

HOW ARE POSITIVE POLARITY ITEMS LICENSED IN ROMANIAN?*

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1. INTRODUCTION

The present investigation of lexical positive polarity items in Romanian tries to integrate two main directions: the study of the licensing of Positive Polarity Items (PPIs) and the semantic features (their inherent meaning). With respect to the licensing of PPIs the study investigates the class of triggers and possible configurations of PPIs concluding that PPIs are doubly marked negative polarity items (NPIs). With respect to the semantic features, the study investigates the inherent meaning of PPIs, revealing the minimal or maximal values incorporated in PPIs. This line of analysis led to the conclusion that PPIs must be subsumed to the class of scalar predicates that give rise to inference phenomena. This paper analyses data of the type presented in (1).

- (1) a. * Presa e subjucată marilor corporații, știrile
Media-the is-3rd.p.sg subject-past.part great-pl.Dat. corporation-pl. news-the.pl.
sunt măsulite, **tone de minciuni** le sunt
are-3rd.p, pl. falsified ton-pl DE lie-pl CL-3rd.p, pl, Dat. are-3rd.p,sg
turnate zilnic în urechi.
pour-past.part daily in ear-pl.
'The media is subjected to the influential corporate companies, the news is corrupt
and **tons** of lies are poured into their ears every day.'¹
- b. Dac-ai putea primi la rădăcină/
If could-2nd.p,sg. receive at root
O picătură de iubire clară./
A drop DE love clear
Cu certitudine în splendida lumină/
With certainty in wonderful light
Ai înflori din nou a doua oară.
Would-2nd.p,sg. blossom again second-the time.
'I'm sure you'd blossom for the second time, in the wonderful light/
in case you received a bit of love.'²

Since this is the first time that PPIs have been analysed in the literature of Romanian, we found it necessary to present experimental studies to see whether Romanian speakers are sensitive to polarity phenomena and to see if lexical Polarity Sensitive Items (PSIs) in Romanian resemble English PSIs.

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¹<http://webcache.googleusercontent.com/search?q=cache:46oOAKRBKHgJ:www.hotnews.ro/stiri-international-5255944-problema-legalizarii-marijuanei-prima-topul-intrebarilor-adresate-americieni-lui-obama.htm+tone+de+minciuni&cd=10&hl=ro&ct=clnk&gl=ro>

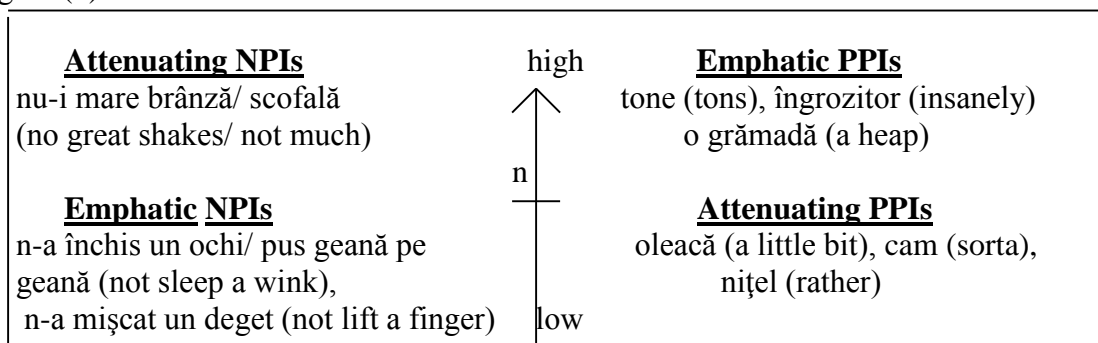
² <http://www.poezii.biz/afiseazapoezie.php?poem=22771>

2. ROMANIAN PPIS AS SCALAR OPERATORS

The aim of this section is to offer a syntactic classification of PPIs in Romanian and to analyse one important aspect of the theory that we adopted, namely that, by virtue of their inherent meaning, polarity items express certain pragmatic functions. PPIs become legitimate whenever they can discharge their pragmatic functions. As was previously argued polarity items are forms which denote an element within a scalar ordering, and PPIs are conventionally used for particular rhetorical effects. Thus, as proposed by the Scalar Model of Polarity (according to Israel (1996)), the scalar component of polarity items is closely connected to the roles they exhibit within a larger propositional structure. It could be argued that these roles determine if and when a minimal or a maximal amount can add emphasis to a proposition. In other words, we understand that polarity sensitivity can be interpreted as a grammatical consequence of the ways speakers make use of a conceptual ability for rhetorical purposes. The conceptual ability, we talk about here, is to reason in terms of scales, the ability to interpret an item/ expression within a particular semantic frame, a scalar model and to make inferences based on this interpretation.

According to the Scalar Model of Polarity proposed by Israel (1996) ‘tone’ (tons) in (1a) describes a high quantity of lies and shows that the predicate holds to a very high degree, while ‘o picătură’ (a little) in (1b) describes a minimal quantity of wine and shows that the predicate holds to a minimal degree. Another property of PPIs is that they license inferences based on their scalar properties, their inherent meaning. What is transparent about them is their rhetorical effects in affirmative sentences, entities describing a maximal quantity create an emphatic effect as in (1a) while entities denoting minimal quantities create an attenuating effect as in (1b).

‘Figure (1)’ PSIs in Romanian



Starting from the diagram, borrowed from Israel (1996), which divides PSIs along three parameters (whether they are NPIs or PPIs, denoting high scalar values or low scalar values, or having an emphatic or attenuating effect), the aim of this subsection is to classify PSIs in Romanian according to the quantitative values that they show, to their rhetoric effect and then to provide a syntactic description of these words/ expressions. According to the theory we have adopted here, proposed by Israel (1996), polarity items are specified for two scalar semantic features, a quantitative value, which reflects the fact that most polarity sensitive items (PSIs) encode a scalar semantics and an informative value, which is the pragmatic feature that reflects the speaker’s attitude to the content he/ she constructs, a property of sentences used in contexts. As argued by Israel (1996) the quantitative and informative values are central ingredients in the interpretation of scalar reasoning and the rhetoric of communication. As the two values interact and combine within a single form leads to a limitation of that form only to contexts which allow the scalar inferences needed to make the quantitative and informative values adequate.

2.1. Quantitative Value and Informative Value of Romanian Positive Polarity Items

The aim of this section is to show how the quantitative value and the informative value interact within a single lexical item and to observe how these two features create the effect of polarity sensitivity. Although the study of NPIs does not represent the main aim of this thesis, we start our discussion on the inherent lexical semantics of PPIs by looking at the distribution of NPIs.

