in the literature (in addition to the previously mentioned references, see

⁷⁷ See also Gajewski & Sharvit (2009), who defend a grammatical view of implicature calculation, without, however, subscribing to the position that implicatures are due to the presence of an exhaustification operator which induces them.

Sauerland (2005), van Rooij and Schulz (2004, 2006), Horn (2005), Russell (2006), Spector 2007 and Geurts (to appear)). A detailed overview of the different positions on the derivation of implicatures is beyond the purpose of this thesis, and consequently, I only address issues that are relevant to the analysis of polarity items. In particular, I set aside the motivations behind the positing of the exhaustification operator defined in (12) or locality issues concerning the different levels of insertion, and in the following, focus on how this way of deriving the interpretation of implicatures bears on the distribution of polarity items.

The previous discussion roughly illustrated the basic idea of how the enriched meaning of a sentence comes about on a view like Chierchia's. With this in mind, let us turn to the relevance of this phenomenon for the discussion of polarity items. First, as we will see shortly, several recent proposals in the literature have recently argued that exhaustification operators responsible for implicature calculation also operate on the alternatives associated with polarity items (see among others Kratzer & Shimoyama (2002), Chierchia (2006)). Second, recall the two main problems of the domain widening approach originally proposed by Kadmon & Landman (1993): lack of compositionality and ungrammaticality resulting from pragmatic constraints. More precisely, if the licensing of polarity items is derived in terms of strengthened meaning, which is generally obtained through pragmatic reasoning along the lines of (11) above, how do such inferences lead to (un)grammaticality, rather than under-informative or contradictory utterances? Once we integrate the domain widening hypothesis in the grammatical theory of implicatures, these problems no longer arise: implicatures are part of the computation, meaning that the exhaustification operator responsible for them affects the derivation of the truth-conditional meaning of a sentence in a compositional way. On this view, implicature calculation does not take place *after*, but rather *alongside* semantic derivation; more specifically, the site of insertion of the operator determines when the strengthened meaning is computed. Moreover, as I show in detail in the following sections, if the constraints on the operator triggered by polarity items are not satisfied, the derivation can no longer proceed and hence the result is an ungrammatical statement, as desired (on the assumption that polarity failure results in ill-formedness, rather than inappropriateness). Consequently, the theory of polarity-sensitivity developed by Chierchia, integrated in the framework of recursive pragmatics, overcomes the lack of compositionality generated by the assumption that pragmatic inferences intervene *after* the computation of truth-conditions. We can thus maintain the basic intuition behind domain widening approaches, namely that the distribution of polarity items is connected to their meaning, which crucially involves alternatives. The constraints on the role of these

alternatives and the way they enter the derivation will determine the (non-)licensing of a given polarity item. The following sections elaborate on this hypothesis and give a more precise description of the analysis of polarity items put forward by Chierchia.

1.2 A unified view of polarity sensitivity: Chierchia⁷⁸

Once we assume a grammatical implementation of exhaustification processes, the second important element in Chierchia's account is that polarity items introduce alternatives which are always active, meaning they always need to be factored in *via* an appropriate exhaustification operator, leading to enrichment.

In connection to this, one of the recent debates in the literature on polarity items bears on the relation between negative polarity items (NPIs) and free choice items (FCIs) and on the role that Scalar Implicatures (SIs) may play in understanding such a relation. We have already seen how Gricean reasoning is put to work in theories that analyze negative polarity items as domain widening indefinites. On the other hand, the distribution of free-choice items has also been linked to pragmatic inferences (see e.g. Kratzer & Shimoyama (2002), Alonso-Ovalle (2005), Aloni (2006)). As for implicatures, the enrichment they produce has been argued to result from the presence of an exhaustification operator *O* (most recently in Fox 2006) with a meaning akin to *only*. The recurrent intuition is that all three classes of elements relate in some way or another to enriched meanings. A natural question arising from these studies is whether we can establish connections between these phenomena and if so, what is the nature of these connections.

Chierchia takes this question as the point of departure of his unifying account of polarity sensitivity. He attributes the restricted distribution of both NPIs and FCIs to the fact that they introduce active domain alternatives which are obligatorily associated with enrichment operators (e.g. Chierchia (2006) assumes the existence of an *even*-operator for NPIs and an 'antiexhaustivity' *only*-operator for FCIs). In the latest development of this approach to polarity items, Chierchia argues that SIs, and the meaning of sentences with NPIs

⁷⁸ The theory presented in this chapter is based on Chierchia (2006) and on several subsequent talks. Whereas the general idea behind the system of polarity sensitivity remains the same throughout the different versions, the actual implementation developed after the publication of the (2006) paper is pretty different. In my opinion, later developments solved some of the issues that seemed problematic in the published version (i.e. the distinction between an *only* and an *even* operator) and result in a more unified analysis of NPIs and FCIs. I will not attempt a detailed discussion of the differences among the different versions of the theory, and simply rely on the handouts that are available to me for the details of the analysis. In my exposition, I will use the precise examples that he provides and the treatment that he gives, without considering other possible treatments compatible with this theory.

and FCIs are *all* obtained through applications of the (same) exhaustivity operator O. Before illustrating this in detail, let me just introduce the basic idea: in order to obtain the differences between classes of polarity items, Chierchia makes the assumption that the exhaustivity operator applies to two different types of (related) alternatives. More specifically, NPIs introduce (simple) domain alternatives, whereas FC effects result from the use of *enriched* (i.e. already exhaustified) domain alternatives, which themselves result from the application of the exhaustification operator. Free choice effects are thus derived as “higher-order implicatures”, i.e. recursive application of the exhaustification operator. Accordingly, the difference between NPIs and FCIs reduces to the fact the former disallows, while the latter allows, enriched domain alternatives⁷⁹. Apart from this difference in terms of alternatives, NPIs and FCIs are alike in that they call upon the same exhaustification operator (which in turn is the same as the one argued to operate on Scalar Implicatures) and no additional stipulation needs to be made as to the way the derivation proceeds. The theory thus relies on the assumption that exhaustification plays a crucial role in making use of the domain widening property which characterizes all polarity items. We know from analyses of scalar implicatures how exhaustification generally works, and we have seen that it is crucial to view this as a recursive grammatical process. Chierchia’s important move is to extend and tie this mechanism to the (previously defended) hypothesis that polarity items obligatorily introduce alternatives.

Let us now unfold the details of Chierchia’s proposal. In order to understand the interaction between the exhaustification operator and polarity sensitivity, we will follow the typology introduced in Chapter 1, and consider several classes of polarity elements and the way their restricted distribution is derived. In particular, we will look at the distribution of items which are only licensed in downward-entailing contexts, such as *ever* (section 1.2.1). The following section focuses on items which exhibit overlap of uses, such as *any*, which can occur in both negative polarity and free-choice environments. Next, this ‘double’ polarity pattern will be contrasted with items whose distribution is restricted to free-choice contexts, so-called *pure* FCIs, like *qualunque*. Finally, in section 1.2.5, we derive the meaning and distribution of existential free-choice items, a pattern which I later argue to be closely connected to epistemic items like *vreun*. This overview will enable a better understanding of

⁷⁹ The same line of argumentation has been used by Fox (2006) to derive the interaction of modals and disjunction.

the parameters assumed to be responsible for the attested empirical variation in the area of polarity items.

One caveat though: Chierchia aims at developing a unified system of polarity sensitivity, based on the insight that polarity items are domain widening indefinites. As such, the proposal does not seek to account for further, specific properties that might be associated with certain items. Rather, it offers an analysis of the restrictions governing the distribution of well-attested, ‘standard’ patterns of polarity, subsumed under the typology given in Chapter 1. In view of the wide range of variation identified in the relevant literature, it should be clear that any discussion in terms of *classes* of polarity items is an idealization, as there can be item or language-specific properties that may result in distributional and interpretive differences. For example, in Chapter 1, I have discussed the distribution of n-words and existential free-choice items and argued that we need to make fine-grained distinctions among the operators to which they are sensitive (i.e. (anti-)licensors). Similarly, I have argued that the distribution of *vreun* in the scope of sentential negation is due to blocking effects, and thus, we can only understand its licensing pattern once we consider the whole range of polarity paradigms available in the language. Accordingly, Chierchia’s account should be viewed as providing the elements that can in principle play a part in deriving the restrictions associated with attested patterns of polarity items; we will later consider to what extent further assumptions are necessary to account for the distribution of other polarity items, such as *vreun*. At this point, I focus on the description of Chierchia’s account of polarity.

1.2.1 Weak Negative Polarity Items

Chierchia’s account of the distribution of NPIs is based on two rather common assumptions: (i) NPIs have the same semantics as an indefinite, plus domain widening (Kadmon & Landman (1993), Krifka (1995), Lahiri (1998)) and (ii) their occurrence is restricted to downward-entailing contexts, i.e. contexts that allow inferences from sets to subsets⁸⁰ (Ladusaw 1979). Accordingly, on this view, a polarity item like *ever* is an existential quantifier over times and, just like any other polarity sensitive element, it always activates domain-alternatives, yielding an extended domain of quantification. In this system, whenever

⁸⁰ Downward-entailing operators were defined in Chapter 1, section 2. Their common property is that they reverse strength. A typical example is sentential negation, which licenses the inference from *Mira doesn’t like vegetables* to *Mira doesn’t like carrots*. Other downward-entailing contexts include the restrictor of a universal, *if*-antecedents, quantifiers like *few* or *nobody*, predicates like *doubt* or *refuse*, and operators like *without* or *before*. For refinements of the original notion of downward-entailment, see e.g. Zwarts (1993), Van der Wouden (1997), von Stechow (1999).

an item has *active* alternatives, an exhaustivity operator (O) is obligatorily inserted and eliminates all stronger alternatives whenever it can without arriving at a contradiction, thus leading to an enriched meaning of the proposition to which it applies. Recall from our discussion of the type of enrichment associated with a quantifier like *many* that exhaustification is normally not obligatory. Crucially, polarity items differ from other quantifiers or indefinites in this respect: the alternatives they bring about always require the insertion of an exhaustification operator, whose properties will be addressed shortly. In a sense, this is what makes polarity items deficient, and constitutes the source of their restricted distribution: if the constraints associated with this operator cannot be satisfied in a given context, the polarity item cannot be licensed.

In addition, we have seen that the domain widening property of NPIs has the effect that their domain of quantification includes items that fall outside the domain that would be naturally considered for existential quantifiers like *sometimes* or *something*. The extension of the domain of quantification results in the largest set of alternatives among the reasonable domain alternatives in the context. As such, the domain we consider includes not only entities that we would ‘normally’ consider, but can possibly also include entities that would have been otherwise regarded as marginal. For instance, in using *any mammal*, as opposed to *a mammal*, we might signal that the assertion ranges over a domain of quantification that includes bats, whales, platypuses, or other individuals we don’t typically have in mind when referring to mammals⁸¹. It is these kinds of alternatives that an NPI brings about and that need to be exhaustified.

In order to see how exhaustification works and what role it plays in the licensing of polarity items, let us go through the computation proposed by Chierchia for a sentence with an NPI (following the basic insights in Krifka 1995), like the ungrammatical example *John ever sees Mary*, given in (20) below.

The assertion is equivalent to the existential assertion made by a sentence with a basic indefinite, as in (20)a, with the additional requirement that the domain of quantification D is

⁸¹ It is important to keep in mind that context plays an important part in determining the extent of widening. Kadmon & Landman (1993) argue that usually domain widening is not total (i.e. the extended domain does not include all possible members of a given set), but rather partial, meaning determined by oppositions relevant in the context. For instance, if we are in a conversation where we talk about aquatic mammals, we will not necessarily consider *bats* as members of the widened domain. An important factor determining the extent of widening is stress, as has been often pointed out in the literature (see among others Krifka (1995), Lahiri (1998)).

large (for this example, let us assume that it contains three elements $\{t_1, t_2, t_3\}$, as in (20)a). The sentence thus asserts that there is a time t , chosen among the members of D , such that John sees Mary⁸² at t . As a result of the presence of the polarity item *ever*, equivalent to an existential quantifier over times, we then generate the set of domain alternatives, all possible subsets of D , given in (20)b. Next, on the basis of these subsets, we generate the set of propositions ALT, which only differ from the original assertion ‘John ever sees Mary’ with respect to the choice of the domain alternatives. Following Chierchia’s notation, I will represent the set of alternatives to the original assertion (that we can abbreviate ‘p’) using disjunction of propositions a, b and c, where ‘a’ stands for $see(j, m, t_1)$, ‘b’ stands for $see(j, m, t_2)$, ‘c’ stands for $see(j, m, t_3)$. The propositional alternatives are given in (20)c and schematized in (20)d:

(20) *John *ever* sees Mary = John sometimes sees Mary.

a. $p = \exists t \in D [see(j, m, t)] = \exists t \in \{t_1, t_2, t_3\} [see(j, m, t)]$

b. D-alternatives – all possible subsets of D

$D = \{t_1, t_2, t_3\}$
 $\{t_1, t_2\}, \{t_1, t_3\}, \{t_2, t_3\}$
 $\{t_1\}, \{t_2\}, \{t_3\}$

c. from D-alternatives, we get the following set of propositions :

- | | |
|---|--|
| 1. $\exists t \in \{t_1, t_2, t_3\} [see(j, m, t)]$ | 2. $\exists t \in \{t_1, t_2\} [see(j, m, t)]$ |
| 3. $\exists t \in \{t_1, t_3\} [see(j, m, t)]$ | 4. $\exists t \in \{t_2, t_3\} [see(j, m, t)]$ |
| 5. $\exists t \in \{t_1\} [see(j, m, t)]$ | 6. $\exists t \in \{t_2\} [see(j, m, t)]$ |
| 7. $\exists t \in \{t_3\} [see(j, m, t)]$ | |

d. $a \vee b \vee c$ (ALT)

$a \vee b \quad b \vee c \quad a \vee c$
 $a \quad b \quad c$

In addition, recall that the alternatives associated with an NPI are assumed to be active, meaning they obligatorily lead to the insertion of an exhaustivity operator O , whose role is to eliminate stronger alternatives (i.e. members of ALT) and thus lead to a stronger claim. Let us now focus on how exactly this operator affects the derivation.

Chierchia (2008) implements the exhaustification requirement triggered by the alternatives an NPI brings about by adopting the specific definition of the enrichment operator

⁸² This is a simplified derivation given by Chierchia: it ignores the contribution of tense, among other things.

proposed in Fox (2006)⁸³, given in (21)^{84,85} (adapted from the operator *Exh* defined in Fox (2006)):

$$(21) O(p, \text{ALT}(p)) = p \wedge \forall q [q \in \text{I-E}(p, \text{ALT}(p)) \rightarrow \neg q]$$

$$(22) \text{I-E}(p, \text{ALT}(p)) = \cap \{ \text{ALT}' \subseteq \text{ALT}(p) : \text{ALT}' \text{ is a maximal set in ALT such that } \text{ALT}' \cup \{p\} \text{ is consistent} \}$$

$$\text{ALT}'^{\neg} = \{ \neg p : p \in \text{ALT}' \}$$

According to the definition in (21), the exhaustification operator, *O* in Chierchia's notation, applies to a proposition *p* and the set of its alternatives (*ALT*(*p*)). What *O* does is that it asserts *p* and says that all non-weaker alternatives, more precisely all *innocently excludable* alternatives (the members of the set *I-E*(*p*, *ALT*(*p*))), are false. In the case at hand, the proposition *p* is (20): $\exists t \in \{t_1, t_2, t_3\} [\text{see}(j, m, t)]$. What are the “innocently excludable” alternatives? The notion of *innocent exclusion* applies to a mechanism proposed by Sauerland (2005) and extended by Fox (2006) in order to deal with sets of alternatives which are not completely ordered (in terms of entailment) with respect to each other. Recall that in the case of quantifiers like *some*, it was easy to see that the alternative with *all* entailed the one with *some*. When it comes to domain alternatives, things are different. There is no entailment relation between alternatives like (*a* $\vee$ *b*) and (*b* $\vee$ *c*), although they are both stronger alternatives to (*a* $\vee$ *b* $\vee$ *c*). In order to find the alternatives that are *innocently excludable*,

⁸³ The adoption of Fox' definition enables Chierchia to subsume under a single exhaustivity operator what he previously calls an *even* and an *only* operator associated with different types of polarity items (Chierchia 2006). This is a fairly technical proposal, intended to provide an algorithm to calculate and exclude alternatives, the details of which cannot be fully addressed here. In order to enhance readability, it is convenient to keep in mind that the main role of the exhaustivity operator is to exclude (i.e. negate) stronger alternatives to the proposition to which it applies, something along the lines of the definition in (12). For the motivations behind further refinements of this definition, see Fox (2006), Magri (2007) or Chierchia, Fox & Spector (2009).

⁸⁴ Fox shows that applying *Exh* to a proposition and the set of its non-weaker/non-entailed alternatives leads to contradictory results in the case of the free-choice reading of disjunction under modals. More specifically, a sentence like *You may have coffee or tea* is equivalent to *You may have coffee and you may have tea*. However, in the neo-gricean setting developed in Sauerland 2004, the sentence is predicted to give rise to the implicature *The speaker is not sure whether you may have coffee and the speaker is not sure whether you may have tea*. In order to deal with this and similar contradictions arising in cases of question-answer pairs (Groenendijk & Stokhof 1984), or unembedded disjunction, Fox proposes a modification of the exhaustification operator, which applies to the set of *innocently excludable* alternatives, thus preserving consistency with the initial proposition (the prejacent) and among alternatives.

⁸⁵ Other definitions of exhaustivity operators designed to avoid contradictions can be found in Spector (2006, 2007) or van Rooij and Schulz (2004, 2006). Note however, that these operators might not be as contradiction-free as intended (see Gajewski 2009 for a potential problem related to Fox' proposal). These difficulties do not bear directly on the proposal developed by Chierchia, whose system does not depend on the specific implementation in Fox. I believe any type of exhaustivity operator which avoids contradiction and which leads to exclusion of stronger alternatives would suit Chierchia's purposes. Here, I rely on Chierchia (2008) and present an implementation based on innocent exclusion, without addressing details concerning the specific implementation of exhaustification.

defined as in (22), here is what we must do for the sentence in (20). First, we look at every maximal set of propositions in ALT such that, when we negate all the propositions in that set, we find that adding to this new set the proposition that we started with (=the assertion) results in consistency. Note that, since these are *maximal* sets, given any one of these sets, we cannot add a different proposition from one of the other sets without running into inconsistency. The propositions that are in every one of these maximal sets can be excluded, without forcing us to conclude that some other proposition from one of these sets is true. These propositions are the *innocently excludable* alternatives. As a result, the only alternatives we can exclude non-arbitrarily and without running into inconsistency (*innocently*) are those in the *intersection* of all maximal sets we considered for exclusion. This algorithm might seem fairly complicated, but the basic idea should be clear: the operator is supposed to eliminate as many (stronger) alternatives as possible, while avoiding contradiction. Innocent exclusion is just a mechanism that says how to arrive at a set of alternatives that can be safely denied.

To clarify the concept of innocent exclusion and to introduce Chierchia's idea of the role it plays in polarity licensing, let us see in detail how this notion applies to the example in (20). According to the definition in (22), in order to find the set of innocently excludable alternatives, we look for the maximal subsets of the initial set of alternatives, such that the negation of the elements doesn't lead to inconsistency when taken together with the assertion. This gives the following results. The assertion is $(a \vee b \vee c)$. One maximal subset in ALT that we could consider for exclusion, while preserving consistency with $(a \vee b \vee c)$ is $\{a \vee b, a, b\}$. When we negate the elements of this set, we obtain $\{\neg(a \vee b), \neg a, \neg b\}$, which is equivalent to $\{\neg a \wedge \neg b, \neg a, \neg b\}$. Adding the assertion $(a \vee b \vee c)$ to this set yields a consistent set. Applying the same procedure to the other maximal subsets we could consider for exclusion, we obtain $\{\neg a \wedge \neg c, \neg a, \neg c\}$ and $\{\neg b \wedge \neg c, \neg b, \neg c\}$. Next, in order to decide which alternatives can be innocently excluded, we must look at the intersection of these sets. However, there is no such intersection. There aren't any innocently excludable alternatives, so we cannot eliminate alternatives in a non-arbitrary manner. All alternatives are in principle excludable, since they are all stronger than the assertion, but any exclusion would be arbitrary. This means that the exhaustification operator, whose role is to eliminate stronger (innocently excludable) alternatives in order to yield an enriched meaning, in the end eliminates nothing. On the one hand, we have to eliminate stronger alternatives, but on the other, we have no principled way of deciding what alternatives to exclude in order to obtain enrichment.