- (2) a. Maria **n-a** închis un ochi toată noaptea.
 Maria not have-3rd.p,sg close-past.part. an eye all night-the.
 ‘Mary didn’t sleep a wink all night.’
- b. Maria **n-a** pus geană pe geană toată noaptea.
 Maria not have-3rd.p,sg put-past.part. eyelash on eyelash all night-the.
 ‘Mary didn’t sleep a wink all night.’
- c. Maria **n-a** dormit mult.
 Maria not have-3rd.p,sg sleep-past.part much.
 ‘Mary didn’t sleep much.’

The sentence under (2a, b) makes a strong claim by denying that Mary slept even the smallest amount imaginable and the sentence under (2c) makes a weak claim by denying only that Mary slept for a long time. Thus, ‘a wink’ marks a low, in fact a minimal, quantitative value and produces an emphatic sentence, and ‘much’ marks a relatively high quantitative value and produces an understatement. So, ‘un ochi’ and ‘geană pe geană’ mark a low, minimal quantitative value and produce an emphatic sentence, and ‘mult’ marks a high quantitative value and produce an understatement.

- (3) a. **N-a** mișcat/ ridicat un deget ca să-l ajute.
 Not have-3rd.p,sg move/lift-past.part a finger CA SA CL-3rd.p,sg,Acc help
 ‘She didn’t lift a finger to help him.’
- b. * **A** mișcat/ ridicat un deget ca să-l ajute.
 Have-3rd.p,sg. move/lift-past.part a finger CA SA CL-3rd.p,sg,Acc help
 ‘She lifted a finger to help him.’
- c. Românii nu dau doi bani pe mesajele scrise
 Romanian-pl.the not give two coin-pl. on message-pl. written
 de pe pachetele de țigări.³
 on packet-pl. of cigarette-pl.
 ‘Romanian people don’t give a damn on the messages written on packets of cigarettes.’
- d. * **Dau doi bani** pe măsurile luate de Merkel.
 Give two coin-pl. on initiative-pl. taken by Merkel.
 ‘I give a damn on Merkel’s initiatives.’

An expression like, ‘*a mișcat/ ridicat un deget*’ (‘lift a finger’), expresses a minimal effort and contrasts with all expressions which denote a great effort. Being an emphatic item it contributes to a strong proposition. Thus, this expression can only be used in scale reversing contexts, where inferences run from lesser to greater efforts. The sentence under (3a) is grammatical because it licenses the inference that ‘she didn’t try very hard’. By contrast, the sentence under (3b) cannot generate such an inference and the reason for its failure is that such an expression expresses a weak proposition incompatible with its inherently emphatic nature.

³ http://www.adevarul.ro/locale/bucuresti/bucuresti-stiri_din_bucuresti-fumat-fumatori-mesaje-pachet_de_tigari-imagini-impact_0_677332

An expression like ‘*dau doi bani*’ (‘give a damn’), express a minimal amount of interest and contrasts with all the expressions which denote a great amount of interest. ‘*Dau doi bani*’ (‘give a damn’) is an emphatic NPI and contributes to a strong proposition and we can only use this expressions in contexts where inferences run from lower amounts of interest to greater amounts of interest. The example under (3c), by contrast with the example under (3d), is grammatical because we can license the inference that ‘I don’t care much’. In the example presented before the emphatic NPIs denote low scalar values and the attenuating NPIs denote high scalar values. The analysis of PPIs reveals a totally different situation. Emphatic forms denote high scalar values and attenuating forms denote low to mid scalar values. The following example investigates the scalar semantics of ‘*olecuță/ niscaiva*’ (‘a little bit’) and ‘*o grămadă/ tone*’ (‘scads’). The use of the negative operator ‘*nu*’ (‘not’) shows that these expressions qualify as PPIs.

- (4) a. Bradley Wiggins (***nu**) a câștigat **o grămadă** de bani
 Bradley Wiggins (*not) have-3rd.p.sg. won a bunch of money-pl.
 în Turul⁴ Franței 2012.
 in Tour-the France-Gen. 2012.
 ‘Bradley Wiggins won tons of money at the Tour de France.’
- b. [...] din șirul de ceaiuri cel care pare a fi mai cu moț
 [...] from series-the DE tea-pl. the which seem-3rd.p.sg. to be more with forelock
 (***nu**) este un ceai de afine cu **olecută** de scorișoară.⁵
 (*not) is a tea DE blackberry-pl. with a little DE cinnamon.
 ‘From all the types of tea one can think of [...], the best type of tea seems to be the blackberry tea with a little cinnamon.’

The sentence under (4a) in the previous example constitutes an emphatic assertion to the effect that the cyclist, Bradley Wiggins won a very large quantity of money, while the example under (4b) asserts only that the tea contains a bit of cinnamon. ‘*O grămadă/ tone*’ (‘Scads’) defines a very high quantity and produces an emphatic sentence, while ‘*olecuță/ niscaiva*’ (‘a little bit’) defines a small quantity and produces an understatement.

- (5) a. **Degree Adverbs:** *destul, enorm, mult, puțin (puțințel), un pic, oleacă (olecuță), cam, prea.*
- b. **QPs⁶:** *extraordinar de, grozav de, teribil de, atât de, îngrozitor de, uimitor de, exagerat de, colosal de, fabulos de, imens de, infinit de, desăvașsit de, anormal de, neverosimil de, nemaipomenit de tână, nemaivăzut de.* This class also includes terms like: *crunt de, cumplit de, fioros de, groaznic de, infernal de, jalnic de, monstrous de, oribil de.*
- c. **NPs, pseudo-partitive constructions:** *un strop, o fărâcă, un dram, o umbră, o picătură, un grăunte, tone, o groază (fig), o grămadă, o puzderie, o sumedenie, o droaie.*
- d. **PPs:** *într-o clipă, într-o clipită, într-o clipeala din ochi, la Paștele Cailor, la Sfântu’ Așteaptă, la moșii cei verzi, la calendele grecești, la mama dracului, la dracu-n praznic.*

⁴ <http://www.biciclistul.ro/2012/07/24/cat-a-câștigat-bradley-wiggins-in-turul-frantei-2012/>

⁵ <http://www.petocuri.ro/pagina5/forum/thread/concursuri-petocuri/concursuri/câștiga-doua-ceaiuri-jasmin-și-doua-cutii-pentru-ceai-de-la-carturesti.html>

⁶ See Protopopescu (2008: 299) or her PhD thesis (to appear) for further details and an extensive analysis of adjectives that are used as manner adverbs and QPs.

- e. **AdvPs, constituents** (these AdvPs/ expressions have a complex structure and function as a single syntactic unit - cf. Gramatica Academiei): *cât ai clipi, cât ai zice mei, cât ai zice pește, cât ai scăpăra din ochi, cât ai scăpăra dintr-un amnar, cât te-ai șterge la ochi, cât te-oi freca la ochi, cât ai bate din palme, cât ai da în cremene, unde și-a înțărcat dracul copiii, unde și-a spart dracul opincile.*
- f. **Verbal Idioms, constituents:** *când mi-oi vedea ceafa, când va face broasca păr, când va face plopul pere și răchita micșunele, când o prinde mâța pește, când va face spânul barbă, când mi-o crește iarbă-n barbă și-n tre dește, când o sta oul în cui, când o da din piatră lapte, când or zbură bivoli, când o pica frunza de pe brad, când mi-o crește păr în călcăie, când mi-o crește păr în palmă și-n tre dește, când o zbură porcu, în doi timpi și trei mișcări.*

In conclusion, irrespective of whether they are neologic or archaic lexical positive polarity items, we can notice that PSIs come from semantic domains which are inherently scalar and measure terms or degree adverbs qualify as polarity items that bear this feature.

2.1.1. *The Rhetoric of Positive Polarity Items in Romanian*

Israel's (1996) and Szabolcsi's (2004) studies argue for the unity of lexical elements that are sensitive to polarity, which ultimately incorporate minimal or maximal quantities. This makes it difficult to decide at times what kind of polarity items (PIs) they are. What remains transparent about them is their rhetorical effects. Thus, we differentiate between the two distinct classes of PSIs: emphatic PSIs and understating PSIs.

Polarity items are argumentative operators which indicate an argumentative attitude toward what is said (the meaning of an utterance). Following Kay (1990), one may define the strength of a proposition directly in terms of its entailments: a proposition *p* is stronger than a proposition *n* iff *p* unilaterally entails *n*.

“While emphasis and attenuation are fundamentally rhetorical aspects of meaning, they are in fact grounded in simple propositional logic. Marking an expressed proposition as either emphatic or attenuating is basically just a way of calling attention to its logical status with respect to background assumptions. Emphasis and attenuation are pragmatic aspects of meaning, so the claim that polarity sensitivity depends on such features means that polarity licensing must be, at least in part, pragmatic in nature.” (according to Israel (2011)). The ‘acceptability’ of a polarity item depends not only on the context in which it occurs, but also on the way it is used.

Israel (1996) proposed a series of tests to help distinguish between emphatic PSIs and understating PSIs, where certain intensifying devices allow some intensifiers but exclude hedged constructions within their scope:

- (1) Modification by the intensifying “literally”, which emphatic PSIs allow but understating PSIs reject.
- (2) Occurrence after the introduction “you’ll never believe it!”, which is acceptable for emphatic PSIs but not for the understating PSIs.
- (3) Hedged coordinating conjuncts like ‘what’s more’, ‘or at least’, ‘in fact’ show that emphatic PSIs make stronger claims than understating PSIs.

We suggest that similar tests will help us distinguish between emphatic and understating PSIs in Romanian.

2.2. Experimental Study on the Rhetoric Effect of Positive Polarity Items in Romanian

The aim of this section is to present the tests that helped us differentiate between emphatic and attenuating PPIs in Romanian and to list the items/ expressions that belong to these two categories in Romanian.

All of the Romanian data presented so far shows us that lexical PPIs are not homogeneous from a stylistic point of view. Some of these items are frequently encountered in conversations that would not be considered academic, while the neologic items are frequently encountered in the media, television or newspapers, as the corpus examples have shown.

Thus, the aim of the experiment is to establish whether Romanian speakers are sensitive to the rhetoric effects of polarity items like: *olecuță* ('a little'), *tone* ('tons'), *cât ai zice pește* ('in a jiffy'), *într-o clipită* ('in a jiffy'), *ca dracu* ('as hell'), *extraordinar de* ('utterly'), *incredibil de* ('utterly'), *când mi-oi vedea ceafa* ('when hell freezes over'), *când o face plopul pere și răchita micșunele* ('when hell freezes over') and thus, Romanian speakers can distinguish between emphatic PPIs and attenuating PPIs. The hypothesis is that emphatic sentences make a stronger claim than might have been expected while understating sentences make a weaker claim that might have been expected. In order to test sensitivity of rhetorical effects of PPIs we have used different intensifying devices, namely: emphatic polarity items allow modification by intensifying *literalmente* ('literally'), but attenuating polarity items reject it; emphatic polarity items allow occurrence after the introduction '*N-o să-ți vină să crezi niciodată!*' ('You'll never believe it!'), while attenuating polarity items reject it; coordinating conjunctions like '*sau măcar*' ('or at least') require that the first conjunct represents a stronger claim than the second conjunct; coordinating conjunctions like '*de fapt*' ('in fact') require that the second conjunct make a stronger claim than the first conjunct.⁷

2.2.1. Procedure:

In order to verify if native speakers of Romanian confirm the hypothesis that emphatic sentences make a stronger claim than might have been expected while understating sentences make a weaker claim that might have been expected, 90 participants – 40 students of English philology (Faculty of Foreign Languages and Literatures, University of Bucharest) and 50 other native speakers (friends, family).

We chose a two-factorial design with the factors PPI-hood (emphatic PPI or attenuating PPI) and Context (emphatic or attenuating context), which, crossed with each other yielded 4 conditions:

⁷ Remember the examples Israel (1996) provides:

- (i) a. Margo *literally* didn't **sleep a wink** before her big test.
 b. * Margo *literally* didn't sleep **much** before her big test.
 c. Belinda *literally* won **scads** of money at the Blackjack tables.
 d. * Belinda *literally* won **a little bit** of money at the Blackjack tables.
- (ii) *You'll never believe it!*
 a. Margo didn't **sleep a wink** before her big test.
 b. ? Margo didn't sleep **much** before her big test.
 c. Belinda won **scads** of money at the Blackjack tables.
 d. ? Belinda won **a little bit** of money at the Blackjack tables.
- (iii) a. Margo didn't **sleep a wink** *or at least* she didn't sleep **much**.
 b. * Margo didn't sleep **much** *or at least* she didn't **sleep a wink**.
 c. Margo didn't sleep **much**, *in fact* she didn't **sleep a wink**.
 d. * Margo didn't **sleep a wink**, *in fact* she didn't sleep **much**.
- (iv) a. Belinda won **scads** of money *or at least* she won **a little bit**.
 b. * Belinda won **a little bit** of money, *or at least* she won **scads**.
 c. Belinda won **a little bit** of money, *in fact* she won **scads**.
 d. * Belinda won **scads** of money, *in fact* she won **a little bit**.

Conditions:

- (1) Emphatic PPI in emphatic contexts
- (2) Emphatic PPI in attenuating contexts
- (3) Attenuating PPI in attenuating contexts
- (4) Attenuating PPI in emphatic contexts
- (5) Non polarity sensitive item PSI in emphatic context
- (6) Non polarity sensitive item PSI in attenuating context.