Chierchia claims that this state of affairs is not allowed, and that the unacceptability of (20) should be traced back to this problem. He suggests implementing this in terms of economy⁸⁶: ‘do not activate alternatives idly’. On the one hand, there are alternatives that can be excluded consistently with the original assertion, and whose exclusion would strengthen the original assertion, thus satisfying the requirements associated with the exhaustification operator. On the other hand, there are no alternatives that can be *innocently* excluded, and the result of this is that exhaustification has no effect: the meaning of the sentence with the exhaustification operator is identical to the meaning without. Situations like this are responsible for the unacceptability of (20). In other words, an exhaustification operator is inserted in the derivation, without however being able to fulfill its requirement of leading to enrichment, despite the presence of stronger alternatives. This causes the derivation to crash and results in ungrammaticality.

Things are different in a downward-entailing context, such as in (17), where negation licenses the NPI *ever*:

(23) John **won’t** *ever* see me.

If we insert the exhaustification operator below negation, we get the same sets of alternatives and consequently, the derivation wouldn’t go through for the same reasons as in (20): since the alternatives which the exhaustification operator sees are based on the constituent to which the operator attaches, in this case the original assertion (with the existential quantifier over times), we get the same sets of alternatives as in the case of positive sentences. There are no innocently excludable alternatives and therefore exhaustification would once again be vacuous.

However, things are different in one important respect: we have another insertion site for the operator, namely above negation⁸⁷. Accordingly, the assertion first combines with negation and then, the operator applies to the resulting negated proposition and its alternatives. In combination with negation, the assertion and the set of alternatives, which are now negated propositions, are as in (24):

⁸⁶ A similar economy condition on the insertion of the exhaustification operator is argued for in Fox (2006) and Fox & Spector (2008).

⁸⁷ Recall that on the grammatical view of implicature calculation developed by Chierchia, the exhaustification operator can be inserted at all scope sites (including embedded sites).

$$(24) a. p = \neg \exists t \in D [\text{see}(j,m,t)] = \neg \exists t \in \{t_1, t_2, t_3\} [\text{see}(j,m,t)]$$

$$b. \quad \neg(a \vee b \vee c) \quad (\text{ALT})$$

$$\neg(a \vee b) \quad \neg(b \vee c) \quad \neg(a \vee c)$$

$$\neg a \quad \neg b \quad \neg c$$

Here, the assertion entails each alternative. If it is not the case that John saw Mary at time t_1, t_2 or t_3 , then it is also not the case that John saw Mary at time t_1 , and similarly for all the other members of ALT. Consequently, there is no stronger alternative to the assertion, whose exclusion could lead to a strengthened meaning. The enriched meaning for an assertion such as *John won't ever see me* is thus the strongest alternative among the set of possible alternatives ($\neg(a \vee b \vee c)$), which entails all the other alternatives.

The result of applying the exhaustification operator to the assertion containing negation is therefore identical to the assertion (including negation). Strictly speaking then, the exhaustivity operator doesn't contribute to truth-conditions and therefore, no enrichment takes place. Now, why is the result not problematic? Recall that in the case of the positive sentence in (20), the problem came from activation of alternatives (*all of which were stronger than the assertion*) without leading to exclusion. Here, the same problem doesn't arise, as there is no *stronger* alternative to the assertion to begin with; the proposition denoted by (17) is the strongest in the alternative set. The overall situation is thus different in positive and negative contexts, although in both cases the result is that no strengthening takes place in the end. The operator is inserted, as is always the case for sentences with polarity items, but the lack of enrichment in this configuration is not problematic and does not result in ungrammaticality. The reason is the absence of stronger alternatives.

Chierchia's precise implementation of this involves the operator O_{WEAK} ⁸⁸, defined as follows (where "O" is Fox's exhaustivity operator):

$$(25) O_{\text{WEAK}}(p, \text{ALT}(p)) = O(p, \text{ALT}(p)), \text{ if } [p \not\subseteq \cap \text{ALT}(p)] \rightarrow [O(p, \text{ALT}(p)) \subset p] \\ \perp, \text{ otherwise}$$

According to (25), the operator inserted as a result of the presence of a weak NPI, O_{WEAK} , will be defined and lead to exhaustification in two situations: either if p entails the conjunction of

⁸⁸ As I will show later in this chapter, Chierchia makes a distinction between a 'weak' version of the exhaustification operator, defined as in (25), which allows enrichment in DE contexts (activated by items like *ever* or *any*), and a 'strong' ('presuppositional') version of the operator (associated with free-choice items), which requires proper strengthening, in a sense to be made precise. Chierchia uses the notation O_{Pr} and O_{Pr} to designate the two operators, but for expository reasons, I will use O_{WEAK} and O_{STRONG} .

all true alternatives to p , or if the exhaustification of p asymmetrically entails (i.e. narrows down) p , that is, if we obtain an enriched meaning. In positive contexts, neither of these conditions holds, since the assertion does not entail the alternatives (which are all stronger) and the result of exhaustification is not stronger than the original assertion, because we cannot eliminate stronger alternatives in a non-arbitrary matter. In contrast to this, the presence of a downward entailing operator leads to a situation where the assertion entails all alternatives, so no problem arises with respect to the application of the operator triggered by an NPI. The operator can be appropriately inserted, as required by the presence of the alternatives triggered by the NPI, so the derivation of the sentence goes through. In a sense, the DE contexts are the ones where the operator does the least work, by not leading to any kind of actual enrichment.

This implementation thus seeks to derive two important properties of NPIs. First, the fact that in DE contexts, the assertion is the *strongest* alternative explains why NPIs often acquire an *even*-like flavor⁸⁹ in negative contexts. The proposition ‘there is a time t such that John sees me at t ’ is negated for the largest choice of domain (the one that includes all contextually relevant alternatives). Consequently, a sentence like *John won’t ever see me* can be paraphrased as *John won’t even see me once*. As such, this proposal integrates the insights of scalar analyses of polarity items, that tie their distribution to the presence of a (possibly covert) *even*-like focus particle (e. g. Lee & Horn (1994), Lahiri (1998)), but derives this as a side-effect of the fact that the assertion containing negation (or any other downward-entailing operator) is the strongest alternative. Second, the connection with DE contexts is derived by assuming that enrichment is not obtained in these contexts. The scale-reversal properties of the contexts lead to the entailment relation that holds between the alternatives and consequently, it is precisely (and only) in these contexts that the requirements of the operator triggered by the alternatives associated with (weak) NPIs are met.⁹⁰ Due to the presence of the

⁸⁹ In previous versions of this account, Chierchia distinguishes an *even*-like and an *only*-like operator. It seems that this distinction is now derived by the way the computation of alternatives goes and the definition of the operator. The difference seems to resurface for emphatic NPIs like *at all*, but this is implemented by assuming different types of alternatives, degree alternatives. Although I believe Chierchia’s system also seeks to incorporate this type of polarity item, in a way similar to the one described in this chapter, I abstract away from this class of expressions.

⁹⁰ The derivation illustrated here with negation can be extended to all other DE contexts. The property that allows the requirements of O_{WEAK} to be satisfied is that all downward-entailing contexts reverse scales, and thus the assertion containing the DE operator and holding for a large domain (associated with the NPI) is stronger than any equivalent proposition holding for a subset of this domain. The assertion thus ends up entailing the all its alternatives.

DE-operator, there are no stronger alternatives that could lead to enrichment, a configuration that satisfies the first conjunct of the definition in (25).

To sum up the analysis up to this point, the implementation developed by Chierchia relies on the assumption that the exhaustification operator needs to eliminate alternatives whenever there are stronger alternatives. In positive contexts, there are stronger alternatives which trigger the insertion of the operator but this does not lead to an enriched meaning. The derivation therefore crashes for an NPI like *ever*.

However, in addition to weak (or ‘pure’) NPIs, whose distribution is restricted to DE environments, there are NPIs that can also occur in certain positive contexts. Assuming a unified approach to polarity items, the procedure for interpreting such an item in negative contexts is the same as for an element like *ever*. Importantly, according to Chierchia, for some types of polarity items, there is a further possibility, namely to create a different set of alternatives by an operation that itself involves application of the exhaustification operator. The crucial difference thus lies in the set of alternatives to which the exhaustivity operator applies. This is the analysis pursued by Chierchia for items that are ambiguous between an NPI and a free-choice use, such as *any*, to which we now turn.

1.2.2 NPI and FC uses

In Chapter 1, we saw that polarity items that are used in both negative polarity and typical free-choice environments constitute a well-represented class cross-linguistically. The theoretical debate often takes *any* as a case study and is centered around the question of whether there are two distinct lexical items that happen to have the same pronunciation or rather, there is only one item whose uses overlap. Both types of answers have been provided in the literature and several tests have been proposed in order to distinguish these two different items or uses (for a recent overview of the debate, see Horn (2005)). However, in recent years, a number of scholars have converged on a unified semantics for *any* as an existential or some type of indefinite (Heim (1985), Haspelmath (1993), Kadmon & Landman (1993), among others). As descriptive studies made clear, the use of the same class of elements in both negative and free-choice contexts is common cross-linguistically, and it is hard to assume that languages massively use lexically ambiguous items. To avoid this kind of conclusion, a plausible hypothesis seems to be that an element that has both NPI and FC uses has a (single) lexical representation that makes it compatible with these contexts. This is the approach that Chierchia pursues for *any*-type polarity items.

Now that we have seen what kind of semantics is associated with an item restricted to NPI uses, we need to understand what allows an element that has the distribution of an NPI to occur in further contexts, that are not downward entailing. More generally, in what way could the theory account for the fact that some kinds of NPIs can develop FC uses and others cannot?

The basic property of *any* in its free-choice use (as well as that of other polarity items belonging to this class) is that it gives rise to a universal reading. Simplifying at this point, a sentence like *Any bird flies* asserts that the property of flying applies to every individual that is a bird. Any unifying theory has to explain how this interpretation comes out for an item that starts out as a basic indefinite (as made obvious by its negative polarity use, where no universal reading arises). Moreover, we need to understand what the differences and the similarities are with weak NPIs, which do not double as free choice items.

In order to provide an answer to these questions, Chierchia builds on recent analyses that derive free-choiceness by the same system that accounts for scalar implicatures (Kratzer & Shimoyama (2002), Alonso-Ovalle (2005), Fox (2006)). The underlying intuition is the same as for any other polarity item: a free-choice item (possibly with an extra NPI use) is an alternative-triggering element which widens its domain of quantification. In addition, being a dependent item, its alternatives are always active, meaning they trigger the insertion of an exhaustification operator, which must lead to strengthening.

Let us see how exhaustification works for a free-choice item and what is the type of enrichment we obtain. Consider the following example, where *any* gets a free-choice reading:

(26) John talks to *any* student⁹¹.

$$a. p = \exists x \in D [\text{student}(x) \wedge \text{talk}(j,x)] = \exists x \in \{s1, s2, s3\} [\text{student}(x) \wedge \text{talk}(j,x)]$$

⁹¹ An additional factor is the presence of a post-nominal modifier like *that wanted to see me*, a configuration known as subtriggering (Legrand 1975). Note that without subtriggering or the presence of a modal operator, the sentence would be ruled out (a phenomenon often referred to as ‘the (modal) variation requirement’ (e.g. Giannakidou (2001), Jayez & Tovenà (2005)). Chierchia adopts the standard position that the role of the postnominal modification is to provide the anchoring that avoids an otherwise too strong universal claim (see Dayal (1998), Giannakidou (2001), Jayez & Tovenà (2005) for discussion of the phenomenon). For example, in a sentence like *I saw any student that wanted to see me*, the set of students (the one which we widen) ends up being restricted to students that actually wanted to see me, and the resulting statement is perfectly natural ‘every possible student who in fact wanted to see me (and hence must be actual) indeed saw me’. Chierchia refers to work by Dayal (1995, 1998) for an account of this phenomenon. Dayal confirms the claim that her account of free-choice items can be viewed as compatible with Chierchia’s analysis of polarity, without however getting into details. Once again, it could be objected that Chierchia does not really seek to derive this behavior, but rather gives an idea of the ways and reasons that make free-choice items different from NPIs, setting aside implementation of further distributional properties. I think such an objection is reasonable, but this does not undermine the account, it just points to the need to supplement it.

b. D-alternatives – all possible subsets of D

$$D = \{s1, s2, s3\}$$

$$\{s1, s2\}, \{s1, s3\}, \{s2, s3\}$$

$$\{s1\}\{s2\}\{s3\}$$

c. from D-alternatives, we get the following sets of propositions :

1. $\exists x \in \{s1, s2, s3\} [\text{student}(x) \wedge \text{talk}(j, x)]$
2. $\exists x \in \{s1, s2\} [\text{student}(x) \wedge \text{talk}(j, x)]$
3. $\exists x \in \{s1, s3\} [\text{student}(x) \wedge \text{talk}(j, x)]$
4. $\exists x \in \{s2, s3\} [\text{student}(x) \wedge \text{talk}(j, x)]$
5. $\exists x \in \{s1\} [\text{student}(x) \wedge \text{talk}(j, x)]$
6. $\exists x \in \{s2\} [\text{student}(x) \wedge \text{talk}(j, x)]$
7. $\exists x \in \{s3\} [\text{student}(x) \wedge \text{talk}(j, x)]$

d. $a \vee b \vee c$ (ALT)

$$\begin{array}{ccc} a \vee b & a \vee c & b \vee c \\ a & b & c \end{array}$$

Assuming a domain containing three individuals ($\{s1, s2, s3\}$), the sentence asserts that there is an individual x belonging to the domain D , such that x is a student and John talks to that individual. We have the same derivation as in the case of weak NPIs, repeated in (26)a-d for convenience. Recall that in positive contexts, this procedure does not lead to enrichment as none of the stronger alternatives to p can be excluded non-arbitrarily; so at this first step, the result of applying the exhaustification operator to the proposition p ($= a \vee b \vee c$) and the set of its stronger alternatives ($\text{ALT}(a \vee b \vee c)$) is the same as the initial assertion, and therefore $O(a \vee b \vee c, \text{ALT}(a \vee b \vee c)) = a \vee b \vee c$. In other words, at this point, the requirement associated with the exhaustification operator is not satisfied: we are not in a DE context (where the assertion entails all true alternatives), so the only other option to make appropriate use of the enrichment operator O is to find a way of leading to strengthening. However, at this point in the derivation, no strengthening took place, there are stronger alternatives, but nothing gets eliminated. If this is all we can do, the derivation crashes. Crucially however, Chierchia assumes that items like *any* have another possibility that allows the derivation to continue and yield the free-choice reading, namely ‘recursive exhaustification’⁹². According to Chierchia, we can apply an operation that itself involves exhaustification to yield a set of alternatives

⁹² The idea of free-choiceness as a result of recursive exhaustification comes from Fox (2006), who focuses on the reading of disjunctions under modals and quantifiers.

different from the initial set. This means that the exhaustified alternatives replace the initial set (i.e. $ALT(avbvc)$) and we apply the operator to the resulting new set of alternatives.

Let us first see how to obtain this new set of alternatives, that we will call $ALT'(avbvc)$. The members of ALT' are what we get by taking the members of ALT and exhaustifying each one with respect to ALT itself. For example, assume we exhaustify alternative 'a'. What would be the result of $O(a, ALT(avbvc))$? In other words, in which way can we exclude as many alternatives as possible, without leading to a contradiction? One maximal subset of ALT we could consider for exclusion is $\{b, c, bvc\}$. The negation of its elements is $\{\neg b, \neg c, \neg(bvc)\}$, which is consistent with 'a'. Negating the members of this maximal subset, the exhaustified alternative says that 'a' holds and (bvc) doesn't hold⁹³. Intuitively speaking, the enriched meaning of 'a' with respect to the original assertion says that only 'a' holds. The result of $O(a, ALT(avbvc))$ is thus $a \wedge \neg(bvc)$. Similarly, when we apply exhaustification to alternative (avb), the only set we could consider for exclusion, while preserving consistency, is $\{c\}$ (excluding 'a' would force us to conclude that 'b' holds, and similarly, excluding 'b' would force the conclusion that 'a' holds). As a result, $O(avb, ALT(avbvc)) = (avb) \wedge \neg c$. Keeping things to an intuitive level, exhaustified alternatives are similar to the original ones combined with an operator meaning *only*. This is of course not surprising in view of what we know of the meaning and role of O . Applying the same procedure to the rest of the alternatives in ALT , the complete set of exhaustified alternatives is as represented in (27):

(27) The set of exhaustified alternatives

$$\begin{array}{l} \{ O(q, ALT(avbvc)) \mid q \in ALT(avbvc) \} \quad ALT' \\ avbvc \\ \begin{array}{lll} (avb) \wedge \neg c & (avc) \wedge \neg b & (bvc) \wedge \neg a \\ a \wedge \neg(bvc) & b \wedge \neg(avc) & c \wedge \neg(avb) \end{array} \end{array}$$

Now that we have the complete set of exhaustified alternatives, we can derive the enriched meaning of the sentence containing the free-choice item *any*. Recall that the crucial difference between *ever* and *any* is that the latter allows recursive exhaustification, by applying O to the set of exhaustified alternatives ALT' . What is the enriched meaning in this case? More precisely, what are the alternatives in ALT' we could innocently exclude? When we look for the maximal subsets of alternatives that we could exclude, i.e. while preserving consistency

⁹³ More precisely $O(a, ALT(avbvc)) = a \wedge \neg(bvc) \wedge \neg b \wedge \neg c$, which is equivalent to $a \wedge \neg b \wedge \neg c$ or $a \wedge \neg(bvc)$.

with $(avbvc)$ when we negate its members (following the definition in (28)a), we see there is only one such set, namely one that contains all the exhaustified alternatives, except $(avbvc)$ itself. Putting together the negation of all exhaustified alternatives with the assertion does not result in contradiction (as attested by the result of exhaustification in (29)b), so we can exclude all the alternatives. The set we consider for enrichment is given in (28) and the result of exhaustification in (29):

(28) a. $IE(avbvc, ALT'(avbvc))$ is $\cap \{ALT'' : ALT'' \text{ is a maximal subset of } ALT' \text{ such that } ALT'' \cup \{avbvc\} \text{ is consistent}\}$

b. $IE(avbvc, ALT'(avbvc)) = \{(avb) \wedge \neg c, (avc) \wedge \neg b, (bvc) \wedge \neg a, a \wedge \neg(bvc), b \wedge \neg(avc), c \wedge \neg(avb)\}$

(29) a. $O(avbvc, ALT'(avbvc)) = \exists x \in \{s1, s2, s3\} [student(x) \wedge talk(j, x)] \wedge$

$\wedge \neg O(\exists x \in \{s1, s2\} [student(x) \wedge talk(j, x)])$

$\wedge \neg O(\exists x \in \{s1, s3\} [student(x) \wedge talk(j, x)])$

$\wedge \neg O(\exists x \in \{s2, s3\} [student(x) \wedge talk(j, x)])$

$\wedge \neg O(\exists x \in \{s1\} [student(x) \wedge talk(j, x)])$

$\wedge \neg O(\exists x \in \{s2\} [student(x) \wedge talk(j, x)])$

$\wedge \neg O(\exists x \in \{s3\} [student(x) \wedge talk(j, x)])$

b. $O(avbvc, ALT'(avbvc)) = (avbvc)$

$\wedge \neg ((a \vee b) \wedge \neg c)$

$\wedge \neg ((a \vee c) \wedge \neg b)$

$\wedge \neg ((b \vee c) \wedge \neg a)$

$\wedge \neg (a \wedge \neg(bvc))$

$\wedge \neg (b \wedge \neg(avc))$

$\wedge \neg (c \wedge \neg(avb))$

c. In other words:

$$O(avbvc, ALT'(avbvc)) = (avbvc)$$

$$\wedge (a \vee b) \rightarrow c$$

$$\wedge (a \vee c) \rightarrow b$$

$$\wedge (b \vee c) \rightarrow a$$

$$\wedge a \rightarrow (bvc)$$

$$\wedge b \rightarrow (avc)$$

$$\wedge c \rightarrow (avb)$$

$$d. O(avbvc, ALT'(avbvc)) = a \wedge b \wedge c$$

As represented in (29)a, the second layer of exhaustification yields the following meaning: the assertion holds, and none of the exhaustified alternatives (generated on the basis of the initial domain alternatives) holds. Putting all the negated alternatives together, the resulting reading is that *John sees any student* holds for any alternative, i.e. it holds for ‘a’, for ‘b’ and for ‘c’, which is equivalent to ‘ $a \wedge b \wedge c$ ’. This is how the universal reading associated with free-choice items like *any* comes about. This result is consistent with the definition of the exhaustification operator which requires either that the assertion entails all true alternatives (as in negative polarity contexts), or that the enriched meaning asymmetrically entails the assertion. In the case of the sentence in (26), the (enriched) derived universal reading is stronger than the assertion. The operator thus successfully leads to enrichment.