As for the choice of the non-polarity sensitive item, we chose the non-polarity sensitive item (PSI) from the same category with a meaning as close as possible to the PPI we used in the other sentences. As fillers, we used sentences which featured unlicensed NPIs, as the type presented in example (6).

- (6) a. * Sylvia literalmente a câștigat deloc bani la ruletă.
Sylvia literally has won at-all money at roulette.
'Sylvia literally won at-all money at the Blackjack tables.'
- b. * N-o să-ți vină să crezi niciodată!
Not will CL-2nd.p.sg. come SA believe never!
Sylvia literalmente n-a câștigat deloc bani la ruletă.
Sylvia literally not-has won at-all money at roulette.
You'll never believe it! Sylvia won at-all money at the Blackjack tables.'
- c. * Silvia a câștigat deloc bani la ruletă, de fapt
Sylvia has won at-all money at roulette, in fact
a câștigat nicidecum bani.
has won not-at-all money.
'Sylvia won at-all money at the Blackjack tables, in fact she won not-at-all money.'
- d. * Silvia a câștigat deloc bani la ruletă sau măcar a câștigat
Sylvia has won at-all money at roulette or at least has won
nicidecum bani.
not-at-all money.
'Sylvia won at-all money at the Blackjack tables, or at least she won not-at-all money.'

The questionnaire the participants worked with contained 100 sentences:

- (A) 4 sentences testing the hypothesis: emphatic polarity items allow modification by intensifying *literalmente* ('literally'), but understating polarity items reject it;
- (B) 6 sentences testing the hypothesis: emphatic polarity items allow occurrence after the introduction '*N-o să-ți vină să crezi niciodată!*' ('You'll never believe it!'), while understating polarity items reject it;
- (C) 4 sentences testing the hypothesis: coordinating conjunctions like '*sau măcar*' ('or at least') require that the first conjunct represents a stronger claim than the second conjunct;
- (D) 6 sentences testing the hypothesis: coordinating conjunctions like '*de fapt*' ('in fact') require that the second conjunct make a stronger claim than the first conjunct.
- (E) The rest of the sentences either contained emphatic PPIs and attenuating PPIs in inappropriate environments, attenuating contexts and respectively emphatic contexts, or non-polarity items in either emphatic or attenuating contexts.

In the questionnaire we only tested eight emphatic PPIs and three attenuating PPIs because we tentatively assumed that many of these expressions are synonymous and we hope that it is sufficient to test one or two examples from the same morpho-syntactic class. We established the threshold of acceptability at 70% in order to count as proof of the sentence's grammaticality.

The instructions for the grammaticality judgement tasks were provided on the questionnaire. Thus, the participants had to mark Yes or No, if the sentences seemed correct or not in Romanian, as in the following examples.

- (7) a. Silvia literalmente a câștigat tone de bani la ruletă.
Sylvia literally has won tons of money at roulette.
'Sylvia literally won scads of money at the Blackjack tables.'
- b. N-o să-ți vină să crezi niciodată!
Not will CL-2nd.p.sg. come SA believe never!
Silvia a câștigat tone de bani la ruletă.
Sylvia has won tons of money at roulette.
'You'll never believe it! Sylvia won scads of money at the Blackjack tables.'
- c. N-o să-ți vină să crezi niciodată!
Not will CL-2nd.p.sg. come SA believe never!
Silvia a câștigat olecuță de bani la ruletă.
Sylvia has won a little of money at roulette.
'You'll never believe it! Sylvia won a little bit of money at the Blackjack tables.'
- d. * Silvia a câștigat olecuță de bani la ruletă sau măcar
Sylvia has won a little DE money at roulette or at least
a câștigat tone de bani.
has won tons of money.
Sylvia won a little money at the Blackjack tables or a least she won scads.
- e. * Silvia a câștigat tone de bani la ruletă, de fapt a câștigat olecuță de bani.
Sylvia has won tons of money at roulette, in fact has won a little of money.
'Sylvia won scads of money at the Blackjack tables, in fact she won a little bit.'

The results show that 77% of the participants consider example (7a) correct and 23% judged this example as incorrect, 84% of the participants consider example (7b) correct and 16% judged this example as incorrect, 30 % of the participants consider example (7c) correct and 70% judged this example as incorrect, 4% of the participants consider example (7d) correct and 96% judged this example as incorrect and 13% of the participants consider example (7e) correct and 87% judged this example as incorrect.

The aim of the experiment was to see if Romanian speakers are sensitive to the rhetoric effects of polarity items like: *olecuță/ un strop/ nițel* ('a little'), *tone* ('tons'), *cât ai zice pește* ('in a jiffy'), *într-o clipită* ('in a jiffy'), *ca dracu'* ('as hell'), *extraordinar de* ('utterly'), *incredibil de* ('utterly'), *când mi-oi vedea ceața* ('when hell freezes over'), *când o face plopul pere și răchita micșunele* ('when hell freezes over') and whether, Romanian speakers can distinguish between emphatic PPIs and attenuating PPIs in Romanian with the help of the tests that Israel (1996) proposes. Following Israel (1996) among others, we claimed that emphatic sentences make a stronger claim than might have been expected while understating sentences make a weaker claim that might have been expected.

On average, the percentage shows that around 74% of the participants identified *literalmente* ('literally') as a modifier of emphatic PIs. With respect to the sensitivity to the rhetoric effects of PIs occurring with the modifier *literalmente* ('literally') we can conclude that our participants can make a distinction between emphatic and attenuating PPIs.

Also, our participants, in an overwhelming percentage, considered that *N-o să-ți vină să crezi niciodată!* ('You'll never believe it!') is a modifier of the emphatic PI *într-o clipită* ('in a jiffy'). Similarly, not surprisingly, the participants considered that *N-o să-ți vină să crezi niciodată!* ('You'll never believe it!') is not a modifier of the attenuating *olecuță* ('a little').

The participants unanimously rejected *sau măcar* ('or at least') as a modifier of the second conjunct. In other words, Romanian speakers correctly consider that the first conjunct *tone* ('tons'), *într-o clipită* ('in a jiffy'), *ca dracu'* ('as hell'), *incredibil de* ('utterly') co-

occurring with *sau măcar* ('or at least') make a stronger claim than the second conjunct – in this case – *olecuță/ un strop/ nițel* ('a little'), *curând* ('in a short while').

The participants unanimously rejected *de fapt* ('in fact') as a modifier of the first conjunct. In other words, Romanian speakers correctly consider that the second conjunct *tone*, ('tons'), *ca dracu* ('as hell'), *incredibil de* ('utterly'), *cât ai zice pește* ('in a jiffy'), *când o face plopul pere și răchita micșunele* ('when hell freezes over') co-occurring with *de fapt* ('in fact') make a stronger claim than the first conjunct – in this case – *olecuță/ un strop/ nițel* ('a little'), *curând* ('in a short while').

Looking at the percentages we obtained we conclude that Romanian speakers are sensitive to the polarity of the items/ expressions we analyzed in the experiment. We showed that emphatic polarity items allow modification by intensifying *literalmente* ('literally'), but attenuating polarity items reject it; emphatic polarity items allow occurrence after the introduction '*N-o să-ți vină să crezi niciodată!*' ('You'll never believe it!'), while attenuating polarity items reject it; coordinating conjunctions like '*sau măcar*' ('or at least') require that the first conjunct represents a stronger claim than the second conjunct; coordinating conjunctions like '*de fapt*' ('in fact') require that the second conjunct make a stronger claim than the first conjunct.

We conclude that the hypothesis of the first experimental study investigating the rhetoric nature of lexical PPIs, that emphatic sentences make a stronger claim than might have been expected while understating sentences make a weaker claim that might have been expected, is valid and we suggest that the following sixty words or expressions qualify as attenuating PPIs, as in (8) and respectively as emphatic PPIs, as in (9).

- (8) * **Attenuating PPIs:** *cam* (sorta), *puțin/ un pic/ puținel/ oleacă/ olecuță/ nițel/ nițică/ un strop/ o fărâcă/ un dram/ o umbră/ o picătură/ un grăunte/ un crâmpei/ o frântură* (a bit/ a little/ a little bit/ a tad/ a smidgen/ mite), etc.
- (9) * **Emphatic PPIs:** *tone* (tons); *o groază/ o grămadă/ o puzderie/ o sumedenie/ o droaie* (lots/ oodles/ gobs/ jillions/ lashings/ loads); *ca dracu* ('as hell/ as blazes); *în doi timpi și trei mișcări/ într-o clipă/ într-o clipită/ într-o clipeala din ochi/ cât ai clipi/ cât ai zice mei/ cât ai zice pește/ cât ai scăpăra din ochi/ cât ai scăpăra dintr-un amnar/ cât te-ai șterge la ochi/ cât te-oi freca la ochi/ cât ai bate din palme/ cât ai da în cremene* (in a jiffy/ in a New York minute/ in (half) a tick/ in a brace of shakes/ in the twinkling of an eye/ at the drop of a hat/ in two shakes of a lamb's tail/ in a trice/ in two tows/ in the turn of a hand); *la Paștele Cailor/ la Sfântu' Așteaptă/ la calendele grecești/ la moșii cei verzi* (at the Greek Calends/ At Latter Lammas); *când mi-oi vedea ceafa/ când va face broasca păr/ când va face plopul pere și răchita micșunele/ când o prinde mâța pește/ când va face spânul barbă/ când mi-o crește iarba-n barbă și-nre dește/ când o sta oul în cui/ când o da din piatră lapte/ când or zbura bivoli/ când o pica frunza de pe brad/ când mi-o crește păr în călcâie/ când mi-o crește păr în palmă și-nre dește/ când o zbura porcul* (when hell freezes over/ when pigs fly); *fabulos de/ extraordinar* (incredibly), *exagerat de/ incredibil* (amazingly), *nemaipomenit de* (unbelievably), *enorm* (enormously), *o armată* (a legion), *un cârd* (lots), etc.

In conclusion, scalar reasoning has a crucial/ essential role in the analysis of the structure of rhetorical utterances.

3. A CLASSIFICATION OF POSITIVE POLARITY ITEMS BASED ON THE HIERARCHY OF NEGATIVE STRENGTH

In this section we present a classification of PPIs with respect to the class of negative contexts, contexts which license negative polarity items, since by hypothesis PPIs are doubly marked NPIs. Studies in the domain of polarity phenomena show that polarity items are compatible with various semantically definable types of non-assertive contexts/ operators, like: downward entailing operators, anti-additive operators and anti-morphic operators. Zwarts (1993) observed that the three licensing conditions are downwards applicable in the sense that they hold for PIs that are members of a class with a weaker condition. Thus, as described in Zwarts (1993), with respect to the licensing of NPIs, anti-morphic environments (classical negation) should license in addition to strong NPIs, also medium-strength NPIs, also anti-additive environments (minimal negation) should license, in addition to medium-strength NPIs, also weak NPIs. This falls out from the algebraic definitions of these negations, which are repeated here in (10) – (15).

We assume that in Romanian PPIs cannot scope below antimorphic operators, like classical negation (*nu* – ‘not’) but also in the scope of *deloc*, *nicidecum* (‘not’, ‘not-at-all’), and thus most PPIs are of the weak type. We suggest that PPIs like *într-o clipită/ cât ai clipi* (in the blink of an eye) and *cam* (‘sorta’) cannot scope below anti-additive operators (*fără*, *neagă* – ‘without’, ‘deny’ etc.), which makes them PPIs of medium strength. Given the previously mentioned typology, we shall see that all PPIs in Romanian are compatible with downward entailing operators (*puțini*, *cel mult N* – ‘few’, ‘at mostN’ etc.), and thus Romanian does not exhibit any strong PPIs.

First let us look again at definitions of the operators/ contexts that license the occurrence of both negative polarity items and of positive polarity items. The underlined items in the following examples represent typical NPIs in English and Romanian.

- (10) * **Downward Entailing:** $X \subseteq Y \rightarrow f(Y) \subseteq f(X)$ – few, seldom, hardly, at most N etc.
- (11) a. *Few* students ever said anything.⁸
 b. *At most* 5 students ever said anything.⁹
 c. **Puțini** studenți dau doi bani pe noul regulament.
 Few student-pl. give-3rd.p.pl. two money-pl. on new-the. regulations
 ‘Few students give a damn on the new regulations.’
 d. **Cel mult** 5 colegi cred o iotă din ce spune Maria.
 At most 5 colleague-pl. believe-3rd.p.pl. an iota from what say-2nd.p.sg. Maria.
 ‘At most 5 colleagues believe an iota from what Maria is saying.’
- (12) * **Anti-additive:** $f(XUY) = f(X) \cap f(Y)$ (in other words: $(X \text{ or } Y) = f(X) \text{ and } f(Y)$) – nobody, never, nothing, deny/ refuse/ be amazed, surprised; without etc.
- (13) a. Sandy is *amazed/ surprised* that Robin ever ate kale.¹⁰
 b. Sandy is *sorry/ regrets* that Robin bought any car.¹¹
 c. Sunt **surprins** că Maria a pus geană pe geană azi.
 Am surprised that Maria have-3rd.p.sg. put eyelash on eyelash today.
 ‘I am surprised that Mary has ever brought flowers.’
 d. A plecat **fără** a spune o iotă.
 Have-3rd.p.sg. left without to say an iota.
 ‘S/he left without saying an iota.’