The key distinction between FCIs like *any* and weak NPIs like *ever* is recursive exhaustification. Crucially, the possibility of applying the same operator to an enriched set of alternatives (obtained by applying exhaustification to the initial alternatives) derives the universal reading associated with free-choice. This idea has already been pursued in the literature by Kratzer & Shimoyama (2002) (though for different types of FC) and by Fox (2006) for the free-choice reading of disjunction under certain modals. Chierchia imports the basic insights in the analyses of free-choice and establishes a connection with negative polarity, into a unified approach to polarity items. The basic idea remains the same as for all other polarity items: they introduce active alternatives, which are factored into the meaning by the exhaustification operator.

1.2.3 Pure free-choice items

Earlier in the discussion, I already mentioned that in terms of the typology of polarity items, roughly one language out of two uses the same items for NPI and FC uses. The other half has

different paradigms for downward entailing and for modalized (free-choice) contexts. This means there are free-choice items that disallow an NPI use. Chierchia (2006) illustrates this class by the Italian indefinite *qualunque/qualsiasi*, which occurs in typical free-choice contexts, such as modalized sentences, like in the example (30) with a possibility modal or (31) with future tense, imperatives (32), or certain types of episodic sentences (with post-nominal modification, a phenomenon known as *subtriggering* (Legrand 1975)), as in (33):

(30) Puoi prendere *qualunque* mela.

‘You may pick any apple.’

(31) Domani interroghero *qualsiasi* studente che mi capiterà a tiro.

‘Tomorrow (I) will interrogate whatever student that I will lay my eyes on.’

(32) Prendi *qualunque* dolce.

‘Take any sweet.’

(33) Sono uscito in strada e mi son messo a bussare come un matto a *qualsiasi* porta con i battenti in legno.

‘(I) went out on the street and started knocking like a madman at whatever door with wooden shutters.’

The discussion in the previous section has shown that for Chierchia the key factor leading to a double NPI/FCI function of a polarity item is the option of recursive exhaustification. When not in the scope of a downward entailing operator, it is this possibility that allows an item like *any* to lead to the strengthened, universal reading that surfaces in free-choice environments. In contrast to this ‘double’ behavior, *pure* FCIs cannot occur in negative polarity contexts, or if they do, they acquire a different interpretation. The difference between the two types of FCIs is salient in the scope of negation, as attested by the following sentences:

(34) I didn’t see *any* student today.

(35) ?? **Non** ho incontrato *qualunque* studente.

‘I didn’t meet (just) any student.’

The sentence in (35), with the (unmodified) FC *qualunque* under negation is typically only acceptable with the special intonation associated with the so-called rhetorical ‘not just any’ reading: the sentence asserts that it is not the case that the speaker met every student and

suggests that she met a student with some special property. In contrast to *any* in (34), *qualunque* disallows the negative polarity interpretation, which we could paraphrase as *It is not the case that there is a student (in D) that the speaker met*. *Any* and *qualunque* thus differ with respect to their distribution and interpretation in the scope of downward-entailing operators. How does this difference come out in Chierchia's theory of polarity?

According to Chierchia, the rhetorical, 'not just any' reading of *qualunque* is obtained by applying negation to the derived universal reading of the free-choice item. In other words, when we compute the meaning of an utterance like (35), negation applies to the strengthened meaning of the free-choice element and the meaning we get is something like *It is not the case that I met (just about) every student (but rather a special one)*. Up to the point where we compute negation, the derivation is identical to the one assumed for FCIs like *any* (given in section 1.2.2 and repeated below) and involves recursive exhaustification.

Recall that in addition to free-choice environments, items like *any* are licensed when the assertion entails all of its alternatives, a relation that only holds in downward entailing contexts. In the case of *qualunque*, however, Chierchia posits that this is not an option: pure FCIs must lead to a stronger, i.e. universal reading, which is not entailed by the assertion. Consequently, it is only contexts where this requirement is met that allow for FCIs. The (relevant steps in the) derivation of the enriched meaning of the sentence *Gianni parla con qualunque studente* (which is the Italian equivalent of (26)) is repeated in (36):

(36) Gianni parla con *qualunque* studente.

a. $p = \exists x \in D [\text{student}(x) \wedge \text{talk}(j,x)] = \exists x \in \{s1, s2, s3\} [\text{student}(x) \wedge \text{talk}(j,x)]$

b. Enriched set of alternatives

$$\begin{array}{ccc} \text{avbvc} & & (\text{ALT}') \\ \hline (\text{avb}) \wedge \neg c & (\text{avc}) \wedge \neg b & (\text{bvc}) \wedge \neg a \\ a \wedge \neg (\text{bvc}) & b \wedge \neg (\text{avc}) & c \wedge \neg (\text{avb}) \end{array}$$

c. Application of the exhaustivity operator to the enriched set of alternatives

$$\begin{aligned} O(\text{avbvc}, \text{ALT}'(\text{avbvc})) &= \exists x \in \{s1, s2, s3\} [\text{student}(x) \wedge \text{talk}(j,x)] \wedge \\ &\quad \neg O(\exists x \in \{s1, s2\} [\text{student}(x) \wedge \text{talk}(j,x)]) \\ &\quad \neg O(\exists x \in \{s1, s3\} [\text{student}(x) \wedge \text{talk}(j,x)]) \\ &\quad \neg O(\exists x \in \{s2, s3\} [\text{student}(x) \wedge \text{talk}(j,x)]) \\ &\quad \neg O(\exists x \in \{s1\} [\text{student}(x) \wedge \text{talk}(j,x)]) \\ &\quad \neg O(\exists x \in \{s2\} [\text{student}(x) \wedge \text{talk}(j,x)]) \\ &\quad \neg O(\exists x \in \{s3\} [\text{student}(x) \wedge \text{talk}(j,x)]) \end{aligned}$$

d. $O(\text{avbvc}, \text{ALT}'(\text{avbvc})) = a \wedge b \wedge c$

We first apply the strengthening operator to the assertion, which we can paraphrase as ‘There is an x , x is a student (in D) and Gianni talks to x ’. The first layer of exhaustification leads to a meaning identical to the assertion, so in order to get a stronger meaning, we must apply the exhaustification operator to the enriched set of alternatives. When we compute this, the result is the universal reading represented in (36)d. The strengthened meaning asymmetrically entails the assertion, so the free-choice item *qualsiasi* can occur in the positive assertion ‘Gianni talks to any student’.

Once we assume that the operator associated with an item like *qualsiasi* has to lead to an enriched meaning, the only way to meet this requirement is by recursive exhaustification. A further consequence is that any other operator in the derivation, such as negation⁹⁴ (35)

⁹⁴ A question that arises at this point is whether *qualunque* (and similar free-choice-only elements) behaves similarly in the scope of all DE operators. In other words, do such FCIs always get a rhetorical interpretation under DE-operators, or are there NPI-readings? Chierchia points out that some apparently NPI-readings do surface sometimes. One such case is the subtriggered version of a sentence like (35), *Non ho incontrato qualunque studente che voleva vedermi*. The sentence can have a reading like *It is not the case that I met any student that wanted to see me*. Chierchia argues that in fact this interpretation is comes out as a result of moving the object above negation (QR), which yields a $\forall$ -reading: *for every student that wanted to see me, it is not the case that I met him*. This, in turn, is equivalent to the $\neg\exists$ (NPI) interpretation. For more details on this configuration, see Chierchia (2006: 567-568). The emerging conclusion is that the absence of rhetorical readings of FCIs under DE-operators and apparent NPI-like interpretations should not necessarily be taken at face value, as a counterargument to the way exhaustification is assumed to work on this approach.

applies to the strengthened meaning, yielding an interpretation equivalent to a universal quantifier in the scope of negation (the rhetorical reading). The constraint that free-choice items lead to enrichment thus underlies the different behavior in the scope of negation illustrated by the contrast between (34), which exhibits the NPI-reading of *any*, and the rhetorical interpretation in (35).

The hypothesis that the rhetorical reading is generally obtained by first exhaustifying and then applying negation predicts this derivation to also be available for items like *any*. I think there is evidence that this prediction is borne out, as illustrated by the possible readings of the sentence in (37)⁹⁵:

(37) He didn't win *any* prize.

a. He didn't win any prize, he didn't even finish the race.

b. He didn't win any prize, he won the Nobel prize.

There are two possible derivations associated with this sentence. If we apply exhaustification to a negated claim, we obtain the negative polarity interpretation of *any*, made salient by the continuation in (37)a. However, there is a second option, namely to apply negation to the exhaustified alternatives. The enriched interpretation that results from exhaustification asymmetrically entails the assertion, and in interaction with negation, the 'not just any' interpretation surfaces, as the possible continuation in (37)b confirms. Importantly, this reading of FCIs is obligatorily associated with a special intonation, a possible indication of recursive exhaustification in negative contexts. In view of the fact that there is a 'simpler' way to make appropriate use of the exhaustification operator, by satisfying the condition that the assertion entails its alternatives, the option of recursive application of O, which gives a universal-like reading, to which we then apply negation, is clearly not a default strategy. Focus might then be an indication of this marked derivation.

Summing up, Chierchia implements the difference between *any*-FCIs and *qualunque*-FCIs by assuming that in the case of the latter the exhaustification process has to lead to 'proper strengthening', meaning that the result of exhaustification must be stronger than the assertion. This has the consequence that only exhaustified alternatives (in the enriched set that we called ALT') can be considered; using the initial set of alternatives (ALT) does not yield an enriched meaning. Accordingly, free-choice readings result from recursive

⁹⁵ Some English speakers cannot get the reading in (37)b, and need to add 'just' in order to avoid contradiction.

exhaustification. The definition of the operator with which ‘pure’ FCI associate is given below:

$$(38) O_{\text{STRONG}}(p, \text{ALT}'(p)) = O(p, \text{ALT}'(p)), \text{ if } [O(p, \text{ALT}'(p)) \subset p] \\ \perp, \text{ otherwise}$$

A FCI is only appropriate when we obtain something that asymmetrically entails the unexhaustified interpretation. As we have already seen, this requirement cannot be met in downward entailing contexts, where the assertion is the strongest alternative. To put it differently, ‘pure’ FCIs are subject to a stricter version of the economy condition that requires not to activate alternatives idly: the resulting meaning must be stronger than the assertion, unlike what happens with NPIs. In a sense, given that we are dealing with an approach that derives ungrammaticality from ways in which enrichment works, the constraint on free-choice items, requiring that the operator leads to proper strengthening, comes out more naturally than the configuration displayed by NPIs, where the presence of a downward-entailing operator suffices to satisfy the exhaustification requirement.

1.2.4 Interim summary

Before moving on to the last class of polarity items that Chierchia discusses, and which is directly relevant for the analysis of *vreun* in section 2, let us briefly summarize what the system looks like thus far.

Common to all polarity items is the fact they are existential quantifiers, which activate domain alternatives leading to the insertion in the derivation of an exhaustification operator, defined as in (39). Intuitively speaking, the role of the operator is to convey an enriched meaning, by adding to the original assertion the negation of all stronger alternatives.

$$(39) O(p, \text{ALT}(p)) = p \wedge \forall q [q \in \text{I-E}(p, \text{ALT}(p)) \rightarrow \neg q]$$

Polarity items differ with respect to the type of alternatives to which exhaustification applies and the exhaustification operator that gets inserted. So far, we have seen the properties of three classes of dependent elements. The exhaustification operator associated with weak NPIs like *ever* (marked O_{WEAK} and repeated in (40)) is defined either if the assertion entails its true alternatives or if the result of enrichment is stronger than the assertion:

$$(40) O_{\text{WEAK}}(p, \text{ALT}(p)) = \begin{array}{l} O(p, \text{ALT}(p)), \text{ if } [p \not\subseteq \cap \text{ALT}(p)] \rightarrow [O(p, \text{ALT}(p)) \subset p] \\ \perp, \text{ otherwise} \end{array}$$

Since as long as we stick to the “original” set of alternatives the requirements of this operator are satisfied in downward entailing contexts only, where the assertion entails the conjunction of its alternatives, these are the only environments that license NPIs. Crucially, the fact that NPIs of this type are ruled out in positive non-polarity contexts indicates that these items do not allow recursive exhaustification (or else, the ‘stronger meaning’ requirement, i.e. the second conjunct in (40), would be satisfied).

Polarity items that can function both as NPIs and FCIs, typically *any*, are licensed in the same way in DE contexts, but, crucially, have an extra option that is responsible for their free-choice use, namely recursive exhaustification, which yields an enriched meaning (that asymmetrically entails the assertion). The operator they associate with is the same as for weak NPIs, but crucially exhaustification applies not only to the alternatives in the initial set (ALT, derived on the basis of domain alternatives), but also to an enriched set of alternatives (ALT’), containing the exhaustified version of each one of the initial alternatives. The result is the universal reading associated with free-choice items.

In addition to FCIs like *any*, we have seen the properties of a related class of free-choice elements, like the Italian item *qualsiasi*, which disallows NPI uses. ‘Pure’ FCIs differ from items like *any* in that they must lead to an enriched meaning, a requirement which can only be satisfied by recursive application of the exhaustification operator. In a sense, they associate with a stronger version of the operator, defined as in (41) and marked O_{STRONG} .

$$(41) O_{\text{STRONG}}(p, \text{ALT}'(p)) = \begin{array}{l} O(p, \text{ALT}'(p)), \text{ if } [O(p, \text{ALT}'(p)) \subset p] \\ \perp, \text{ otherwise} \end{array}$$

Variation is therefore reduced to two parameters: [+/- recursive exhaustification] and [+/-strengthening requirement].

In addition to these three classes of polarity items, Chierchia discusses the properties of so-called existential FCIs, whose interpretation involves exhaustification of multiple sets of alternatives, in a sense that will be made clear in the following section.

1.2.5 Existential free-choice items

The central question in the literature on free-choiceness has been the origin of the universal reading associated with these items. Recent studies, however, have pointed out the existence

of a related class of free-choice items, which can only get an existential interpretation (Kratzer & Shimoyama (2002), Alonso-Ovalle (2005), Chierchia (2006), Choi & Romero (2008)), a pattern already introduced in Chapter 1. An example of this type is the Italian item *un N qualunque* in (13) or German *irgendein* in (43):

(42) Domani parlero con ***un*** studente ***qualunque***

‘Tomorrow I will talk to a student whatsoever.’

(43) Mary musste ***irgendeinen*** Mann heiraten. [Kratzer & Shimoyama 2002:10]

‘Mary had-to irgendet-one man marry’.

The sentence in (43) can have two different readings: either the so-called *speaker ignorance/indifference* reading that we could paraphrase as ‘There was some man Mary had to marry, the speaker doesn’t know or care who it was’ or the *free-choice* interpretation equivalent to ‘Mary had to marry a man, any man was a permitted marriage option for her.’ Kratzer & Shimoyama convincingly argue that the free-choice meaning associated with *irgendein* can be derived as an implicature. More specifically, they assume that *irgendein* triggers maximal *domain widening*, just like any other polarity or free-choice item. However, in the case of this kind of existential element, domain widening serves a different purpose. More specifically, the extension of the domain of quantification is not intended to convey either type of enriched meaning we considered so far, namely that the assertion holds even for the largest choice of domain, as is the case for NPIs, or the universal reading associated with FCIs. Rather, for existential free-choice items, domain widening is activated in order not to rule out any option. For example, upon uttering a sentence like (43), the speaker conveys that for all she knows, any individual in the domain of men is such that marrying him would suffice for Mary to satisfy her obligation, or, equivalently, none of the alternatives gets excluded. In a way, the speaker widens the domain in order to convey uncertainty. Since this way of exploiting domain widening aims at *avoiding false exhaustivity* inferences, meaning that it does not force the conclusion that there are alternatives for which the assertion does not hold, this effect is also called *antiexhaustiveness*⁹⁶.

Chierchia (2006) draws on the basic insights in Kratzer & Shimoyama and proposes an implementation that integrates existential FCIs into the general system of polarity-sensitive

⁹⁶ The derivation of free-choice effect in terms of an antiexhaustiveness implicature is due to Kratzer & Shimoyama (2002) for existential FCI like *irgendein*. Chierchia then extends this insight to universal FCIs, which are argued to be associated with the same use of domain widening, a point illustrated in section 1.2.3.

items. He assumes that these elements have the same semantics as regular FCIs along with the additional semantic input contributed by the indefinite article with which they combine. The morphology of the Italian item *un N qualsiasi/qualunque* makes the two components transparent: *un* is the indefinite article, whereas *qualsiasi/qualunque* is the regular universal FCI.

In the previous sections, the semantic contribution of FCIs was derived as a result of recursive exhaustification of the domain-alternatives they introduce. If the interpretation and distribution of existential FCIs is the result of its morphological composition, we first need to understand what is the meaning associated with overt indefinite morphology. Typically, a sentence containing an indefinite as in (44)a gets an existential interpretation:

(44) a. I met a student.

b. Assertion

$\exists x [\text{student}(x) \wedge \text{meet}(I, x)]$

c. (Scalar) implicature

$\neg \text{two}(\text{student}) \lambda x [I \text{ met } x]$

In addition to this existential component, the indefinite article triggers an ‘exactly’ implicature, given in (44)c, that we could paraphrase as ‘It is not the case I met two students’. As is generally the case with scalar terms, in uttering a member of the scale (in this case, numerical *one, two, three...n*), we negate that stronger members of the scale could hold.

Integrating this into the semantics of items like *un N qualunque*, and taking morphology at face value, Chierchia assumes that their meaning is the result of the co-occurrence of domain and scalar alternatives, the former associated with FCIs and the latter with the indefinite article. In the framework we are considering here, alternatives have to be appropriately used for enrichment, so the distribution and interpretation of existential FCIs is predicted to be the result of how exhaustification proceeds. Specifically, Chierchia analyzes existential FCIs as having two components to their meaning. The first is the ‘exactly’ implicature, triggered by the presence of a scalar item. The second component, that we can call the ‘free-choice implicature’, is the enriched meaning typical of free-choice items, derived by exclusion of exhaustified alternatives, whose result is a universal reading. At an intuitive level, *un N qualunque* can occur in contexts where both the (universal) FC implicature (saying that if the assertion holds of one alternative, it holds of all) and the (existential) scalar implicature (the assertion holds for exactly one alternative) are satisfied. As we will see below, in some environments (i.e. episodic sentences), this leads to

inconsistency. On the other hand, Chierchia shows that these conflicting requirements are successfully met in modal contexts, a result which gives a better understanding of the close connection between existential FCIs and modality.

In order to see how this intuition is implemented in the general framework of polarity-sensitivity advocated by Chierchia, consider the sentence in (45):

(45) ?? Gianni ha sposato *un dottore qualunque*. [Chierchia 2008:6]

‘Gianni has married a doctor whatsoever’

a. Assertion : $\exists x \in D [\text{doctor}(x) \wedge \text{marry}(g, x)]$

b. Scalar alternatives to p (=avbvc) SC-ALT(p)

$$avbvc \quad ((a \wedge b) \vee (a \wedge c) \vee (b \wedge c))$$

$$\begin{aligned} \text{c. } O(avbvc, \text{SC-ALT}(avbvc)) &= (avbvc) \wedge \neg((a \wedge b) \vee (a \wedge c) \vee (b \wedge c)) \\ &= (avbvc) \wedge \neg(a \wedge b) \wedge \neg(a \wedge c) \wedge \neg(b \wedge c) \end{aligned}$$

The sentence with the existential FCI ‘un dottore qualunque’ asserts that there is an individual x in the domain D (in the following we will assume it contains three individuals $\{d1, d2, d3\}$), such that x is a doctor and Gianni marries x . In addition to the domain alternatives triggered by the free-choice component ‘qualunque’, the existential FCIs also activates scalar alternatives, triggered by the indefinite, and both types require exhaustification. Let us look at the different steps in the derivation. First, we exhaustify the assertion with respect to the set of its scalar alternatives (call it SC-ALT)⁹⁷. The set contains the assertion $(avbvc)$ ⁹⁸ and the stronger alternative which says that Gianni married two doctors. At this point, the enriched meaning of the proposition says that the assertion $(avbvc)$ holds and it is not the case the (stronger) alternative holds. At an intuitive level, this corresponds to the ‘exactly one’, existential implicature: the assertion holds of one alternative, and cannot hold of all the alternatives.

At the next step, we look for the domain alternatives associated with the free-choice component and we apply the exhaustification operator. We know that the operator always applies to a proposition and the set of its alternatives. Here, the proposition is the exhaustified meaning in (45)c, noted as $O(avbvc, \text{SC-ALT}(avbvc))$. Let us call the set of domain

⁹⁷ In the following, I present only the derivation where exhaustification applies first to scalar alternatives and then to domain alternatives. However, the result wouldn’t be different if the order would be reversed, a situation also noted by Chierchia in the published version of the paper (Chierchia 2006).

⁹⁸ The alternatives a, b, c are generated on the basis of domain alternatives, by the process described for NPIs (section 1.2.1). In the present example, ‘ a ’ stands for ‘ $d1$ is a doctor and g marries $d1$ ’, ‘ b ’ for ‘ $d2$ is a doctor and g marries $d2$ ’, and ‘ c ’ corresponds to ‘ $d3$ is a doctor and g marries $d3$ ’.

alternatives to this proposition DOM-ALT (which is an abbreviation for DOM-ALT($O(avbvc, SC-ALT(avbvc))$):⁹⁹

$$(46) \quad (avbvc) \wedge \neg ((a \wedge b) \vee (a \wedge c) \vee (b \wedge c)) \quad \text{DOM-ALT}$$

$$(a \vee b) \wedge \neg(a \wedge b) \quad (b \vee c) \wedge \neg(b \wedge c) \quad (a \vee c) \wedge \neg(a \wedge c)$$

$$\quad \quad \quad a \quad \quad \quad b \quad \quad \quad c$$

What happens when we apply exhaustification to the proposition in (45)c (the enriched meaning resulting from exhaustification over scalar alternatives) with respect to the set in (46)? Recall that in order to obtain an enriched meaning, we must find the innocently excludable alternatives to the proposition to which exhaustification applies, i.e. the maximal set of stronger alternatives we can eliminate non-arbitrarily while preserving consistency. Accordingly, we look for the maximal subsets we could consider for exclusion, such as when we negate the members of this set, and we add the assertion, the result is consistent. One such set is $\{(avb) \wedge \neg(a \wedge b), a, b\}$: when we negate its elements we obtain $\{(avb) \rightarrow (a \wedge b), \neg a, \neg b\}$, which is consistent with the proposition we started out with, namely $((avbvc) \wedge \neg((a \wedge b) \vee (a \wedge c) \vee (b \wedge c)))$. Another maximal subset we could consider for exclusion is $\{(avb) \wedge \neg(a \wedge b), c\}$, whose negation yields $\{(avb) \rightarrow (a \wedge b), \neg c\}$. Similarly, we derive the other maximal sets we could consider for enrichment, obtaining the possible exclusions in (47):

$$(47) \text{ The sets we consider for } O(S, \text{DOM-ALT}(S)),$$

$$\text{where } S \text{ abbreviates } (avbvc) \wedge \neg((a \wedge b) \vee (a \wedge c) \vee (b \wedge c))$$

$$\{(avb) \wedge \neg(a \wedge b), a, b\} \quad \{(avc) \wedge \neg(a \wedge c), a, c\} \quad \{(bvc) \wedge \neg(b \wedge c), b, c\}$$

$$\{(avb) \wedge \neg(a \wedge b), c\} \quad \{(avc) \wedge \neg(a \wedge c), b\} \quad \{(bvc) \wedge \neg(b \wedge c), a\}$$

$$(48) O(S, \text{DOM-ALT}(S)) = S,$$

$$\text{where } S = (avbvc) \wedge \neg((a \wedge b) \vee (a \wedge c) \vee (b \wedge c))$$

According to the definition of the exhaustification operator, we obtain enrichment by adding to the assertion the negation of all innocently excludable alternatives. In the present case, the sets in (47) have no intersection and therefore, there are no innocently excludable alternatives. This means that although there are stronger alternatives to the assertion, we cannot exclude alternatives in a non-arbitrary manner. This state of affairs leads to the unacceptability of (45). The problem is the same as the one responsible for ruling out NPIs in positive contexts: there

⁹⁹ DOM-ALT contains the exhaustified scalar alternative for each alternative generated on the basis of a subdomain in D, following the procedure applied in section 1.2.2

are stronger alternatives to the assertion, but we cannot exclude them in a non-arbitrary manner; the insertion of the exhaustification operator does not lead to enrichment, the strengthened meaning in (48) being identical to the proposition we started out with, given in (45)c. Once again, this configuration violates what Chierchia calls the ‘economy condition’ requiring not to activate alternatives idly, i.e. without leading to enrichment. We activated alternatives, and thus triggered the insertion of O, without, however, yielding a strengthened interpretation. This results in ungrammaticality, in conformity with the definition of the exhaustivity operator.

At this point, it is obvious that the free-choice and the scalar implicature are inconsistent in episodic sentences: on the one hand, the assertion must be true for all individuals in the domain of quantification, and on the other hand, it must hold of only one individual. We have seen that this is implemented using the same procedure as for other polarity items, the only difference being the presence of scalar alternatives.

Unlike what happens in the (episodic) sentence in (45), the two conflicting requirements associated with an existential FCI can be satisfied in a modal context. Consider the following example:

(49) Gianni deve sposare *un dottore qualunque*.

‘Gianni must marry a doctor whatsoever’.

Assertion: $\Box \exists x \in D [\text{doctor}(x) \wedge \text{marry}(g, x)]$

Let us see what is the meaning of (49) and how it is derived. The assertion given in (49)a states that in every possible world (that is accessible from the actual world), Gianni marries a (unique) doctor selected from the widest domain of quantification D. Just as before, we have scalar and domain alternatives to the proposition below the modal. However, we have seen that at this point there are no innocently excludable alternatives that could lead to enrichment, so there is no exhaustification possible before we get to the modal. However, due to the presence of the necessity modal, the situation is different from the one in episodic sentences. More precisely, Chierchia assumes that the exhaustification that considers domain alternatives occurs at a level above the modal. The domain alternatives we compute thus include the modal, and take the form of (50). (I will call this set UNIV-ALT):

$$\begin{aligned}
(50) \quad & \Box ((a \vee b \vee c) \wedge \neg ((a \wedge b) \vee (a \wedge c) \vee (b \wedge c))) & (\text{UNIV-ALT}) \\
& \Box ((a \vee b) \wedge \neg (a \wedge b)) & \Box ((b \vee c) \wedge \neg (b \wedge c)) & \Box ((a \vee c) \wedge \neg (a \wedge c)) \\
& \Box a & \Box b & \Box c
\end{aligned}$$

At this point in the derivation, we apply exhaustification. What are the maximal sets we could consider for enrichment? There is only one such maximal set, that we could exclude, while keeping consistency with $\Box ((a \vee b \vee c) \wedge \neg ((a \wedge b) \vee (a \wedge c) \vee (b \wedge c)))$, namely the one that contains the members of UNIV-ALT, except for the assertion, i.e. $\{\Box ((a \vee b) \wedge \neg (a \wedge b)), \Box ((b \vee c) \wedge \neg (b \wedge c)), \Box ((a \vee c) \wedge \neg (a \wedge c)), \Box a, \Box b, \Box c\}$. Applying the same procedure as before, the computation of exhaustification is given in (51):

$$\begin{aligned}
(51) \text{ a. } & O(\Box ((a \vee b \vee c) \wedge \neg ((a \wedge b) \vee (a \wedge c) \vee (b \wedge c))), \text{UNIV-ALT}) = \\
& \Box ((a \vee b \vee c) \wedge \neg ((a \wedge b) \vee (a \wedge c) \vee (b \wedge c))) \wedge \\
& \quad \neg \Box ((a \vee b) \wedge \neg (a \wedge b)) \wedge \\
& \quad \neg \Box ((a \vee c) \wedge \neg (a \wedge c)) \wedge \\
& \quad \neg \Box ((b \vee c) \wedge \neg (b \wedge c)) \wedge \\
& \quad \neg \Box a \wedge \neg \Box b \wedge \neg \Box c \\
\text{b. } & \neg \Box ((a \vee b) \wedge \neg (a \wedge b)) \text{ is equivalent to } \Diamond ((a \vee b) \rightarrow (a \wedge b)) \\
& O(\Box ((a \vee b \vee c) \wedge \neg ((a \wedge b) \vee (a \wedge c) \vee (b \wedge c))), \text{UNIV-ALT}) = \\
& \Box ((a \vee b \vee c) \wedge \neg ((a \wedge b) \vee (a \wedge c) \vee (b \wedge c))) \wedge \\
& \quad \Diamond ((a \vee b) \rightarrow (a \wedge b)) \wedge \\
& \quad \Diamond ((a \vee c) \rightarrow (a \wedge c)) \wedge \\
& \quad \Diamond ((b \vee c) \rightarrow (b \wedge c)) \wedge \\
& \quad \neg \Box a \wedge \neg \Box b \wedge \neg \Box c
\end{aligned}$$

Putting this into words, the formula above says that it is necessary that one of the alternatives holds, but not two; in addition to that, it is not necessary that alternative ‘a’ holds, not necessary that ‘b’ holds and not necessary that ‘c’ holds either. Furthermore, there are worlds in which either ‘a’ and ‘b’ both hold or neither of them hold, and similarly for the other pairs. This means that each of the alternatives a, b and c must be possible (suppose for example that there were no ‘c’ worlds: this would be inconsistent with the requirements imposed by the assertion and the clause that implies that, if there are no worlds in which neither ‘a’ nor ‘b’ hold, then there must be worlds in which they both hold). Moreover, since the assertion guarantees that no two alternatives are true in the same world, there must be worlds in which ‘a’ holds but neither of the other alternatives do, and likewise for ‘b’ and ‘c’. Thus:

- (52) For any subdomain D of {d1,d2,d3}, $\Box \exists x \in D [\text{doctor}(x) \wedge \text{marry}(g, x)]$ must be false
 For any member d of {d1,d2,d3}, there must be a world in which d is a doctor and
 Gianni marries d

The meaning of the original assertion for (‘every accessible world is such that I marry a doctor in that world’) is strengthened (in a way that corresponds to the paraphrase in (52)), in compliance with the requirement that exhaustification operators lead to enrichment.

Not surprisingly, the configuration above is similar to the one we have seen for free-choice items (section 1.2.2.).

Chierchia thus derives the connection between existential FCIs and modal contexts. In plain episodic sentences, these items cannot lead to an enriched meaning. The only way to satisfy the strengthening requirement is to embed the implicatures associated with an item like *un N qualunque* in a modal context, which amounts to distributing individuals in the domain of quantification over worlds¹⁰⁰. Note, however, that existential FCIs do sometimes occur in episodic contexts, as illustrated by the sentence in (53):

- (53) Gianni è uscito di corsa e non sapendo che fare, ha bussato ad *una* porta *qualsiasi*.
 ‘Gianni ran out and not knowing what to do knocked at a door whatsoever’

In his discussion of such cases, Chierchia notes that they are rather marginal, and highly context-dependent. In order to subsume these facts, Chierchia needs to assume the presence of a covert, *assertoric* modal, with a resulting meaning like ‘it follows from what the speaker knows that Gianni knocked at a door’; through regular processes of exhaustification, the FC implicature would then be ‘it is consistent with what the speaker knows that any door might have been the one knocked at.’ A similar hypothesis has been advocated in Kratzer & Shimoyama (2002): some contexts are construable as modal, despite the absence of an overt operator quantifying over worlds. The existence of null modal operators, relativized to what the speaker knows, constitutes a last resort strategy. It should perhaps be mentioned that covert restriction seems to be involved in other cases of FCIs, of the universal kind, marginally occurring in an episodic context¹⁰¹:

¹⁰⁰ This ‘distribution over worlds’ property has been already put forth (Dayal 1998, Giannakidou 2001, and Sæbø 2001) for universal FCIs which in some contexts get an existential reading, such as the imperative like *Push any key!* which requires to press one key, and any key is a possible option.

¹⁰¹ Recall that universal FCIs are rescued in episodic contexts by subtrigging, where the presence of a post-nominal modifier provides the anchoring we need in order to prevent the universal claim from being too strong. In contrast to this, existential FCIs do not seem sensitive to the presence of a post-nominal modifier, which

(54) After the dinner, we threw away *any* leftovers. [Dayal 1998]

Once we allow the marginal insertion of this kind of operator, the distribution of existential FCIs is fully accounted for in this framework. Their morphological formation makes the meaning components very salient: the existential meaning characterizing all polarity items is enriched by a uniqueness implicature associated with the indefinite determiner, doubled by the free-choice component. The relation with the universal FCIs is thus neatly derived, the difference lying in the presence of the indefinite determiner, which triggers exhaustification of scalar alternatives.

In talking about the parallels between ‘regular’ and existential FCIs, one last point needs to be addressed. More precisely, we have seen that ‘universal’ FCIs come in two variants: some double as NPIs (like *any*), whereas some others preclude NPI uses (like *qualunque*), and only accept rhetorical (‘not just any’) readings under downward-entailing operators. This difference was derived as the result of association with two different versions of the exhaustivity operator, a weak one, allowing occurrence in downward-entailing contexts, and a strong version, imposing proper strengthening of the original assertion. The actual implementation makes use of the different levels of insertion of O: items that can only function as free-choice force exhaustification prior to combination with negation (proper strengthening only obtains if the operator applies to positive assertions). This analysis predicts that the same distinction should surface with existential FCIs. Chierchia, building on Kratzer & Shimoyama’s work on German *irgendein*, shows that this prediction is borne out, as attested by examples already introduced in Chapter 1. In other words, we have a further split in our landscape of polarity items, according to the way existential FCIs behave in the scope of downward-entailing operators. Let us repeat the relevant data (Chierchia 2006: 547):

wouldn’t be able to provide the ‘distribution’ meaning component triggered by regular modals, which avoids the clash between the scalar and the free-choice implicature.

(55) **Niemand** musste *irgendjemand* einladen.

✓RHETORICAL/✓NPI READING

no one had to a person whatever invite

‘No one had to invite anybody.’

(56) **Nessuno** e` costretto ad invitare *una persona qualsiasi*. ✓RHETORICAL/*NPI READING

no one had to invite a person whatever

‘No one had to invite just anybody.’

According to Kratzer & Shimoyama, the sentence in (41), with the existential free-choice *irgendjemand* usually acquires an NPI-like reading. A second, less frequent, interpretation, corresponding to the rhetorical ‘not just any’ reading, is triggered by special intonation and contextual factors. In contrast to this, the Italian existential free-choice *una persona qualsiasi* cannot be interpreted as a typical NPI, and can only have the ‘not just anybody’ interpretation. In other words, some existential free-choice items (such as *irgendein*) can function like NPIs, whereas some others (like *un N qualsiasi*) cannot. The existence of these two options is parallel to the ones exhibited by universal-like free-choice items and follows naturally in the system developed by Chierchia. Expressions that have to lead to strengthening cannot acquire NPI-readings, the exhaustification operator must therefore apply before negation (or any other downward-entailing operator)¹⁰². Consequently, the pattern in (41)-(40) is captured without any additional stipulation.

1.3 Summary and further issues

The previous sections provide a detailed description of the core elements in Chierchia’s account of polarity sensitivity. Let me now summarize the discussion.

One of the fundamental questions in the study of polarity concerns the source of this phenomenon. On the view adopted here, the hallmark of polarity sensitive items is domain widening, which constitutes the common property of all polarity items discussed in this chapter. More specifically, in using a polarity item, we consider a domain of quantification

¹⁰² Schematically, the two configurations given by Chierchia look as follows:

- (a) $\neg O \text{ MUST } (\exists x, y, x \text{ is a person} \in D \wedge \text{invite}(x, y))$ $\Rightarrow$ rhetorical reading (it is not the case that x must invite somebody and anybody is an option)
- (b) $O \neg \text{ MUST } (\exists x, y, x \text{ is a person} \in D \wedge \text{invite}(x, y))$ $\Rightarrow$ NPI-reading (it is not the case that x must invite anybody)

Irgendein allows both derivations, whereas *un N qualsiasi* is incompatible with the configuration in (b), which would not lead to proper strengthening.

larger than the one we have in mind in the case of a plain indefinite. In Chierchia's system, this insight is implemented by assuming that polarity items bring about active alternatives, i.e. alternatives that must be appropriately used. As is usually the case, alternatives trigger implicatures, which we exploit in order to enrich the meaning of statements. In Chierchia's account, implicatures are computed by means of an exhaustification operator, defined as in (57), whose role is to lead to an enriched meaning. This can be achieved in more than one way: *even*-like implicature in DE-contexts, or *antiexhaustiveness*, universal-like reading in positive, modal contexts. In either situation, the assumption is that the implicature is added to the plain meaning, which is consequently enriched. The activation of alternatives, resulting in the insertion of an exhaustification operator, is subject to an economy condition 'do not activate alternatives idly': the resulting meaning must be an enriched meaning.

$$(57) O(p, ALT(p)) = p \wedge \forall q [q \in I-E(p, ALT(p)) \rightarrow \neg q]$$

The role of the exhaustification operator when applied to a proposition is to eliminate all stronger alternatives in a non-contradictory manner, in other words, to add to the assertion the negation of all stronger alternatives. Abstracting away from the formal details, things go wrong when there are stronger alternatives to the assertion, which we do not eliminate. Crucially, in this framework, exhaustification is a grammatical process, which can affect semantic derivation, so if the requirements associated with the operator are not satisfied, the derivation crashes. In other words, polarity failure does not result in inappropriateness, as in other 'pragmatic' approaches, but in ungrammaticality.

We thus see what is common to all polarity items: the alternatives they introduce always trigger the presence of an exhaustification operator. Let us now summarize the way the differences among polarity items are derived. The variation attested in the field of polarity items considered in the previous sections is assumed to be the result of three parameters: (i) the possibility of recursive exhaustification; (ii) the type of operator they associate with: requiring strengthening or not; (iii) presence/absence of scalar alternatives. Accordingly, the typology introduced in Chapter 1, and extensively discussed in this chapter, looks as follows:

(58) (i) +/- recursive	(ii) +/- strengthening requirement	(iii) +/- scalar
Pure NPIs <i>ever</i>	- recursive - strengthening - scalar	
NPI/FCI <i>any</i>	+ recursive - strengthening - scalar	
Pure FCI <i>qualunque/qualsiasi</i>	+ recursive + strengthening - scalar	
Existential FCI <i>un N qualsiasi</i>	+ recursive + strengthening + scalar	
NPI/Existential FCI <i>irgendein</i>	+ recursive - strengthening + scalar	

This unified account of polarity thus seeks to reduce variation to a small number of parameters. In particular, the type of exhaustification operator polarity items associate with, whether it requires strengthening of the initial assertion (as is the case for all items that disallow NPI-uses) or not (as is the case in downward entailing contexts). The cases of overlap (NPI/FCI and NPI/existential FCI) come about as a result of the possibility of recursive exhaustification, which in non-negative polarity contexts leads to a strengthened meaning.

The proposal presented in this chapter thus provides a clear answer to one of the fundamental questions underlying studies of polarity sensitivity, namely the *source* question. By positing a unique source for polarity sensitivity, implemented in terms of alternatives, we have seen that it can account for attested patterns of polarity sensitivity and the connections between them, as shown for instance in the derivation of cases of overlap between negative polarity and free-choice uses. However, the present set-up leaves many open issues, especially concerning the exhaustification process. More work is required to establish the constraints on the insertion of the exhaustification operators, and constraints on how to deal with multiple sets of alternatives. Similarly, we need to investigate sentences with more than one polarity item, possibly associated with different types of exhaustification operators, and establish which combinations are realized cross-linguistically, and what they reveal about how exhaustification works. Another important aspect that needs to be developed deals with syntactic constraints on the licensing of polarity items, such as c-command or intervention effects. Some of these issues are addressed in Chierchia (2004, 2006), whereas others are still open at the current stage of the theory. It is clear that the system needs to be supplemented in more than one way in order to accommodate the wide range of variation among polarity items, but, nevertheless, it manages to articulate the meaning of polarity items with their distributional constraints, offering a promising line of investigation.

With this background in mind, I now return to the polarity pattern instantiated by

determiner *vreun*, which I have argued to have both an NPI and an epistemic use, and discuss the issues raised by its distribution for this unified account of polarity sensitivity.

2 *Vreun* as a domain widening indefinite

In the previous section, I have presented the framework developed in Chierchia (2006, 2008), which puts the domain widening property of dependent indefinites at the heart of polarity sensitivity. I would now like to turn back to the constraints I have identified for the licensing of *vreun* and see how the above system could account for it. The distribution of *vreun* is captured by the generalizations in (59):

(59) (a) ***vreun* is a negative polarity item:** *vreun* is licensed in negative-polarity contexts

(b) ***vreun* is an epistemic item** Licensing pattern: Op [...*vreun*...]