⁸ (Gajewski, <http://www.gajewski.uconn.edu/papers/NLSNPI.pdf>)

⁹ (Gajewski, <http://www.gajewski.uconn.edu/papers/NLSNPI.pdf>)

¹⁰ Kai von Fintel (1999)

¹¹ Kai von Fintel (1999)

- (14) **Antimorphic:** $f(X \cap Y) = f(X) \cup f(Y)$
 $f(X \cup Y) = f(X) \cap f(Y)$ – not, not the teacher, allerminst
 in other words:
 $f(X \text{ or } Y) = f(X) \text{ and } f(Y)$
 $f(X \text{ and } Y) = f(X) \text{ or } f(Y)$
- (15) a. Bill *isn't* here yet.¹²
 b. I haven't seen Bill in years.¹³
 c. Bill doesn't like pasta either.¹⁴
 d. **Nu** înțeleg **deloc** această problemă.
 Not understand-1st.p.sg. at all this problem.
 'I don't understand this problem at all.'
 e. Vasile Blaga **nu** dă doi bani pe sondaje.
 Vasile Blaga not give-3rd.p.sg. two money-pl. on survey-pl.
 'Vasile Blaga doesn't give a red cent on the polls.'¹⁵

Keeping in mind that the licensing conditions are semantic we expect these to carry over to Romanian PPIs.

Thus, the following examples show that *puțini* ('few') and *cel mult n* ('at most N') are downward entailing operators. As expected, they license inferences from sets to subsets.

- (16) a. **Puțini** copii mănâncă legume. →
 Few child-pl. eat vegetable-pl.
 'Few children eat vegetables.'
 → **Puțini** copii mănâncă broccoli.
 Few child-pl. eat broccoli.
 'Few children eat broccoli.'
- b. **Cel mult** 5 invitați au băut alcool. →
 At most 5 guest-pl. have-3rd.p.pl. drunk alcohol.
 'At most 5 guests drank alcohol.'
 → **Cel mult** 5 invitați au băut vin.
 At most 5 guest-pl. have-3rd.p.pl. drunk wine
 'At most 5 guests drank alcohol.'

The following example shows that *refuză* ('refuse') and *fără*¹⁶ ('without') are antiadditive operators.

¹² (Giannakidou, 2011)

¹³ (Giannakidou, 2011)

¹⁴ (Giannakidou, 2011)

¹⁵ <http://www.ziuanews.ro/stiri/vasile-bлага-nu-da-doi-bani-pe-sondaje-16302>

¹⁶ In the following example, Falaus (2008) argues that the inferences show that '*fără*' ('without') is also an antimorphic operator, as was claimed previously in Giannakidou (1997)

(i) a. Paul a plecat **fără** să doarmă sau să mănânce. ↔

'Paul left **without** sleeping *or* **without** eating.'

Paul a plecat **fără** să doarmă și **fără** să mănânce.

'Paul left **without** sleeping *and* eating.'

b. Paul a plecat **fără** să doarmă și să mănânce. ↔

'Paul left **without** sleeping *and* eating.'

Paul a plecat **fără** să doarmă *sau* **fără** să mănânce.

'Paul left **without** sleeping *or* **without** eating.'

However, Iordăchioaia (2005), among others argues that the second inference is not valid in the following example and thus *fără* ('without') does not qualify as an antimorphic operator.

(ii) a. Ion a venit fără flori sau cărți. ↔ Ion a venit fără flori și Ion a venit fără cărți.

Ion has come without flowers or books. ↔ Ion has come without flowers and Ion has come without books.

b. Ion a venit fără flori și cărți. /↔/ Ion a venit fără flori sau Ion a venit fără cărți.

Ion has come without flowers and books. /↔/ Ion has come without flowers or Ion has come without books.

- (17) a. **Refuză** să mănânce sau să doarmă. ↔
 Refuse-3rd.p,sg. SA eat or SA sleep
 ‘He refuses to eat or sleep.’
 ↔ **Refuză** să mănânce și **refuză** să doarmă. ↔
 Refuse-3rd.p,sg. SA eat and refuse-3rd.p,sg. SA sleep
 ‘He refuses to eat and he refuses to sleep.’
- b. Maria a plecat **fără** bani sau acte. ↔
 Maria have-3rd.p,sg. left without money-pl. or document-pl.
 ‘Maria left without money or documents.’
 ↔ Maria a plecat **fără** bani și Maria a plecat
 Maria have-3rd.p,sg. left without money-pl. and Maria have-3rd.p,sg. left
fără acte
 without document-pl.
 ‘Maria left without money and Maria left without documents.’

The following examples show that *nu* (‘not’) is an antimorphic operator.

- (18) a. Maria **nu** a cumpărat flori și cadouri. ↔
 Maria not have-3rd.p,sg. bought flower-pl. and present-pl.
 ‘Maria didn’t buy flowers and presents.’
 ↔ Maria **nu** a cumpărat flori sau Maria **nu** a
 Maria not have-3rd.p,sg. bought flower-pl. or Maria not have-3rd.p,sg.
 cumpărat cadouri.
 bought present-pl.
 ‘Maria didn’t buy flowers or Maria didn’t buy presents.’
- b. Maria **nu** a cumpărat flori sau cadouri. ↔
 Maria not have-3rd.p,sg. bought flower-pl. or present-pl.
 ‘Maria didn’t buy flowers or presents.’
 ↔ Maria **nu** a cumpărat flori și Maria **nu** a
 Maria not have-3rd.p,sg. bought flower-pl. and Maria not have-3rd.p,sg.
 cumpărat cadouri.
 bought present-pl.
 ‘Maria didn’t buy flowers and Maria didn’t buy presents.’

In conclusion, as expected, in Romanian we can talk about similar semantic licensing conditions, just like in English or Dutch.

In order to provide an accurate classification of PPIs in Romanian with respect to their occurrence in the scope of non-assertive contexts (as such a classification was never proposed for PPIs in Romanian) we will test the occurrence of PPIs in the scope of the following operators: downward entailing operators (*puțini*, *cel mult N* – ‘few’, ‘at mostN’ *etc.*), anti-additive operators (*fără*, *neagă* – ‘without’, ‘deny’ *etc.*) and clausemate antimorphic operators: *nu* (‘not’) and operators like *deloc*, *nicidecum* (‘not’, ‘not-at-all’). The expectation is that in Romanian lexical PPIs are not of the strong type, in the sense that there aren’t any lexical PPIs that cannot occur in the scope of downward entailing operators (*puțini*, *cel mult N* – ‘few’, ‘at mostN’ *etc.*). Another prediction is that there are some lexical PPIs that cannot occur in the scope of anti-additive operators (*fără*, *neagă* – ‘without’, ‘deny’ *etc.*), which makes them PPIs of medium strength. Also, another generalization that we can postulate is that all lexical PPIs in Romanian cannot scope below the clausemate antimorphic operators: *nu* (‘not’), and thus we suggest that mostly, Romanian lexical PPIs are of the weak type.

3.1. Experimental studies

3.1.1. *Experiment 1 and 2 – PPIs in the scope of antimorphic operators*

The aim of these experiments is to see if speakers of Romanian rule out sentences where PPIs scope below a clausemate anti-morphic operator, like *nu* ('not'). A second aim of the following two experiments is to classify lexical PPIs as to how prototypical they are. The hypothesis is that no PPI can scope below *nu* ('not') and other operators like *deloc*, *nicidecum* ('not', 'not-at-all'). The sensitivity to negation has been announced and exemplified in the previous sections but now we have enlarged the list of items/ phrases that we want to test.

3.1.1.1. Procedure

With respect to the items' sensitivity to clausemate negation, we tested 60 words or expressions on 100 native speakers of Romanian – 50 students of English philology (Faculty of Foreign Languages and Literatures, University of Bucharest) and 50 other native speakers (friends, family) whose L1 is Romanian, and we suggest that PPIs in Romanian cannot scope below antimorphic operators, like classical negation '*not*'. We ordered the PPIs in the following examples according to how prototypical they are.

We chose a two-factorial design with the factors PPI-hood (presumed PPI or non PPI) and Context (positive or negative), which, crossed with each other yielded 4 conditions:

Conditions:

- (1) PPI in negative contexts (anti-licensed)
- (2) PPI in positive contexts (licensed)
- (3) Non polarity sensitive item PSI in negative context
- (4) Non polarity sensitive item PSI in positive context.

As for the choice of the non-polarity sensitive item, we chose the non-polarity sensitive item (PSI) from the same category with a meaning as close as possible to the PPI we used in the other sentences. As fillers, we used sentences which featured unlicensed NPIs as the ones presented in (19).

- (19) a. Această cămașă este deloc scumpă.
This shirt is at all expensive.
'This shirt is at all expensive.'
- b. Această cămașă este nicidecum scumpă.
This shirt is not-at-all expensive.
'This shirt is not-at-all/ in the least bit expensive.'

In the first experiment, the participants were asked to perform grammaticality judgement tasks, evaluating 78 sentences, out of which 39 were assertive contexts and 39 were negative contexts. The rest of 117 sentences featured non-PPIs in positive and negative contexts and unlicensed NPIs. The aim of the experiments was to see if native speakers of Romanian can rule out the negative contexts that contained examples of PPIs and can attest that the assertive contexts containing 17 attenuating PPIs and the 22 emphatic PPIs are grammatical.

In the second experiment, a control experiment, the participants were asked to perform grammaticality judgement tasks, evaluating 28 sentences, out of which 14 were assertive contexts and 14 were negative contexts. The rest of 42 sentences featured non-PPIs in positive and negative contexts and unlicensed NPIs. The aim of the experiments was to see if native speakers of Romanian can rule out the negative contexts that contained examples of PPIs and can attest that all the assertive contexts containing emphatic PPIs, are grammatical. We established the threshold of acceptability at 70% in order to count as proof of the sentence's grammaticality. The instructions for the grammaticality judgement tasks were provided on the

questionnaire, thus the participants had to mark Yes or No, if the sentences seem correct or not in Romanian, as in the following examples. The following examples are ordered according to the percentages we obtained in our experiments (ranging from the highest percentage to the lowest).

For reasons of space we chose to exemplify only some examples (out of the 60 items/expressions we gathered) – neologic or archaic examples.¹⁷

- (20) a. [...] am convingerea că trebuie să mai așteptăm până **când**
 [...] have-1st.p.sg. conviction that must SA more wait-1st.p.pl. until when
va face plopul pere și răchita micșunele...
 will-3rd.p.sg. make poplar-the pear-pl. and willow-the ten-week stock-pl.
 ‘I am convinced we need to wait until hell freezes over/ till the cows come home.’
- b. Poate printre toate răutățile, mai găsim și **o fărâmă** de bunătate”.
 Maybe among all malice-pl still find-1st.p.pl also a crumb/shred of kindness.
 ‘Maybe, among all the bad things around us, we can find a bit of kindness.’
- c. Există **un pic** de Lizuca în fiecare...
 Exist a bit of Lizuca in each ...
 ‘There is a bit of Lizuca in each of us.’
- d. Piranha: te papă **cât ai zice pește!**
 Piranha: CL-2nd.p.sg. Acc. eat how much/ many would-2nd.p.sg. say-2ndp.sg.
 fish!
 ‘Piranha: they’ll eat you in a jiffy!’
- e. Îmbracă-l **în 2 timpi și 3 mișcări!**
 Dress up-2nd.p.sg. CL-3rd.p.sg. masc. Acc. in 2 times and 3 moves
 ‘Get him dressed up in a jiffy.’
- f. [...] iar vulpea linse totul **într-o clipită.**
 [...] and fox-the licked everything in a moment
 ‘[...] and the fox licked everything in a flash.’

The results show that the idiomatic expression ‘când va face plopul pere și răchita micșunele’ for (20a) 95% of the participants consider this sentence grammatical and 5% judged it as ungrammatical. The same expression was tested in the following negative context: ‘*Nu* voi ajunge președinte **când va face plopul pere și răchita micșunele**’ (I won’t become president when hell freezes over.), and 92% of the participants consider this sentence ungrammatical and 8% judged it as grammatical. As for (20b) 94% of the participants consider it grammatical and 6% judged it as ungrammatical. The same item, ‘o fărâmă’, was tested in the negative context: ‘Denisa Jebeleanu *nu* aduce **o fărâmă** de artă în locuințele timișorenilor.’ (Denisa Jebeleanu won’t bring a little art in the house of the inhabitants of the city of Timișoara.), and 70% of the participants consider this sentence ungrammatical and 30% judged it as grammatical. As for example (20c) 85% of the participants consider it ungrammatical and 15% judged it as grammatical. The same item, ‘un pic’ was tested in the following assertive context, ‘Merită,

¹⁷ Example (20)

a. [http://webcache.googleusercontent.com/search?q=cache:9Ng0SYNunREJ:legea290-](http://webcache.googleusercontent.com/search?q=cache:9Ng0SYNunREJ:legea290-2003.jurnalultau.ro/intrebari-si-raspunsuri-f5/aplicarea-legii-t2.html+cand+o+face+plopul+pere+si+rachita+micsunele&cd=28&hl=ro&ct=clnk&gl=ro)