Licensing constraint: Op *p* entails that the epistemic agent's doxastic alternatives include *non p*-worlds

In the following, I sketch an analysis that retains the main ingredients of Chierchia's account and discuss ways in which we need to modify the system, so that it integrates the constraint governing the distribution of *vreun* in its epistemic use. Situating *vreun* with respect to the typology in (58), I will start from the assumption that *vreun* is very similar to NPI/existential FCI, which introduce both scalar and domain alternatives, and then propose a modification of the domain alternatives in order to get the difference in meaning with existential FCI (section 2.1). The licensing constraint responsible for the epistemic use of *vreun* is discussed in section 2.2. The assumptions that underlie the proposal sketched here are given in (60) below:

(60) (i) *vreun* is a **polarity item** - it brings about two types of alternatives: scalar and *singleton* domain alternatives, which both require the insertion of an exhaustification operator

(ii) it associates with the **weak version of the exhaustification operator**, which allows it to function in both downward-entailing and non-polarity contexts

(iii) *vreun* is **sensitive to speaker's knowledge**: it has an additional meaning component, which triggers the insertion of an operator, EPIST, whose role is to check that *vreun* is in the scope of an operator which satisfies the *non p*-world constraint in (59)b.

2.1 The meaning of *vreun*

In order to understand the analysis I propose for *vreun*, let us go through the different steps that contribute to its licensing.

Like all items that have a ‘double’ use, *vreun* is associated with the weak version of the exhaustification operator, repeated in (60):

$$(61) O_{\text{WEAK}}(p, \text{ALT}(p)) = O(p, \text{ALT}(p)), \text{ if } [p \not\subseteq \cap \text{ALT}(p)] \rightarrow [O(p, \text{ALT}(p)) \subset p] \\ \perp, \text{ otherwise}$$

The use of *vreun* as an NPI comes about through the procedure illustrated for other NPIs, detailed in section 1.2.1, which I will not repeat here. Just recall that in downward entailing contexts, the exhaustification procedure applies to the assertion containing the negation (or any other downward-entailing operator), a configuration which makes the assertion stronger than any of its alternatives. Since exhaustification means excluding stronger alternatives, and since here there are no stronger alternatives, the requirement associated with the alternatives introduced by *vreun* is satisfied, and therefore *vreun* is licensed in these contexts.

Let us now focus on the way exhaustification works in the cases where *vreun* occurs in non-negative polarity contexts. Take the following sentence, where *vreun* is licensed by the predicate *hope*:

- (62) *Sper* *să* *găsesc* *vreo* carte interesantă.
 Hope.1SG SUBJ find.1SG V-A book interesting
 ‘I hope to find some interesting book.’

On the basis of this example, let us consider ways in which the type of exhaustification proposed by Chierchia can be put to use to derive the meaning of *vreun*. Later, in section 2.2, I will focus on the constraint that restricts the distribution of *vreun* to modal contexts that satisfy the ‘*non p*-worlds’ requirement (rather than any kind of modal context) and discuss how the unified framework that I endorse can accommodate this pattern. For expository reasons, I will separate the two parts. In the first part of the discussion, I will assume the kind of representations used by Chierchia, so that the similarities and differences with the previous derivations are more salient. I will then provide more specific denotations of the expressions in sentence (62), and the way in which they combine and contribute to the licensing of *vreun*.

Let us first focus on the meaning of *vreun*, and the kind of exhaustification which derives its meaning. In the previous chapter (section 3), we investigated the difference in meaning between an existential free-choice like *un N quelconque* and epistemic items like *quelque* or *vreun*. Building on a hypothesis proposed by Jayez & Tovenà (2008), I have shown that the crucial difference between the two classes of items is the NO LOSER constraint: epistemic items admit the exclusion of certain members of the set denoted by the noun with which they combine, whereas existential free-choice items do not. The relevant examples are repeated below:

(63) NO LOSER is violated

??Marie a rencontré **un** diplomate **quelconque**, *qui ne peut pas être mon frère*.

‘Mary met some diplomat or other, who cannot be my brother.’

(64) NO LOSER is violated

E *posibil* ca Irina să se fi întâlnit cu **vreun** prieten, *dar nu poate fi*
 be.3SG possible that Irina SUBJ REFL BE met with V-A friend, but NEG can be
Matei, tocmai l-am văzut.

Matei, just CL-have.1SG seen

‘It’s possible that Maria met some friend, but it cannot be Matei, I have just seen him.’

In other words, an existential free-choice item requires that *all* members of its domain be possible values for the existential claim, and therefore, a continuation which explicitly excludes one of the members, and as such violates NO LOSER constraint, renders the sentence in (63) infelicitous. On the other hand, the acceptability of the statement in (64) shows that *vreun* does not impose this constraint on the members of the restriction set, a situation we can describe by saying that *vreun* is not subject to NO LOSER. This property is common to all epistemic items, as shown in Jayez & Tovenà (2008) for *quelque*, and in Alonso-Ovalle & Menéndez-Benito (2009) for *algun*.

With this difference in mind, let us now return to how *vreun* could fit in the framework developed by Chierchia. More specifically, I assume that *vreun* introduces the same kind of alternatives as existential free-choice items: scalar and domain. The presence of scalar alternatives comes about as a result of the presence of the indefinite article (of which *vreun* is a morphologically complex variant). The presence of domain alternatives is common

to all polarity items. Now, in order to get the difference in meaning with an existential free-choice item, I assume that the domain alternatives to *vreun* are all singletons, rather than all possible subsets of the domain of quantification. This, I argue, constitutes the main difference with existential free-choice; apart from this aspect, the exhaustification proceeds in exactly the same way as we detailed in section 1.2.5.

It is convenient for the time being to assume we represent the licensing verb *hope* as universal quantification over worlds compatible with a subject's hopes (the denotation of *hope* will be given in section 2). I will write this as $\Box$. So, the meaning of the sentence in (62) is represented as in (65)a:

(65) *Sper* să gălesc *vreo* carte (interesantă).

Hope.1SG SUBJ find.1SG V-A book interesting

'I hope to find some (interesting) book.'

a. **Assertion:** $\Box (\exists x \in D [\text{book}(x) \wedge \text{find}(I, x)])$

b. **Exhaustification:** $O_{\text{DOM}} \Box O_{\text{SCALAR}} (\exists x \in D [\text{book}(x) \wedge \text{find}(I, x)])^{103}$

Following the procedure detailed in this chapter, I assume that the exhaustification operator applies to a proposition and the set of its propositional alternatives. In order to obtain these propositional alternatives, we replace the polarity item *vreun*, which is an existential quantifier, with other members from the domain D. Assuming that D contains three entities {b1, b2, b3}, and following Chierchia's notation, I will represent the set of alternatives to the original assertion using disjunction of propositions a, b and c, where 'a' stands for *find(I, b1)*, 'b' stands for *find(I, b2)*, 'c' stands for *find(I, b3)*.

Let us now look in detail at the way the alternatives come in, following the order of application in (65)b. First, assume the usual set of scalar alternatives, given in (66):

(66) $(a \vee b \vee c) \quad ((a \wedge b) \vee (a \wedge c) \vee (b \wedge c)) \quad \text{SC-ALT}$

This set of alternatives contains the assertion (i.e. *I find a book*) and the stronger scalar alternative to the assertion which says that I find two books. When we exhaustify, we get the following meaning:

¹⁰³ The notations O_{DOM} , O_{SCALAR} are only intended to make salient the order in which the scalar and domain alternatives enter the derivation. Things are not different from the derivations we have seen in section 1.2.5, for existential free-choice items.

$$(67) O(avbvc, SC-ALT(avbvc)) = (avbvc) \wedge \neg(a \wedge b) \wedge \neg(a \wedge c) \wedge \neg(b \wedge c)$$

At the next level, we apply the necessity operator to the assertion, as in (68):

$$(68) \Box O(avbvc, SC-ALT(avbvc)) = \Box ((avbvc) \wedge \neg(a \wedge b) \wedge \neg(a \wedge c) \wedge \neg(b \wedge c))$$

So far, everything is identical to what we had for existential free-choice items. Let us now see the domain alternatives, where I assume that *vreun* only has *singleton alternatives*. Accordingly, the set of domain alternatives looks as in (69):

$$(69) \quad \Box a \quad \Box b \quad \Box c \quad \text{DOM-ALT}$$

At this point in the derivation, we apply exhaustification to the initial assertion combined with the necessity modal with respect to the set of alternatives DOM-ALT. What are the maximal sets we could consider for enrichment? There is only one such maximal set, that we could exclude, while keeping consistency with the assertion $\Box ((a \vee b \vee c) \wedge \neg(a \wedge b) \wedge \neg(a \wedge c) \wedge \neg(b \wedge c))$, namely the set that contains all the alternatives, i.e. $\{\Box a, \Box b, \Box c\}$. So we can eliminate all of them, and we get the enriched meaning in (70):

$$\begin{aligned} (70) O(\Box ((avbvc) \wedge \neg(a \wedge b) \wedge \neg(a \wedge c) \wedge \neg(b \wedge c))) = \\ \Box ((avbvc) \wedge \neg(a \wedge b) \wedge \neg(a \wedge c) \wedge \neg(b \wedge c)) \\ \wedge \neg \Box a \quad \wedge \neg \Box b \quad \wedge \neg \Box c \\ = \Box ((avbvc) \wedge \neg(a \wedge b) \wedge \neg(a \wedge c) \wedge \neg(b \wedge c)) \\ \wedge \Diamond \neg a \wedge \Diamond \neg b \wedge \Diamond \neg c \end{aligned}$$

The enriched meaning amounts to something like ‘it’s necessary that some alternative holds, but also that no two of them hold at once, and it’s possible that ‘a’ does not hold, it’s possible that ‘b’ does not hold, and it’s possible that ‘c’ does not hold’. In other words, all the speaker’s hope-worlds are such that the speaker finds a book in that world, but at the same time there are some such worlds in which she fails to find a book that is b1, others in which she fails to find a book that is b2, and others in which she fails to find a book that is b3. These conditions are satisfied when, for example, c does not hold in any of the speaker’s hope worlds, but a does (without b holding) or b does (without a holding). We can thus see that once we only look at singleton alternatives, we avoid the universal ‘free-choice’ inference which requires that *all* members in the domain (all possible subsets) be possible, and allow for situations where one of the members of the domain is excluded. The meaning of *vreun* comes out right.

Let me illustrate this procedure for a possibility modal, where we need to make use of recursive exhaustification. Consider the following example:

(71) (Tudor) s-o *fi întâlnit cu vreun prieten.*

Tudor REFL-FUT2.3SG BE met with V-A friend

‘Tudor might have met some friend.’

Assertion: $\Diamond (\exists x \in D [\text{friend}(x) \wedge \text{meet}(t, x)])$

(72) **Exhaustification:** $O_{\text{DOM}} \Diamond O_{\text{SCALAR}} (\exists x \in D [\text{friend}(x) \wedge \text{meet}(t, x)])$

Following the same procedure as before, assuming that D contains three individuals $\{f1, f2, f3\}$, and using Chierchia’s notation, I will represent the set of alternatives to the original assertion using disjunction of propositions a , b and c , where ‘ a ’ stands for $\text{meet}(t, f1)$, ‘ b ’ stands for $\text{meet}(t, f2)$, ‘ c ’ stands for $\text{meet}(t, f3)$. Let us now look in detail at the way the alternatives come in, following the order of application in (72). First, assume the usual set of scalar alternatives, given in (73):

(73) $(a \vee b \vee c)$ $((a \wedge b) \vee (a \wedge c) \vee (b \wedge c))$ SC-ALT

When we exhaustify this set of alternatives, we get the following meaning:

(74) $O(a \vee b \vee c, \text{SC-ALT}(a \vee b \vee c)) = (a \vee b \vee c) \wedge \neg(a \wedge b) \wedge \neg(a \wedge c) \wedge \neg(b \wedge c)$

The possibility modal then applies to the assertion, resulting in the meaning given in (75), saying that it is possible that some alternative holds without it being the case that two alternatives hold:

(75) $\Diamond O(a \vee b \vee c, \text{SC-ALT}(a \vee b \vee c)) = \Diamond ((a \vee b \vee c) \wedge \neg(a \wedge b) \wedge \neg(a \wedge c) \wedge \neg(b \wedge c))$

Next, we consider the set of domain alternatives, which *only contains singleton alternatives*. Accordingly, the set of domain alternatives looks as in (76):

(76) $\Diamond a$ $\Diamond b$ $\Diamond c$ DOM-ALT

We then try to enrich the meaning of the assertion by exhaustifying with respect to this domain of alternatives:

$O(\Diamond ((a \vee b \vee c) \wedge \neg(a \wedge b) \wedge \neg(a \wedge c) \wedge \neg(b \wedge c))) = ?$

In order to decide what alternatives can be excluded, we look for innocently excludable alternatives, i.e. maximal subsets of alternatives such that when we negate the members of its

set, the result is consistent with the assertion. Unlike what happens in the case of a necessity modal given above, here, we cannot eliminate all the alternatives in DOM-ALT, because negating these alternatives, we obtain something like $\{\neg\Diamond a, \neg\Diamond b, \neg\Diamond c\}$, and adding all of these to the assertion results in inconsistency. The maximal subsets we could therefore consider for exclusion are $\{\Diamond a, \Diamond b\}, \{\Diamond a, \Diamond c\}, \{\Diamond b, \Diamond c\}$. However, they have no intersection, so at this point, we cannot exclude anything.

However, recursive exhaustification can yield a strengthened meaning¹⁰⁴ (just like we have seen for free-choice items, in section 1.2.2). Recall that this means that each alternative in DOM-ALT gets exhaustified with respect to DOM-ALT. For example, let us first see what the exhaustified version of $\Diamond a$ looks like. Negating the members of DOM-ALT gives us $\{\neg\Diamond a, \neg\Diamond b, \neg\Diamond c\}$, and, except for the negation of $\Diamond a$ itself, these can be added consistently to $\Diamond a$. The result will be that the exhaustified version of $\Diamond a$ will exclude the two other alternatives in DOM-ALT. Writing this in more detail:

$$(77) O(\Diamond a, \text{DOM-ALT}) = \Diamond a \wedge \neg\Diamond b \wedge \neg\Diamond c$$

Applying the same procedure to the other singleton alternatives, the enriched set looks as follows:

$$(78) \begin{array}{l} \Diamond a \wedge \neg\Diamond b \wedge \neg\Diamond c \\ \Diamond b \wedge \neg\Diamond a \wedge \neg\Diamond c \\ \Diamond c \wedge \neg\Diamond a \wedge \neg\Diamond b \end{array} \quad \text{DOM-ALT2}$$

What can we exclude at this point? Is there a maximal set of alternatives, such that when we negate its members and add the assertion, the result is consistent? The answer is positive: there is a single such set and it contains all the alternatives in DOM-ALT2. We can thus eliminate all of the alternatives in DOM-ALT2, and get the following result:

¹⁰⁴ Recall that in Chierchia's set-up, the only items that do not allow recursive exhaustification are weak NPIs.

$$\begin{aligned}
(79) \quad & O(\Diamond((a \vee b \vee c) \wedge \neg(a \wedge b) \wedge \neg(a \wedge c) \wedge \neg(b \wedge c)), \text{DOM-ALT2}) = \\
& \Diamond((a \vee b \vee c) \wedge \neg(a \wedge b) \wedge \neg(a \wedge c) \wedge \neg(b \wedge c)) \\
& \wedge \Diamond a \rightarrow \Diamond(b \vee c) \\
& \wedge \Diamond b \rightarrow \Diamond(a \vee c) \\
& \wedge \Diamond c \rightarrow \Diamond(a \vee b)
\end{aligned}$$

This has the following meaning: there is a world in which exactly one member of $\{a,b,c\}$ is true and if one is possible, another is as well. Note that this does not require that all three alternatives be possibilities: these conditions are satisfied if, for example there is no world in which a holds but at the same time there are worlds in which b and c hold, and, in one of these, say, b is true without c being true. Once again, through the assumption that the domain alternatives are all singletons, we avoided the free-choice meaning, requiring that *all* members in the domain be possible.

Let me summarize what we have seen so far: *vreun* introduces two types of alternatives: *scalar*, which results in the meaning ‘a single friend’, and *singleton domain alternatives*. The exhaustification of both types of alternatives implies not only that there are members of $\{a,b,c\}$ which are possible, but also that more than one is. All of this is compatible with situations where we exclude a member of $\{a,b,c\}$ as being a possibility. The enriched meaning is thus as desired.

The above procedure shows that we can maintain a very similar analysis for existential FCIs and epistemic items like *vreun*, as desired. They are both existential, and they are both used in situations where there is variation with respect to what members of the domain of quantification can satisfy the existential claim. The difference with the existential free-choice comes from the consideration of *singleton alternatives only*. Intuitively, in using *vreun*, the only stronger (domain) alternatives which are relevant are the ones in which only one individual in the domain satisfies the existential claim. So these are the alternatives we consider for the enriched meaning. A similar point has been made by Alonso-Ovalle & Menendez-Benito (2009), who argue that *algun* imposes an anti-singleton constraint on the domain of quantification. Using a procedure very similar to the one sketched above, without however adopting Chierchia’s account of polarity, they derive the same meaning for *algun*, which crucially does not require that all members of its domain be possibilities (this type of meaning is dubbed ‘Modal Variation’).

The discussion so far shows that we can make use of the main elements in Chierchia’s

system and derive the meaning of *vreun*, as well as the difference with existential free-choice items. A reasonable question at this point is whether this is the only way of deriving the meaning of *vreun* in this framework. However, I will not address issues concerning alternative derivations, with a different order of computing the alternatives. The only thing that is relevant for our present purposes is that the exhaustification procedure associated with existential free-choice items, together with the assumption that the domain alternatives are all singletons, provide a way to derive the desired meaning.

2.2 The licensing constraint

Up to this point, we have assumed *vreun* to be a dependent item, in many respect similar to existential free-choice items, the only difference being the set of domain alternatives. We have seen how we obtain its meaning in the scope of a verb like *hope* (65), translated as universal quantification over worlds, and in the scope of a possibility modal (71). However, recall that *vreun* is licensed only in the scope of operators that satisfy the ‘*non p*-worlds constraint’ (given in (59)b). So, at this point, we have only derived the behavior of *vreun* under necessity and possibility modals, without making any distinctions among modals. In a sense, the exhaustification operator is blind to the distinctions among the operators below it, and at the point where the alternatives are computed, the modals or other licensing operators get treated as simply involving quantification over worlds. If we add nothing else, *vreun* is incorrectly predicted to be able to occur in the scope of deontic modals or verbs like *want*.

Consequently, I make the hypothesis that *vreun* requires the insertion of an operator that checks whether the ‘*non p*-worlds constraint’ is satisfied. Given that this operator is relevant for the distribution of *vreun* in non-polarity contexts, to which I referred as its *epistemic* use, I will dub this operator *EPIST*.

Let us therefore focus on the derivation before exhaustification, i.e. ignoring the alternatives introduced by *vreun*. The important point is to understand how the licensing condition is satisfied. To illustrate, I will contrast the licensing of *vreun* under *hope* with its non-licensing under *want*. In Chapter 2, section 2.3, we have seen that both attitude predicates are interpreted with respect to an individual’s doxastic alternatives, which are ordered by a preference-related (*bouletic*) ordering source. However, they differ with respect to their entailments. Crucially, *hope* cannot be used in a context where *all* the epistemic agent’s doxastic alternatives are such that the complement proposition, *p*, holds. For example, in a situation where John sees that it is raining outside, he cannot say *It’s raining and that is what I hope*. In other words, the epistemic agent’s doxastic alternatives must include *non p*-worlds.

In contrast to this, *want* is compatible with such a situation, i.e. John can felicitously utter *It's raining and that is what I want*, a property that shows that *want* does not carry the entailment that the epistemic agent's alternatives contain *non p*-worlds. With this background in mind, I now turn to the relevance of this difference for the licensing of *vreun*.

In order to understand how meaning composition proceeds, let us go through the relevant steps for a sentence where *vreun* is licensed in the scope of *hope*, as in (80). I will then discuss in more detail the assumptions underlying this proposal.

(80) *Sper* *să* *găsesc* *vreo* carte interesantă.

Hope.1SG SUBJ find.1SG V-A book interesting

'I hope to find some interesting book.'

I assume the following initial structure for the sentence: *vreun* requires the insertion of EPIST and of the exhaustification operator O (as illustrated in the previous section):

(81) O [I hope [EPIST [I find an interesting book]]]

Let us focus on how things work prior to exhaustification (which was detailed in section 2.1). The semantic values that I assume for the constituents of the sentence in (81) (that are relevant at this point) are the following¹⁰⁵:

(82) **Semantic values**

- (a) $[[\text{hope}]]^{c,g} = \lambda p_{\langle st \rangle}. \lambda x_e. \lambda w_s$: for some world w' among the doxastic alternatives that x entertains in w , $p(w') = 0$. for every world w'' among x 's doxastic alternatives that x prefers in w , $p(w'') = 1$
- (b) $[[\text{EPIST}]]^{c,g} = \lambda q_{\langle st \rangle}. \lambda N_{\langle st, st \rangle}$: for all p, w , if $N(p)(w) = 1$ then, for some world w' among the doxastic alternatives that speaker(c) entertains in w , $p(w') = 0$. $N(q)$
- (c) $[[\text{I find an interesting book}]]^{c,g} = \lambda w_s$. speaker(c) finds an interesting book in w

where c is an evaluation parameter that is set to the situation of utterance and that is responsible for the value of indexicals and g is an assignment function

In order for these three constituents to combine we assume that EPIST moves higher than *I hope*, something that gives the following structure:

¹⁰⁵ In the following, I assume a system of interpretation like the one given in Heim & Kratzer (1998).

(83) [EPIST [I find an interesting book]] [1 [I hope t_1]]]

$[[1 \text{ I hope } t_1]]^{c.g} = \lambda p_{\langle s, t \rangle}. \lambda w_s$: for some world w' among the doxastic alternatives that x entertains in w , $p(w') = 0$. for every world w'' among x 's doxastic alternatives that x prefers in w . $p(w'') = 1$

Let us now see how these elements combine:

First, according to the definition I gave in (82)b, EPIST is an operator that takes as its arguments a proposition and an operator (of type $\langle st, st \rangle$, i.e. that takes propositions and gives propositions). EPIST applies to its first argument, in this case the proposition $[[I \text{ find an interesting book}]]^{c.g}$:

(84) $[[\text{EPIST}]]^{c.g} ([[I \text{ find an interesting book}]]^{c.g}) = \lambda N_{\langle st, st \rangle}$: for all p, w , if $N(p)(w) = 1$ then, for some world w' among the doxastic alternatives that speaker(c) entertains in w , $p(w') = 0$. $N(\lambda w_s. \text{speaker}(c) \text{ finds an interesting book in } w)$

Next, EPIST combines with its second argument, in this case $[[1 \text{ I hope } t_1]]^{c.g}$. For this to work, we must check that it satisfies the domain condition of EPIST, given in (82)b, i.e. for all p, w , if $[[1 \text{ I hope } t_1]]^{c.g} (p)(w) = 1$, there is a world w' among the speaker's doxastic alternatives in w , such that $p(w') = 0$

This condition is met, assuming the meaning of *hope* in (82)a, $[[\text{hope}]]^{c.g}$ guarantees that there are worlds w' among its subject's doxastic alternatives such that its propositional argument does not hold in w' . Accordingly, we can treat $[[1 \text{ I hope } t_1]]^{c.g}$ as an argument for EPIST and we get the following meaning:

(85) $[[\text{EPIST I find an interesting book}]]^{c.g} ([[1 \text{ I hope } t_1]]^{c.g}) = [[1 \text{ I hope } t_1]]^{c.g} (\lambda w_s. \text{speaker}(c) \text{ finds an interesting book in } w)$
 $= \lambda w_s$: for some world w' among the doxastic alternatives the x entertains in w , speaker(c) does not find an interesting book in w' . for every world w'' among speaker(c) 's doxastic alternatives that speaker(c) prefers in w , speaker(c) finds an interesting book in w''

When we apply the operator EPIST to a propositional operator, a modal or an attitude predicate (after movement), the result is just the predicate applied to the embedded proposition. In other words, the only role of EPIST is to check whether the propositional operator has the kind of entailment to which the distribution of *vreun* is sensitive. If the operator does not have the *non*

p -worlds entailment, meaning that it is an operator which is compatible with situations where the speaker's doxastic alternatives are all p -worlds, then the calculation cannot proceed. EPIST can only combine with elements which satisfy this entailment. Accordingly, in the case of a verb like *want*, the derivation cannot go further: EPIST cannot combine with *want*, whose denotation is given in (86):

$$(86) [[\text{want}]]^{c,g} = \lambda p_{<st>}. \lambda x_e. \lambda w_s. \text{ for every world } w' \text{ among } x \text{'s doxastic alternatives that } x \text{ prefers in } w, p(w') = 1$$

In order to see whether a constituent can serve as an argument of EPIST, we need to check whether for all p and w , that are such that that p bears the relation to w that this constituent describes, there is some world w' compatible with what the speaker believes such that $p(w')$ is false. This is not the case for the *I want* constituent, that we would get by raising EPIST together with its complement (like we did in (83)), since we know *want* can be used in situations which do not satisfy this constraint (i.e. situations in which it is clear that p holds, and the speaker knows it). Consequently, these constituents cannot combine semantically. We cannot compute the meaning of the sentence any further. Accordingly, whenever the *non p*-worlds requirement is not satisfied, *vreun* cannot be licensed, and the result is ungrammatical.

2.3 Summary and further issues

The proposal I have just sketched relies on three assumptions, repeated below:

- (87) (i) *vreun* is a **polarity item** - it brings about two types of alternatives: scalar and *singleton* domain alternatives, which both require the insertion of an exhaustification operator
- (ii) it associates with the **weak version** of the **exhaustification** operator, which allows it to function in both downward-entailing and non-polarity contexts
- (iii) *vreun* is sensitive to **speaker's knowledge**: it has an additional meaning component, which triggers the insertion of an operator, EPIST, whose role is to check that *vreun* is in the scope of an operator which satisfies the *non p*-worlds constraint

The assumptions in (i)-(ii) are inherent to the account of polarity sensitivity developed by Chierchia, endorsed here. More specifically, I assumed that *vreun* is a domain widening indefinite, introducing both domain and scalar alternatives, which triggers the insertion of an exhaustification operator, whose requirements can be satisfied either in downward-entailing or in non-polarity contexts. I proposed a modification of the domain alternatives that *vreun*

introduces, and shown that once we assume that only singleton alternatives are relevant, we can derive the interpretation of *vreun*, and the way it differs from existential free-choice items.

The claim in (iii), concerning the *non p*-worlds constraint cannot be easily connected with Chierchia's system, and, as it stands right now, the insertion of an operator checking that the licensing entailment is present, is a stipulation. The present set-up can only derive the ungrammaticality of *vreun* in the absence of a downward-entailing operator or in the absence of an operator quantifying over worlds (modal or attitude predicate). Ideally, one would like the *non p*-worlds licensing constraint on the use of *vreun* to be derived, either from the type of alternatives that the item introduces and the way are exhaustified, or from some independent property of the licenser. At this point of investigation, I do not see a precise way of deriving this constraint, and therefore I can only formulate it as a challenge to accounts of polarity, including the one I presented in this chapter.

Elaborating on the consequences of this proposal, let me go through some of the issues it raises. First, the contrast between *hope* and *want* gives an idea of the way *vreun* is licensed. The crucial factor (before exhaustification) is the presence of the *non p*-worlds entailment. This position amounts to building the entailment into the meaning of the licensing operator. I believe that this is unproblematic for attitude verbs, but there are licensing contexts which we need to examine in more detail, and in particular modals.

In my discussion of the constraints governing the use of *vreun*, I have shown that it is only licensed by epistemic modals, regardless of whether it is a necessity or a possibility modal. The semantics assumed for the modal operators, given in Chapter 2, is repeated below:

- (88) (a) *possible*(*p*) is true at the world of utterance w_0 iff among the worlds compatible with the speaker's beliefs, there are worlds where *p* is true
 (b) *must*(*p*) is true at the world of utterance w_0 , iff for those worlds consistent with the set of the speaker's beliefs that come close to a certain ideal, *p* is true at *w*

On this version, the '*non p*-worlds' constraint is not satisfied. However, I have shown that the hallmark of epistemic modals is that they cannot be used in situations where the truth of a proposition is established. The most straightforward example is a situation where if the speaker sees Paul at the window, she cannot utter *Paul must be at home*. Direct evidence,

amounting to knowledge, rules out the use of an epistemic modal¹⁰⁶. It is therefore obvious that when the speaker chooses to make use of an epistemic modal, we are entitled to make the inference that she is not in a position to make the non-modalized claim ‘Paul is at home’, i.e. she cannot rule out the possibility that the proposition does not hold. In other words, the strengthened meaning of *Paul must be at home* is something like ‘Those worlds compatible with the speaker’s beliefs that come closest to a certain ideal are such that Paul is at home in those worlds, and it is compatible with the speaker’s beliefs that there may be worlds in which Paul is not at home’. Once we assume that implicatures can be added to the original assertion in order to enrich the meaning¹⁰⁷, the epistemic modals satisfy the licensing condition for *vreun*. This hypothesis is fully compatible with the treatment of implicature that underlies Chierchia’s approach to polarity sensitivity.

The proposal put forward in this section leaves many open issues. However, we have seen that an implementation in terms of domain widening, such as the one adopted here, offers a promising line of investigation. In particular, we pursued an account which derives *ungrammaticality* from the meaning of polarity items like *vreun*, and the way the alternatives they introduce are used for enrichment. Similarly, the theory derives cases of overlap between negative polarity and non-negative polarity uses and although more work is required to investigate the role of EPIST in downward-entailing contexts, it is clear that *vreun* exhibits ‘double’ behavior.

Focusing on the epistemic use of *vreun*, I believe that a better understanding of epistemic modals represents the key issue in deriving the licensing constraint for *vreun*, and similar epistemic items. The area of epistemic indefinites still needs to be properly explored before reaching firm conclusions on the typology of polarity items, but the study of *vreun* gave a more precise idea of what type of pattern a unified account of polarity, such as the one I endorse here, still needs to accommodate. I have shown that we have ways to integrate the

¹⁰⁶ The source of this restriction is subject to debate in the literature: the question is whether the semantics of the modals is weaker than usually assumed (like we see here, where *must* is not treated as a necessity modal) or rather, this meaning component is to be located outside the truth-conditional meaning of the modal (for a recent overview of the issues concerning epistemic modality see von Stechow & Gillies 2009). In trying to derive the ban on the use of epistemic modals in situations where a fact is established to be true, there have been several proposals that try to build an evidentiality component into the meaning of epistemic modals. The status of this component differs: for example, von Stechow & Gillies 2009 assume that this component is a presupposition; in a recent proposal, Kratzer (2009) argues that epistemic modals have an argument which qualifies the source of information (body of evidence) for the modal claim.

¹⁰⁷ The position that the enriched meaning of epistemic modals involves inferences of this kind, which get added to the truth-conditional meaning, has been recently defended in Kratzer (2009), who dubs them ‘Moore commitments’. This account is fully compatible with the proposal adopted here, an issue that leave for future research.

similarities and differences between *vreun* and existential free-choice items, by exploiting the domain widening property of polarity items. Future investigation will establish to what extent other epistemic items are subject to similar constraints.

In the next chapter, I return to the distribution of *vreun* under sentential negation, and the ways it connects with other elements that can occur in negative sentences, such as n-words. We will see that the domain widening property of *vreun* is directly related to its interaction with sentential negation and n-words.

Chapter 5

Broaden your views: negative (polarity) patterns

The previous chapters revealed the existence of a range of dependent indefinites, called epistemic items, which are sensitive to the alternatives entertained by the epistemic agent. In Chapter 3, we have seen that *vreun* differs from other epistemic items, such as *algun* and *quelque*, by being sometimes licensed in the scope of local negation, an option that is not available for *algun* or *quelque*. The interaction between *vreun* and sentential negation was shown to be determined by the properties of n-words, which constitute the default option in negative sentences, and hence typically block the use of NPIs like *vreun*. In Chapter 1, I have argued n-words differ from NPIs by not conveying an existential, domain widening interpretation. I now provide further support for this claim and argue that Romanian n-words are inherently negative elements, and as such they differ from negative polarity items (section 1). The consequences of this treatment of n-words for the distribution of *vreun* are made explicit in section 2, emphasizing the conclusion that the distribution of polarity-sensitive paradigms is determined by what other options are realized in a given language. When trying to account for the behavior in a given context (such as scope of sentential negation), we need to have in mind the whole system of polarity in a given language, and the possible competition among existing paradigms. Finally, we explore this line of thinking for Spanish, and the way the properties of n-words might determine the distribution of *algun* in negative contexts.

1 The properties of Romanian n-words

In Chapter 1, we have seen that the distribution of Romanian n-words is much more restricted than that of NPIs. More specifically, in contrast with an NPI like *vreun*, they cannot occur in typical polarity contexts, such as the scope of the downward entailing operator *few* (23), scope of negative predicates (2), the antecedent of conditionals, *before*-clauses or restriction of a universal quantifier:

- (1) **Puțini** studenți au citit **niciun/✓vreun articol*.

Few students have.3pl read N-A/V-A paper

‘Few students have read no/any paper.’

- (2) Irina **refuză** să spună **niciun/✓vreun cuvânt*.

Irina refuse.3SG SUBJ say.3SG N-A/V-A word

‘Irina refuses to say no/any word.’

Instead, they require the presence of a stronger form of negation (defined in Chapter 1, section 2, as anti-morphic operators) as illustrated in (3)¹⁰⁸:

- (3) a. **(Nu)* am aflat **nimic** nou.

NEG have.1SG found N-THING new

‘I didn’t find anything new.’

- b. **Nimeni** **(nu)* știe ce se întâmplă.

N-BODY NEG know.3SG what REFL happen.3SG

‘Nobody knows what is happening.’

Given that n-words require the presence of a clausemate negative marker, regardless of whether they are in a preverbal (3)b or postverbal (3)a position, Romanian is called a strict negative concord language¹⁰⁹.

In Chapter 1, we have seen that this restricted distribution has led to accounts of negative concord as a more constraint instance of NPI-licensing (for analyses along these lines, see e.g. Laka 1990, Ladusaw 1992, Acquaviva 1997, Giannakidou 1997). More recently, Chierchia (2006:559) suggests that negative concord might be explained by assuming that n-words are NPIs semantically similar to *any*, i.e. existential quantifiers which typically induce domain widening (and thus requiring the insertion of an exhaustification operator). He furthermore suggests that overt negative morphology on n-words might be responsible for the fact that n-words cannot occur in all NPI-contexts and impose stricter locality conditions. In Chapter 1, section 2, I took issue with this position and argued that

¹⁰⁸ Recall from Chapter 1 that in addition to sentential negation, n-words are also licensed in the scope of the anti-morphic operator *without*. In the following, I focus on the behavior of n-words in negative sentences and abstract away from this context of occurrence.

¹⁰⁹ Languages where it is only postverbal n-words that require the presence of clausemate negation are called *non-strict negative concord* languages, a pattern well-known from the study of Italian and Spanish. Typologically, non-strict negative concord varieties represent a reduced class: Haspelmath (2005) inventories 13 non-strict NC languages out of 206 surveyed, as compared to a large majority of strict negative concord languages, 170 out of 206.

Romanian n-words cannot occur in non-negative contexts and never exhibit a non-negative interpretation. Accordingly, I argued that they should not be treated as NPIs. In the following, I will turn to a different type of evidence in favor of this claim and show that Romanian n-words are inherently negative expressions.

1.1 Romanian n-words as inherently negative items

There are two types of arguments which support the view that Romanian n-words are negative quantifiers¹¹⁰: first, there are contexts where they introduce negation (section 1.1), and second, they display a number of similarities with negative quantifiers in non-negative concord languages (section 1.2). The discussion that follows is based on arguments that I presented in previous work (Fălăuş 2007a,b, 2008a), where I consider in more detail the implications of this position for analyses of negative concord, an issue which I set aside in this thesis.

1.1.1 The double negation puzzle

As previously mentioned, Romanian is a strict negative concord language, where n-words obligatorily co-occur with clausemate sentential negation, yielding an interpretation with a single negation, as in (4) below.

- (4) *Nimeni* *(*nu*) ştie ce se întâmplă.
 N-BODY NEG know.3SG what REFL happen.3SG
 ‘Nobody knows what is happening.’

Despite the presence of two morphologically negative elements, the n-word and the sentential negative marker *nu*, the sentence does not acquire a double negation reading, where the two negations would cancel each other out, yielding a positive reading paraphrasable as ‘Everybody knows what is happening’. This situation is captured by the following generalization:

¹¹⁰ The semantic contribution of n-words in negative concord languages has been the subject of many debates in the literature, and led to three main approaches, according to whether n-words are considered to be *negative quantifiers* (Zanuttini 1991; Haegeman & Zanuttini 1991, 1996; Haegeman 1995; De Swart & Sag 2002; Watanabe 2004; Richter & Sailer 2006), *non-negative indefinites* (Laka 1990; Ladusaw 1992; Acquaviva 1997; Giannakidou 1997; Deprez 1997, 2000; Alonso-Ovalle & Guerzoni 2004; Zeijlstra 2004, 2007, Penka 2007) or *ambiguous* items (Zwarts 1993; Dowty 1994; van der Wouden 1997; Herburger 2001).

(i) *The co-occurrence of the sentential negative marker with one n-word yields a single negation reading*

This has been generally taken to indicate that strict negative concord languages do not allow double negation interpretations (see, for instance, Giannakidou (2006)). A more thorough analysis of the empirical data shows, however, that this claim runs contrary to the facts. Although the example in (4) above, where sentential negation licenses only one n-word, indeed does not allow a double negation reading, this interpretation becomes available as soon as there is more than one n-word in the clause. Consider the Romanian example in (5):

(5) *Niciun* copil *nu* știe *nicio* poezie.

N-A child NEG know.3SG N-A poem

a. 'No child knows any poem.' [NC]

b. 'Every child knows a poem.' [DN]

The sentence in (5) is ambiguous between a negative concord [NC] and a double negation [DN] reading. Under the negative concord reading, it has a meaning we could paraphrase as *It is not the case that there is a child x and a poem y, such that x knows y*. This 'single negation' reading, given in (5)a, can surface in a situation where children are supposed to learn poems, but it turns out none of them carried out their task. The other possible interpretation is the double negation reading. Suppose that each child had to learn two poems, but managed to memorize only one. In this context, the utterance in (5) could be used, for instance, in order to reassure the teacher who is terribly worried about children's difficulty in learning their poems. The most natural interpretation would then be equivalent to the non-negative paraphrase in (5)b, *Every child knows (at least) one poem*.

The examples below show that the double negation reading is always available as soon as there are (at least) two n-words in a sentence:

(6) *Nimeni* *nu* face *nicio* greșeală

N-BODY NEG make.3SG N-A mistake

a. 'Nobody makes any mistake.' [NC]

b. 'Everybody makes mistakes.' [DN]

(7) *Nimeni n -a iubit niciodată pe nimeni.*

N-BODY NEG have.3SG loved N-ONCE ACC N-BODY

a. 'Nobody has ever loved anybody' [NC]

b. 'Everybody has loved somebody at some point.' [DN]

(8) *Nimeni nu moare niciodată.*

N-BODY NEG die.3sg N-ONCE

a. 'Everybody is immortal.' [NC]

b. 'Everybody is mortal.' [DN favored]

The double negation readings of the Romanian sentences above are subject to the usual constraints on double negation. Thus, as shown in Horn (2001), pragmatic factors govern the possibility of having a double negation interpretation, which generally serves to contradict a negative assertion or presupposition. The utterance in (6) could be a reply to an assertion like *I'm surprised by Luca's professionalism, his work is always perfect*. In this context, (6) could be used to express doubts on Luca's capacities and would be easily interpreted as *Everybody makes mistakes*. Similarly, double negation constitutes the most salient reading of the sentence in (8), in accordance with our knowledge of the world, where everybody is mortal. The NC reading, on the other hand, needs a special context in order to become more salient.

Intonation also plays a crucial role in determining the availability of double negation readings. According to Corblin (1996), double negation is the preferred interpretation if one n-word is "separated" from the rest of the sentence through a different intonation. He illustrates this with French sentences that contain three n-words:

(9) *PERSONNE // ne dit rien à personne*

NOBODY NEG say.3SG NOTHING to NOBODY

'Nobody is such that he doesn't say anything to anyone' [DN favored]

As Corblin points out, sequences of three n-words are usually difficult to process. Consequently, the example in (9) acquires a double negation reading, marked by special intonation. As a general rule, intonation can always be used to disambiguate sentences with two or more n-words. Romanian is no different in this respect.

Double negation is always a marked (and consequently less frequent) interpretation, both in negative concord and double negation languages. The fact that double negation readings are marginal in Romanian, or other strict negative concord languages, where the

default ‘single-negation’ interpretation is always available, should therefore not be surprising. This is probably the reason why this kind of data have long been ignored (or overlooked) in the literature on Romanian n-words (except for Isac (2004)).

The empirical generalization that emerges from the study of Romanian n-words is the following:

(ii) a sentence with two or more n-words (arguments/modifiers of the same predicate) can yield a double negation reading

The distribution of n-words in Romanian thus gives rise to the puzzle in (10):

- (10) *(i) a sentence with sentential negation and an n-word is always interpreted as containing only one semantic negation (it never has a double negation reading)*
(ii) a sentence with two or more n-words (arguments/modifiers of the same predicate) can have a double negation reading

In previous work, I have argued that this puzzle poses a serious challenge both to theories that take n-words in strict negative concord to be non-negative elements (Laka 1990, Ladusaw 1992, Giannakidou 1997, 2006, Zeijlstra 2004) and to theories that rely on ambiguity (van der Wouden 1997, Herburger 2001). I have defended the hypothesis that a negative quantifier analysis for n-words provides a straightforward account for the puzzle in (10). Abstracting away from the role of sentential negation, which can be seen as a scope marker (see de Swart & Sag 2002, Corblin & Tovenia 2003 for proposals along these lines), under this approach, n-words contribute semantic negation to the interpretation of the sentence where they occur. When there is only one n-word, we always end up with a single negation reading. However, as soon as there are two n-words, the two negations contributed by each one of them can either combine and get interpreted as a single negation, or cancel each other out, by virtue of the Law of Double Negation, and end up expressing a positive statement.

The existence of double negation readings provides an important argument in favor of an analysis of n-words as semantically negative items.

1.1.2 N-words without sentential negation

In the previous section, I have shown that the availability of double negation readings provides support for an analysis of n-words as negative elements. This hypothesis is also confirmed by the existence of contexts where n-words appear without sentential negation and contribute semantic negation. This kind of data can be found diachronically, and also

synchronically, albeit in certain non-finite contexts only.

1.1.2.1 Diachronic evolution of n-words

In spite of the reduced amount of relevant data from Old Romanian, the distribution of n-words in their evolution from Latin to contemporary Romanian further supports the hypothesis that n-words introduce semantic negation in the sentences where they occur. More specifically, preverbal n-words in Old Romanian (mainly 16th century) do not co-occur with sentential negation (Ciompec 1969, Dumitrescu 1974). This distributional pattern is illustrated by the following examples:

- (11) *Nimea* are a şedea de-a dereapta. (Old Romanian)
N-BODY have.3SG INF sit of right
'Nobody will sit on the right (side).'

- (12) *Nemica* adevăr grăesc, ce tot mint.
N-THING truth say.3PL but all lie.3PL
'They say no truth, and keep on lying.'

Preverbal n-words are the only negative elements in the sentences above, as the negative sentential marker is absent. Consequently, a reasonable way of accounting for the negative meaning of such sentences is to assume that preverbal n-words contribute semantic negation. Sentential negation only appears with postverbal n-words, as shown in (13):

- (13) Ca când *nu* ar avea impreunare *nemica* trupul cu sufletul.
as when NEG would have bound N-THING body.DEF with soul.DEF
'As if body and soul had nothing in common.'

Between the 17th and the 18th century, sentential negation became more and more frequent with preverbal n-words, and consequently, Romanian turned into a strict negative concord language, with no preverbal /postverbal asymmetry regarding the licensing of n-words.

In other words, old Romanian behaves just like non-strict negative concord languages, like Italian or Spanish, where sentential negation is disallowed with a preverbal n-word, but obligatory with a postverbal one, as illustrated by the following examples:

(14) a. *Nadie* vino. (Spanish)

n-body came

‘Nobody came.’

b. No vino *nadie*.

not came n-body

‘Nobody came.’

(15) a. *Nessuno* parla italiano. (Italian)

nobody neg speak.3sg italian

‘Nobody speaks Italian.’

b. *Non* capisco *niente* di tutto questo.

neg understand.1sg nothing of all this

‘I don’t understand anything of all this.’

It is interesting to note that the evolution pattern described for Old Romanian is the mirror image of the one reported for other Romance languages, such as Spanish or Portuguese (cf. Herburger 2001, Posner 1984), which used to have strict negative concord, as attested by the following 16th century Spanish example (taken from Posner (1984)), and then became non-strict negative concord languages:

(16) ...*que ya mal pecado caducado he nadie no me quiere*

...that already bad evil grown-feeble have.1sg nobody neg me want.3sg

‘...now, the devil take it, I am grown old and nobody loves me.’

The comparison between the diachronic distributions of n-words in Romance raises the more general question of the exact historical relation between strict and non-strict negative concord, and shows that diachronic shift is not unidirectional (Jaeger 2007). As far as the hypothesis pursued here is concerned, there are two important conclusions which can be drawn on the basis of the available data in Old Romanian. First, n-words clearly contribute semantic negation when they occur in preverbal position, just like negative quantifiers in other languages.

The second point arguing in favor of a negative quantifier approach is the fact that, although both Old Romanian and modern Spanish/Italian display non-strict negative concord, n-words in Romanian are never attested with a non-negative, existential interpretation, a fact already illustrated in Chapter 1. More specifically, they never appear in typical polarity

contexts, such as questions (27), comparatives (28) or scope of negative predicates (29), unlike what we find in other non-strict negative concord languages, where n-words have an existential interpretation:

(17) Viene **nessuno** in negozio? [Corblin & Tovenà 2003:13]

Come.3SG N-BODY in store

'Does anyone come to the store?'

(18) E l'idea *piu stupida* che abbia mai avuto **nessuno**. [Giannakidou 2006:30]

be.3sg the idea more stupid that have.subj.3sg ever had n-person

'It's the dumbest idea I have ever had.'

(19) *Perdimos* la *esperanza* de encontrar **ninguna** salida. [Giannakidou 2006:30]

lost.1PL the hope to find N- exit

'We lost hope of finding some way out.'

The absence of a 'positive' reading represents a crucial difference between Romanian n-words and their counterparts in Romance (see section 2 for further data in this sense), and strongly supports an analysis of n-words as semantically negative elements. Accordingly, I take the absence of non-negative readings to be a crucial difference between Romanian and other Romance languages, as providing support for the hypothesis that Romanian n-words are inherently negative elements.

1.1.2.2 Non-finite Contexts

The diachronic data introduced in the previous section indicate that at a certain stage of the evolution of negation, Romanian was a non-strict negative concord language. This distributional pattern survives in contemporary Romanian in some non-finite contexts. The following examples illustrate the asymmetry between preverbal and postverbal n-words with a past participle:

(20) a. Un mister ***niciodată***/de ***nimeni*** rezolvat.

a mystery N-ONCE /by N-BODY solved

b. Un mister **(ne)*rezolvat ***niciodată***/de ***nimeni***.

a mystery NEG.solved N-ONCE /by N-BODY

‘A mystery never/by nobody solved.’

In the examples in (20), the presence of the negative marker *ne-* (the typical negation in non-finite contexts) is required with an n-word in postverbal position (20)b, whereas preverbal n-words need not be licensed by some other negative element (20)a. The two examples have the same interpretation, with one semantic negation, but, crucially, in (20)a, the only negative element is the preverbal n-word.

If preverbal n-words co-occur with the negative affix *ne-*, the construction acquires a (marginally accepted) double negation interpretation, as in the sentence in (12), taken from Teodorescu (2004):

(21) ? o carte ***niciodată*** necitată

a book N-ONCE NEG.quoted

‘a book never unquoted’

The distribution and interpretation of n-words in non-finite contexts raises the same question as the double negation readings and the diachronic data previously discussed. If n-words were non-negative elements, where would the negative meaning of these constructions come from? On the other hand, the hypothesis that Romanian n-words are negative quantifiers provides a straightforward explanation for these facts.

1.2 Romanian n-words and negative quantifiers in double negation languages

Both the quantificational status and the inherent negativity of n-words have been subject to debate in the literature on negative concord. In the previous sections, I have defended the hypothesis that n-words introduce semantic negation and I have introduced empirical facts supporting this view. I now turn to another type of evidence which counts as an argument for an approach to n-words as negative quantifiers. In spite of their systematic co-occurrence with sentential negation, Romanian n-words show interesting similarities with their counterparts in Germanic languages, typically analyzed as negative quantifiers.

The fact that n-words and negative quantifiers pattern together is illustrated by the table in (22), which summarizes the properties that negative quantifiers and n-words (in strict

NC languages)¹¹¹ share, and set them apart from typical NPIs.

(22)

	NPI (<i>any</i>)	Negative quantifier	N-word
Fragmentary answers	✓	✓	✓
<i>Almost/ absolutely</i> modification	*	✓	✓
Existential commitment	*	*	*
Licensing of <i>donkey</i> anaphora	✓	*	*

I now present each one of these similarities in detail, without however seeking to account for them. Note that some of these tests are intended to determine the quantificational status of n-words, universal *versuss* existential, not necessarily their negativity. The only point relevant for our present purposes is that if the semantics of n-words in (strict) negative concord and double negation languages is assumed to be different, their similar behavior remains unexplained. On the other hand, on the assumption that n-words in negative concord languages have the status of negative quantifiers, these facts follow naturally.

1.2.1 Fragmentary answers

N-words cross-linguistically are well-known to occur in fragment answers with negative meaning. This property holds both in negative concord and double negation languages, as illustrated in the question-answer pairs in (23):

(23) Who did you visit during the holidays?

a. Nobody

b. *Pe nimeni*

(Romanian)

Acc.nobody

This pattern has been taken as evidence in favor of the inherent negative meaning of n-words. Negative answers seem to be a context where n-words contribute negation without any additional element in the syntax, regardless of whether we are dealing with negative concord or double negation languages. However, Giannakidou (2006) argues that fragment negative answers actually involve ellipsis. In the elided part of the sentence, sentential negation is

¹¹¹ A recent discussion of the behavior of n-words in languages other than Romanian with respect to these and these and other diagnostics can be found in Giannakidou (2006).

present and licenses n-words, as shown in (24):

- (24) [~~*(Nu)-am-~~ vizitat] pe nimeni.
neg have.1sg visited Acc. nobody

Consequently, for Giannakidou, the occurrence of n-words in negative answers is not a valid argument for their inherent negativity. Note however, that under the ellipsis account of the occurrence of n-words in these contexts, polarity items are also expected to be grammatical, in so far as the elided fragment of the sentence should provide the negation licensing the polarity item, as in (25). Further assumptions are therefore needed to account for the differences between typical polarity items and n-words.

(25) Who did you invite to your birthday party?

- a. *Anybody
b. [~~I didn't invite~~] anybody.

I leave open the issue of whether these contexts involve ellipsis, and whether this contrast should be attributed to the licensing conditions of the two types of items or to semantic factors. I only take the occurrence as fragmentary answers as indicating that n-words resemble negative quantifiers, and pattern differently from NPIs.

1.2.2 *Almost/absolutely* modification

A popular diagnostic for the semantic status of n-words is modification by *almost/absolutely*, generally used to distinguish between existential and universal quantifiers. Since n-words can be modified by *almost/absolutely*, this has been taken as argument in favor of an analysis of n-words as universal quantifiers outscoping negation (cf. Zanuttini (1991) and Giannakidou (2006)). The relevant examples are given in (26):

- (26) a. **Almost/absolutely somebody* was against this war.
b. *Almost/absolutely everybody* was against this war.
c. *Almost/absolutely nobody* was against this war.

There has been much controversy on the reliability of this test for determining the quantificational force of n-words. As shown in Horn (2000) and Penka (2005), modification by *almost/absolutely* is not restricted to universals, but rather to expressions denoting strong scalar values. However, although this test cannot be used to establish the exact quantificational force of n-words, I claim that it still counts as an argument for an analysis in

terms of negative quantifiers, on the basis of two facts.

First, in languages that have both negative and non-negative uses of n-words, typically non-strict negative concord languages, *almost*-modification is only possible in negative contexts. The following Catalan examples (taken from Giannakidou (2006)) illustrate this contrast:

(27) No he dit *absolutament* res.

‘He said absolutely nothing’

(28) * Li diras *absolutament* res?

*‘Will you tell him/her absolutely anything?’

In (27) the object n-word has a negative interpretation and can be modified by *absolutely*, unlike what happens in (28), a typical polarity context, where n-words get a non-negative, existential meaning. I conclude that, as far as n-words are concerned, there is a strong connection between negativity and the possibility to be modified by *almost/absolutely*.

Second, n-words in Germanic languages, unambiguously negative quantifiers, can be modified by *almost/absolutely* (as in (26)c). Any analysis which assumes that n-words in double negation languages are distinct from their counterparts in (strict) negative concord languages has to explain why modification by *almost/absolutely* is possible in both cases. Although this test is not reliable for the existential versus universal quantifier issue, *almost*-modification provides a further empirical argument in favor of a negative quantifier approach to Romanian n-words.

1.2.3 Existential commitment

Existential commitment is another common test in the ongoing debate on the quantificational status of n-words. It is generally assumed that universal quantifiers give rise to an existential inference, which means that their restriction introduces a non-empty set, unlike existential quantifiers where there is no such commitment of existence. This contrast is illustrated below in a negative context:

(29) a.# Silvia *nu* a vazut *fiecare elf*.

Silvia NEG have.3sg seen every elf

‘Silvia hasn’t seen every elf.’

b. Silvia *nu* a vazut *un elf*.

Silvia NEG have.3sg seen an elf

‘Silvia hasn’t seen an elf.’

The example with a universal quantifier is odd, as it forces the presupposition that there is a set of elves, which contradicts real world-knowledge. Since there is no such existential commitment with an indefinite/existential, the example in (29)b is fine. If the object in (29) is replaced by an n-word, the resulting sentence is perfectly acceptable, as confirmed by the continuation in (30):

(30) Silvia *nu* a vazut *niciun elf*. Nici *nu* exista elfi.

Silvia neg have.3sg seen no elf. Neither neg exist.3pl elves

‘Silvia hasn’t seen any elves. Elves don’t even exist.’

The reason why this diagnostic is relevant to the status of n-words is that it offers a further analogy with negative quantifiers in double negation languages. The following German example taken from Iordachioaia (2005) illustrates this property:

(31) Hans hat *kein Einhorn* gesehen. Es gibt gar *keine Einhörner*.

Hans have.3sg no unicorn sees there give absolutely no unicorns

‘Hans didn’t see any unicorn. There are no unicorns at all.’

Like in the Romanian sentence in (30), the object *kein Einhorn* (‘no unicorn’) does not presuppose the existence of a set of unicorns and the sentence can even be continued by asserting the non-existence of such a set, without yielding contradiction. Once again, I set aside the issue of the quantificational status of n-words. The main conclusion that can be drawn from this test is the similar behavior between n-words in a strict negative concord language and their counterparts in double negation languages. The hypothesis that n-words in Romanian are negative quantifiers offers a straightforward account for these similarities.

1.2.4 Donkey anaphora

Romanian n-words do not license so-called *donkey pronouns*, that is, pronouns outside their syntactic scope, as attested by the ungrammaticality of the sentence in (32). In this respect, they once again behave like universal quantifiers (33), and unlike existential quantifiers (34):

(32) *Tările care nu au semnat *niciun tratat*, trebuie sa-l semneze acum.
 countries which neg have.3pl signed no treaty have SUBJ-it sign now
 ‘*The countries that have signed no treaty have to sign it now.’

(33) *Tările care au semnat *fiecare tratat*, trebuie sa-l ratifice acum.
 countries which have.3pl signed every treaty have SUBJ-it ratify now
 ‘*The countries that have signed every treaty have to ratify it now.’

(34) Tările care au semnat *un tratat*, trebuie sa-l ratifice acum.
 countries which have.3pl signed a treaty have SUBJ-it ratify now
 ‘The countries that have signed a treaty have to ratify it now.’

However, the situation is a little more complicated than the pattern above suggests. More specifically, Iordachioaia (2005), elaborating on an argument discussed by Richter & Sailer (1999), observes that the behavior of n-words with respect to anaphor-licensing is actually dependent on the predicate of the sentence where they occur: if it is existential, the n-word can license anaphora, as in (35)a, while if the predicate is property denoting, it cannot in (35)b:

- (35) a. Ori nu exista *nicio* baie in casa asta, ori au construit-o intr-un loc ciudat.
 ‘Either there is no bathroom in this house, or they built it in a strange place.’
 b. *Ori *niciun* câine de pe strada asta nu mai latra, ori l-au alungat tunetele.
 ‘Either no dog in this street barks anymore, or the thunder scared him away.’

As expected on the approach developed in this chapter, the binding properties of negative quantifiers in double negation languages are in this respect very similar to those of n-words in Romanian. The examples in (36), also due to Iordachioaia (2005), illustrate and confirm this conclusion:

- (36) a. Either there is *no bathroom* in this house, or *it*’s in a funny place.
 b. *Either *no dog* in that street barks at all, or *it* is very quiet.

We thus see another similarity between n-words and negative quantifiers, which follows naturally from the assumption that Romanian n-words have the same quantificational status as their counterparts in double negation languages.

Let us summarize the contents of this section. I have presented several arguments in favor of

an analysis of n-words as negative quantifiers. First, we have seen that there are contexts where n-words contribute negation, as attested by the double negation reading of sentences with two n-words, or preverbal n-words in old Romanian or non-finite contexts. If n-words are existential NPIs, i.e. non-negative elements, these facts are not straightforwardly accounted for. I take the analysis in terms of inherently negative items to provide a natural explanation for the data reviewed here. In addition, I have shown that diagnostics generally used to determine the exact quantificational force of n-words in negative concord languages point out interesting resemblances with negative quantifiers. These similarities remain unexplained on an account which assigns n-words the status of non-negative NPIs. On the other hand, if we assume n-words *are* negative quantifiers, these resemblances are straightforwardly captured. Consequently, I take this situation as support for a unitary treatment of n-words as negative quantifiers¹¹².

On the basis of this overview of the properties of Romanian n-words, I defend the hypothesis that they are inherently negative elements, similar to negative quantifiers. I thus depart from Chierchia (2006) and maintain that negative concord and negative polarity licensing are two distinct phenomena, which differ in more than their respective locality conditions. More precisely, Romanian n-words are not interpreted as existentials conveying domain widening, but as negative quantifiers. This position raises the following question: how is the hypothesis that n-words are negative quantifiers compatible with the view of negative polarity defended so far? I now show that the properties of Romanian n-words impact on the distribution of *vreun* in negative contexts, thus showing the importance of taking into account the whole range of dependencies in a given language.

2 Consequences for the distribution of *vreun*

In the previous section, I argued against an analysis of n-words as NPIs and provided evidence for the hypothesis that n-words are negative quantifiers. I now show that this treatment of n-words can account for the interaction of *vreun* with sentential negation (section 2.1). Elaborating on this proposal, in section 2.2, I turn to data in Spanish, and explore the possibility that the ungrammaticality of *algún* in negative contexts is due to the properties of

¹¹² I leave open the issue of whether n-words cross-linguistically always behave like negative quantifiers. My point here is that n-words in Romanian, and arguably in strict negative concord languages, are negative elements, a view I have defended in more detail in Falaus (2008). For similar cross-linguistic data and further arguments in favor of this claim, see de Swart (in press).

n-words in Spanish, which share certain properties of NPIs.

2.1 The behavior of *vreun* under sentential negation

The analysis of n-words as negative quantifiers provides the key to understand the peculiar distribution of *vreun* under sentential negation. More precisely, I have shown in Chapter 2 that *vreun* doesn't easily occur with clausemate sentential negation, despite being similar to NPIs in many other respects (e.g. licensing environments, non-occurrence in subject position). The relevant example is repeated below:

- (37) **Nu* am scriis *vreun* articol.
NEG have.1SG written V-A article
Intended meaning: 'I didn't write any paper.'

This has been taken by Farkas (2002) as evidence against the hypothesis that *vreun* is an NPI, a claim that I have shown to be inaccurate. More specifically, I argued that the distribution of *vreun* under sentential negation is determined by the availability of negative concord in Romanian, a situation which leads to blocking effects (see Chapter 2, section 1.2).

The ungrammaticality of (37) is an instance of the so-called 'Bagel problem' (Perelstvaig 2004): an NPI is used in all weak negative contexts (downward-entailing), but not in the strong(est) negative context, namely sentential negation. This situation, frequent in strict negative concord languages, can be viewed as the result of morphological blocking: n-words being 'specialized' for negative contexts, they constitute the default option in the scope of sentential negation, thus blocking the use of *vreun*. Accordingly, once we consider the full range of items which can occur in negative contexts, the fact that a *vreun* is not licensed in a sentence like (37) does not run against the hypothesis that *vreun* is an NPI.

An important argument in favor of the analysis of *vreun* as an NPI, which on the view defended here, is equivalent to a domain widening indefinite, comes from cases where this blocking effect can be overridden. There are two such situations, either when the presence of *vreun* instead of an n-word contributes to avoid ambiguity, or when the speaker intends to convey domain widening. Let me repeat the relevant examples. Consider the sentences in (38)-(39) below:

- (38) *Nimeni nu a avut **nicio** informație despre cele întâmplate.*
 N-BODY NEG have.3SG had N-A information about DEM.PL happened
 a. ‘Nobody had any information about what had happened.’ [NC]
 b. ‘Everybody had some information about what had happened.’ [DN]

- (39) *Nimeni nu a avut **vreo** informație despre cele întâmplate.* [NC]
 N-BODY NEG have.3SG had V-A information about DEM.PL happened
 ‘Nobody had any information about what had happened.’

Recall from section 1.1.1 of this chapter that a sentence with two n-words, as in (38), is ambiguous between a negative concord and a double negation reading, as attested by the given paraphrases. This, I have argued, is the result of n-words being negative elements: when two n-words co-occur, the negations they contribute can either combine to yield a single negation reading, or cancel each other out, resulting in a positive interpretation. To avoid this ambiguity, and convey a single negation interpretation, the speaker can resort to the NPI *vreun*, as in (39)¹¹³. This situation is very frequently attested, and constitutes the large majority of occurrences of *vreun* under sentential negation. We thus see that *vreun* can be licensed by sentential negation, as long as there is a reason to avoid the default option, i.e. n-words.

Second, there are cases where both *vreun* and *nicium* can be used in the scope of sentential negation. As illustrated by the set of sentences in (19), the difference between the two options lies in their interpretation: whereas the n-word expresses usual negative concord (19)b, the occurrence of *vreun* triggers a domain widening effect, paraphrased as ‘(no hope) *at all*’, typically associated with negative polarity items (19)a.

- (40) a. *Nu am **vreo** speranță că s-ar schimba ceva.*
 NEG have.1SG V-A hope that REFL-have.3SG.COND change something
 ‘I don’t have any hope (at all) that something might change’
 b. *Nu am **nicio** speranță că s-ar schimba ceva.*
 NEG have.1SG N-A hope that REFL-have.3SG.COND change something
 ‘I have no hope that something might change.’

These facts follow naturally under the hypothesis that n-words are negative quantifiers, and

¹¹³ It is only the second n-word that can be replaced by *vreun*, the occurrence of *vreun* in preverbal subject position being ungrammatical (see Chapter 2, section 1.1), as is usually the case for NPIs.

square nicely with the ‘pragmatic’ approach to polarity defended by Chierchia. More precisely, n-words do not normally convey domain widening¹¹⁴, so when the speaker intends this effect to be present, she has to resort to some other option made available by the language. In Romanian, *vreun* happens to offer this possibility. Similarly, since n-words are negative items, the co-occurrence of two n-words is potentially ambiguous, a situation which can sometimes be avoided by making use of *vreun*. The choice of *vreun* over its n-word counterpart precisely in the two situations illustrated above receives a natural explanation under the hypothesis that n-words in Romanian are negative elements (subject to a licensing constraint that requires obligatory co-occurrence with the sentential negation marker), while *vreun* is a domain widening indefinite. Once we view the whole range of expressions that the speaker can choose to realize in negative sentences, the restrictions on the use of *vreun* in negative contexts are no longer mysterious.

2.2 Further investigation: *vreun* versus *algun*

The peculiar distribution of *vreun* under sentential negation was shown to be due to the properties of n-words in Romanian, and to be fully compatible with the hypothesis that *vreun* is a domain widening indefinite. In Chapter 3, section 3, I have shown that the ability of *vreun* to occur in the scope of local sentential negation constitutes an important difference with epistemic items like *algun* and *quelque*, which are ruled out in this context, as illustrated below:

(41) * Je n’ai *pas* mangé *quelque* pomme. [Corblin 2004 :101]

I not-have neg. eaten some apple

(42) *No he leído *algún* artículo recientemente. [P.Menendez-Benito, p.c.]

NEG have.1SG read no article recently

This is an intriguing difference between *vreun* and other epistemic items, which we would like to understand. Following the line of thinking we pursued so far, all other things being equal, we expect the properties of n-words in a given language to influence the behavior of other polarity items. In this section, I would like to focus on Spanish data and explore the possibility that the differences between Spanish *algun* and Romanian *vreun* in the scope of

¹¹⁴ They can give rise to a domain widening effect when focused or modified by *absolutely*. The fact that n-words normally don’t convey domain widening is also acknowledged in Chierchia (2006).

sentential negation may be a reflection of the distinct properties of n-words in these two languages. The facts to be discussed below are preliminary remarks, based on the facts in the literature, and further investigation is needed to establish whether the properties of n-words are (the only factor) responsible for the ungrammaticality of *algun* under sentential negation. At this point, I only consider the differences between the negative concord patterns in Romanian and Spanish and consider ways in which it could bear on the difference between *algun* and *vreun* in negative sentences.

2.2.1 Blocking effects

In Chapter 3, section 3, we have seen that *algun* and *vreun* behave on a par in many respects. In particular, both items seem to be sensitive to the presence of some epistemic modal operator, such as the necessity modal in (43) and (44) (Alonso-Ovalle & Menendez-Benito 2009):

- (43) Juan *tiene* que estar en ***alguna*** habitacion de la casa.

Juan has to be in ALGUNA room of the house

‘Juan must be in a room of the house.’

- (44) (We are discussing the fact that Irina is late and try to provide an explanation for this.)

Trebuie că s-a întâlnit cu vreun prieten.

must that REFL-have.3SG met with V-A friend

‘She must have met some friend.’

Both *algun* and *vreun* disallow continuations where the indefinite is attributed a specific value, a property which we have referred to as the NO WINNER constraint (Jaye & Toven 2008). The sentence in (43), for example, couldn’t be continued with something like ‘(Juan must be in a room of the house) namely in the kitchen’, just like (44) disallows a continuation like (She must have met some friend) namely Bill.’ This is the interpretive property common to all epistemic items discussed in this thesis, a meaning I have derived for *vreun* by hypothesizing that its domain alternatives are singletons, a hypothesis also defended by Alonso-Ovalle & Menendez-Benito (2009) for *algun*.

However, there is at least one important property which sets apart *vreun* and *algun*, namely their NPI use. From what I can gather from the literature, *algun* has many NPI-features, and can easily occur in typical polarity contexts, such as questions, or if-antecedents.

Accordingly, it seems that the difference between epistemic items, concerning their double use, is visible only in the scope of local negation. In particular, *algún* is reported not to be possible in the scope of clausemate sentential negation (Alonso-Ovalle & Menendez-Benito 2009), where an n-word is typically used. The following example illustrates this behavior:¹¹⁵

- (45) **No* he leído ***algún*** artículo recientemente.
 NEG have.1SG read ALGUN article recently

- (46) *No* he leído ***ningún*** artículo recientemente.
 NEG have.1SG read no article recently
 ‘I didn’t read any paper recently.’

As far Romanian is concerned, we have seen a very similar pattern, where the occurrence of *vreun* is blocked by the possibility to use an n-word, as repeated below:

- (47) *Nu* am scris ✓***niciun***/****vreun*** articol.
 NEG have.1SG written N-A/V-A article
 ‘I didn’t write any paper.’

Crucially, however, in Romanian, this effect can be overridden. More precisely, I have shown that *vreun* occurs in the immediate scope of sentential negation only when there is a reason not to resort to negative concord, either when the co-occurrence of two n-words could give rise to ambiguity, either to convey domain widening, typically absent with n-words. The question is why does Spanish *algún* cannot override the blocking effect illustrated in (45)-(46)?

Following the line of thinking pursued so far, we expect the non-occurrence of *algún* in negative sentences to be linked to the properties of other items licensed by negation, and in particular, n-words. Let me now compare the patterns of negative concord in the two languages under survey.

2.2.2 N-words in Spanish

We have already seen that Spanish is a non-strict negative concord language, i.e. a language where postverbal n-words are dependent on the presence of negation, while preverbal ones are not:

¹¹⁵ I am grateful to Paula Menendez-Benito (p.c.) for discussion and for providing the data. Unless mentioned otherwise, the sentences and judgements in this section are hers.

- (48) a. *Nadie* vino. (Spanish)
 n-body came
 ‘Nobody came.’
 b. No vino *nadie*.
 not came n-body
 ‘Nobody came.’

Let us now consider cases involving two-n-words, illustrated by the sentences in (49)-(50):

- (49) *Nadie* miraba a *nadie*. [Herburger 2001:318]
 N-BODY looked at N-BODY
 ‘Nobody looked at anybody.’

- (50) *Nadie* tiene *ninguna* información sobre lo que pasó.
 NOBODY have.3SG no information about DEF WHAT happened
 ‘Nobody has any information about what had happened.’

The co-occurrence of the two n-words without the presence of a negative marker is often called *negative spread* (term attributed to den Besten (1986)). Importantly, the sentences in (49)-(50) can only have a single negation reading; in other words, the ambiguity I have identified for Romanian examples with two n-words, such as (5) or (38) above, is missing in Spanish.

Spanish does have structures which get a double negation reading, but the pattern is very different from the one we have seen in Romanian (section 1.1.1). More specifically, we see double negation arising in structures like (51), where a preverbal n-word co-occurs with the negative marker *no*, yielding a positive interpretation (taken from Laka 1990:104), an option that is not available in Romanian:

- (51) *Nadie no* vino
 n-body not came
 ‘Nobody didn’t come = Everybody came’

In addition, a double negation reading can sometimes result from the co-occurrence of two n-words, but only in cases where both n-words are preverbal. The following examples illustrate this pattern:

(52) **Nadie nunca** volvió a Cuba.

[Herburger 2001:306]

n-body n-ever returned to Cuba

a. Nobody ever returned to Cuba.

b. Nobody never returned to Cuba.

The double negation reading of the sentence in (51), together with the comparison between negative spread cases and (52), lead us to conclude that the structures that can be interpreted as double negation are very different from the ones we have seen in Romanian.

Now, returning to the distribution of *vreun* and *algun* in negative contexts, recall that *vreun* can override the blocking effect in order to avoid the ambiguity triggered by the co-occurrence of two n-words. Now, in Spanish, this motivation is missing: two n-words normally do not give rise to double negation readings. The only case where there is ambiguity is in (52), which is a marked structure. In the absence of (systematic) ambiguity, speakers need not look for alternative ways of expressing single negation readings, unlike what happens in Romanian. The fact that Spanish has a negative spread pattern can be taken to indicate that the grounds for developing an NPI use of *algun* might be missing¹¹⁶. It would be interesting to see whether *algún* ever had such uses, and how this relates to the evolution of the negative concord system.

A further difference between Romanian and Spanish n-words, which might influence the use of an epistemic determiner under sentential negation, is the negative polarity status. More precisely, Spanish n-words can sometimes be used in negative polarity contexts, with an existential (hence NPI-like interpretation), as illustrated by the following sentences:

¹¹⁶ This immediately raises the question of what happens in other languages where negative spread is available, like Italian. I am not aware of any detailed study of *alcun*, an item which is morphologically related to *algun*, but its properties could be very relevant for this discussion. Tovená (1996: 264-265) makes an interesting remark in this sense: she notes that sentences with two n-words can have double negation readings (when the descriptive content of the NP is complex), and in order to avoid this ambiguity, one can make use of the unambiguous *alcun*. My impression is that *alcun* has an NPI use, but I am not aware of whether it is also an *epistemic* indefinite, in the sense of *algun* or *vreun*. The facts need to be explored before drawing any conclusion, an investigation that I leave for future research.

(53) *Perdimos* la esperanza de encontrar **ninguna** salida. [Giannakidou 2006:30]

lost.1pl the hope to find n- exit

'We lost hope of finding some way out.'

(54) *Todo* aquel que tenga **nada** que decir...¹¹⁷ [Giannakidou 2006:30]

all who that have.3sg n-thing that say

'Everyone who has anything to say....'

(55) Antes de hacer **nada**, debes lavarle las manos. [Herburger 2001: 297]

before of do n-thing must.2S wash.cl. the hands

'Before doing anything, you should wash his hands.'

(56) Es la última vez que te digo **nada**. [Herburger 2001: 298]

is the last time that you tell.1S n-thing

'This is the last time I tell you anything.'

This property constitutes a crucial difference between Spanish n-words and their Romanian counterparts, which I have shown to be ruled out in negative polarity contexts, as attested by the ungrammaticality of the sentences in (57)-(58):

(57) **Puțini* studenți au citit **niciun** articol.

Few students have.3pl read N-A paper

'Few students have read any paper.'

(58) **Irina refuză* să spună **niciun** cuvânt.

Irina refuse.3SG SUBJ say.3SG N-A word

'Irina refuses to say any word.'

Romanian n-words never have a non-negative, existential reading, a property which in section 1.1.2, I have shown to hold in diachrony. I take this as indicating that n-words are negative quantifiers, hence not NPIs, unlike Spanish n-words which share properties of NPIs.

¹¹⁷ There is speaker variation concerning the acceptability in the restrictor of a universal. Paula Menendez-Benito (p.c.) informs me that she finds the occurrence of n-word in the restrictor of a universal quantifier ungrammatical. Corblin & Tovenia (2003) make a similar remark on the use of n-words in Spanish and Italian. This variation doesn't affect the main point here: it is clear that n-words in Spanish have a wider distribution than their Romanian counterparts, a situation which bears on the difference between *vreun* and *algun*.

It is interesting to note that there is some overlap in the distribution of *algun* and *ningun*, with a difference in meaning. Consider the following pair of utterances, both reported as counterparts of a sentence with an NPI *any* embedded in a *before*-clause:

(59) Tudor se simți culpabil *antes* de despedir a ***algún*** empleado.

Tudor REFL felt guilty before DE fire ACC ALGUN employee

‘Tudor felt guilty before firing a/some employee’

(60) Tudor se arrepintió *antes* de despedir a ***ningún*** empleado.

Tudor REFL regretted before DE fire ACC no employee

‘Tudor had remorse before firing any employee.’

The sentence in (59), with *algun* is only possible on an ‘ignorance by the speaker’ reading: there’s a particular employee that Tudor felt guilty about firing, and the speaker doesn’t know who. The use of *ningun* in (60) conveys the meaning that Tudor ended up not firing any employee.

The cases of overlap need to be properly explored, and the difference in meaning made more precise, but the empirical facts considered in this section prove that the properties of Spanish n-words and their Romanian counterparts are clearly different. At this preliminary stage of investigation, it is tempting to relate the unavailability of *algun* under clausemate sentential negation to the distribution of the n-word determiner *ningun*. We have seen that the hypothesis that the properties of negative concord items determine the options available for polarity items is crucial in accounting for the interaction between *vreun* and sentential negation. More generally, it can deepen our understanding of the source of variation between *vreun* and related items cross-linguistically, such as *algun*.

3 Summary and further issues

In this section, I have examined in more detail the properties of items licensed in the scope of sentential negation in Romanian. I have defended the hypothesis that n-words are negative quantifiers, a view which has significant consequences for the licensing of *vreun* under negation. More specifically, I have argued that the interaction between *vreun* and sentential negation can only be understood in relation to the study of n-words: on the one hand, their co-occurrence produces an ambiguity which we can avoid by using *vreun*, and on the other hand, the fact that n-words are not domain widening existentials renders the use of *vreun*

appropriate when this meaning effect is intended. The absence of blocking effects in these two situations is thus naturally accounted for under the hypothesis that n-words are negative expressions, and *vreun* a regular domain widening indefinite. On the basis of contrasting properties of Romanian and Spanish n-words, we can see that accounts that take at face value the ungrammaticality of *vreun* under negation in sentences like (37) miss important connections with other polarity items cross-linguistically.

We then explored the possibility that the differences between Spanish *algún* and Romanian *vreun* in negative polarity contexts may reflect the distinct properties of n-words in these two languages, with the important difference that Spanish n-words retain NPI-features. This preliminary comparison between Romanian and Spanish indicates the necessity to carefully explore and consider the properties of dependent items, such as n-words, NPIs and epistemic items, in connection with each other, rather than separately. Despite overlaps and idiosyncrasies, this seems to be a promising line of investigation, which can contribute to maintaining a unitary account of polarity.

Conclusion

This study focused on the properties of the existential dependent determiner *vreun*, which was investigated in relation to other patterns of polarity in Romania, namely existential free-choice and n-words. I provided a detailed description of the environments where *vreun* can occur and established that its distribution exhibits an overlap of uses which cannot be easily classified with respect to existing typologies of polarity patterns. More specifically, I have shown that *vreun* occurs in two types of contexts, and is subject to the constraints repeated below:

(a) *vreun* is a negative polarity item: *vreun* is licensed in negative-polarity contexts

(b) *vreun* is an epistemic item Licensing pattern: Op [...*vreun*...]

Licensing constraint: Op *p* entails that the epistemic agent's doxastic alternatives include *non p*-worlds

Whereas the constraints on negative polarity items are well documented, the ones responsible for the distribution and interpretation of epistemic items like *vreun* and the arguably similar epistemic determiners *algun* and *quelque*, are only beginning to emerge. As far as *vreun* is concerned, I have shown that we need a theory of polarity which seeks to derive ungrammaticality rather than inappropriateness and argued its epistemic use is regulated by the semantic constraint in (b) above, the *non p*-worlds constraint. In order to account for this unfamiliar pattern of overlap, as well as the connections with other polarity items (like existential FCIs), I endorsed Chierchia's unified approach of polarity in terms of domain widening. This theory has the advantage of establishing a close connection between the meaning and use of polarity items, through the inferences speakers make on the basis of the alternatives introduced by polarity sensitive items (implemented in terms of *exhaustification*). As far as *vreun* is concerned, I have argued it is a domain widening indefinite, which introduces scalar and (singleton) domain alternatives, and have shown that we have ways of deriving its meaning in this framework, but more work is required before the *non p*-worlds constraint is fully articulated with the rest of the system. A proper investigation of the connection with epistemic modality, and possibly with evidentiality, might provide a way to integrate items like *vreun* in this unified account.

Extending our area of investigation, I focused on the interaction between *vreun* and n-words, and argued against a treatment of n-words as negative polarity items. I provided

arguments that they are not only clearly different from NPIs, but also very similar to negative quantifiers. Consequently, they are best analyzed as negative elements, a hypothesis which can explain the intricate pattern of distribution of *vreun* in the scope of sentential negation. The emerging conclusion is the importance of viewing polarity items in connection with the other elements available in a given language, as the only way to understand language or item-specific constraints, without giving up the goal of a unified account of polarity sensitivity.

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Items de polarité et indéfinis dépendants en roumain

Cette étude examine les propriétés syntaxiques et sémantiques de trois classes d'éléments sémantiquement dépendants en roumain: items de concordance négative, items existentiels de libre choix et le déterminant existentiel *vreun*. Nous identifions une contrainte de légitimation sémantique, qui met en relation la distribution de l'item de polarité *vreun* avec le type d'alternatives considérées par l'agent épistémique. A partir de données issues d'autres langues (le français et l'espagnol), nous mettons en évidence l'existence d'une classe d'items de polarité épistémiques. En adoptant la théorie unifiée de la polarité proposée par Chierchia (2006), nous défendons l'hypothèse que tous les items de polarité entraînent obligatoirement un élargissement du domaine de quantification. Dans cette approche, la distribution restreinte de ces éléments est déterminée par les inférences que les locuteurs font sur la base des alternatives introduites par l'item de polarité, alternatives qui doivent conduire à un renforcement de sens. Nous montrons également l'importance de considérer dans sa globalité le système de la polarité dans une langue donnée, afin de comprendre d'une part les contraintes de légitimation des items de polarité, et d'autre part les paramètres qui sous-tendent la variation linguistique.

Mots-clés: indéfinis dépendants, élargissement du domaine, polarité (négative), modalité épistémique, items existentiels de libre choix, implicatures, roumain

Polarity items and dependent indefinites in Romanian

This study investigates the distributional and interpretive properties of three classes of semantically dependent items in Romanian: negative concord items, existential free-choice items and the existential dependent determiner *vreun*, which shares properties of both. I identify a licensing semantic constraint which ties the occurrence of this existential polarity item to the type of alternatives entertained by the epistemic agent. Extending the area of empirical investigation, we consider similar facts (in French and Spanish) which provide support for the existence of a class of epistemic polarity items. I endorse the unified theory of polarity put forward in Chierchia (2006), and argue that polarity sensitivity stems from the domain widening property common to all polarity items. On this account, distributional constraints result from the inferences speakers draw on the basis of the alternatives polarity items introduce, which, crucially, have to lead to an enriched meaning. The interaction with other elements of the landscape of polarity items is shown to play an important part in understanding the licensing constraints of polarity sensitive items and the parameters of cross-linguistic variation.

Keywords: dependent indefinites, domain widening, (negative) polarity, epistemic modality, existential free-choice items, implicatures, Romanian