2003.jurnalultau.ro/intrebari-si-raspunsuri-f5/aplicarea-legii-

t2.html+cand+o+face+plopul+pere+si+rachita+micsunele&cd=28&hl=ro&ct=clnk&gl=ro

b. www.princeradublog.ro/atitudini/o-farama-de-bunatate/

c. http://www.iqads.ro/Analize_Reclame_read_9175/exista_un_pic_de_lizuca_in_fiecare_.html

d. [http://webcache.googleusercontent.com/search?q=cache:n7FrWV3xPKYJ:www.yuppy.ro/articol/Entertainme](http://webcache.googleusercontent.com/search?q=cache:n7FrWV3xPKYJ:www.yuppy.ro/articol/Entertainme nt/194/slideshow/10/.html+cat+ai+zice+peste&cd=2&hl=ro&ct=clnk&gl=ro)

nt/194/slideshow/10/.html+cat+ai+zice+peste&cd=2&hl=ro&ct=clnk&gl=ro

e. [http://webcache.googleusercontent.com/search?q=cache:6-0ydo91nLwJ:www.mami.ro/copilul-tau/nou-](http://webcache.googleusercontent.com/search?q=cache:6-0ydo91nLwJ:www.mami.ro/copilul-tau/nou-nascut/imbraca-l-in-2-timpi-si-3-miscari.html+in+doi+timpi+si+trei+miscari&cd=4&hl=ro&ct=clnk&gl=ro)

nascut/imbraca-l-in-2-timpi-si-3-miscari.html+in+doi+timpi+si+trei+miscari&cd=4&hl=ro&ct=clnk&gl=ro

f. [http://webcache.googleusercontent.com/search?q=cache:VhG8rbZzQBgJ:www.mamica.ro/povesti/+intr-](http://webcache.googleusercontent.com/search?q=cache:VhG8rbZzQBgJ:www.mamica.ro/povesti/+intr-o+clipita&cd=58&hl=ro&ct=clnk&gl=ro)

o+clipita&cd=58&hl=ro&ct=clnk&gl=ro

cred eu, să ne gândim un pic la acest exemplu de curaj și hotărâre.’ (I believe that it’s worth giving a little thought to this example of courage and determination.), and 94% of the participants consider this sentence grammatical and 6% judged it as ungrammatical. For the AdvP ‘cât ai zice pește’ in (20d) 94% of the participants consider the sentence grammatical and 6% judged it as ungrammatical. The same item was tested in the negative context: ‘*Nu vine cât ai zice pește*’ (He/She won’t come in a jiffy.) and 78% of the participants consider the sentence ungrammatical and 22% judged it as grammatical. For the PP ‘în doi timpi și trei mișcări’ in (20e) 92% of the participants consider the sentence grammatical and 8% judged it as ungrammatical. The same item was tested in the negative context: ‘*Nu termină treaba în doi timpi și trei mișcări*’ (He/She won’t finish the job in a jiffy) and 56% of the participants consider the sentence ungrammatical and 44% judged it as grammatical. For the PP ‘într-o clipită’ in (20f) 92% of the participants consider this sentence grammatical and 8% judged it as ungrammatical. The same item was tested in the negative context: ‘*Nu ajunge într-o clipită*’ (He/ She won’t get there in a jiffy.) and 45% of the participants consider the sentence grammatical and 55% judged it as ungrammatical.

The results show that most frequent PPIs are: *când va face plopul pere și răchita micșunele* (‘when hell freezes over’), *O fărâmă/ Un pic* (a little), *Cât ai zice pește/ În doi timpi și trei mișcări/ Într-o clipită* (‘in a jiffy’), *O groază* (‘tons’), *Cam* (‘sorta’), *Un dram/ Un strop* (a little), *Când o sta oul în cui* (‘when hell freezes over.’), *O sumedenie* (‘loads’), *Când mi-oi vedea ceafa* (‘when hell freezes over’), *Cât ai bate din palme*, *Când mi-o crește păr în calcaie* (‘when hell freezes over’), *Tone* (‘tons’), *Când va face spânul barbă* (‘when hell freezes over’). What we can notice from the results is that many archaic examples were accepted in an overwhelmingly percentage by our participants, which makes us think that many of the participants have been exposed to such language during their childhood years, as these archaic phrases are commonly found in fairy tales.

By contrast items/phrases like *un grăunte/ puțin* (‘a bit’), *cât te-oi freca la ochi/ cât ai scăpăra dintr-un amnar* (‘in a jiffy/ New York minute’), *la Paștele Cailor/ când va face broasca păr* (‘when hell freezes over’), *ca dracu* (‘as hell’) obtained a percentage lower than the 70% threshold of acceptability. Nonetheless we observe that within the same synonymic group, over 70% of the participants judged as grammatical the occurrence of the following items/ phrases in assertive contexts: *când va face plopul pere și răchita micșunele/ la calendele Grecești* (‘when hell freezes over’), *o fărâmă/ un pic* (‘a bit/ a little’), *cât ai zice pește* (‘in a jiffy’). The only possible explanation for the above mentioned results is that items/ phrases like *o fărâmă/ un pic* (‘a bit/ a little’) are more frequently broadcast/ used in the media than *un grăunte/ puțin* (‘a bit’). Participants have learned items/phrases like *când va face plopul pere și răchita micșunele/ la calendele Grecești* (‘when hell freezes over’), *cât ai zice pește* (‘in a jiffy’) during their school years and would rather use these items/phrases and not *cât te-oi freca la ochi/ cât ai scăpăra dintr-un amnar* (‘in a jiffy/ New York minute’), *la Paștele Cailor/ când va face broasca păr* (‘when hell freezes over’).

As for occurrence in the scope of clausemate negation speakers practically unanimously rejected the occurrence in the scope of clausemate negation of items/ phrases like: *când mi-oi vedea ceafa*, *când o prinde mâța pește*, *când vă face spânul barbă*, *când or zbura bivoli*, *când mi-o crește iarbă-n barbă și-n tre dește*, *la Paștele Cailor*, *când va da din piatră lapte*, *când o sta oul în cui*, *când mi-o crește păr în palmă și-n tre dește*, *la moșii cei verzi*, *când va face broasca păr*, *când o pica frunza de pe brad*, *când va face plopul pere și răchita micșunele*, *la calendele Grecești* (‘when hell freezes over’), *cât ai zice pește/ cât ai clipi/ cât te-oi freca la ochi* (‘in a jiffy’), *oleacă/ nițică/ olecuță/ puțințel* (‘a little’).

Participants in the experiment had stronger reactions to the occurrence of archaic PPIs in the scope of clausemate negation *nu* (‘not’) than to the occurrence of neologic PPIs, like: *cam* (‘sorta’), *o sumedenie/ o grămadă/ o droaie/ o puzderie*, *un cârd* (‘tons/ loads’), *un pic/ o fărâmă/ un dram/ puțin* (‘a little/ a bit’), *exagerat* (‘extremely’).

By contrast, with respect to the PPIs in the scope of clausemate negation, the percentages show that items/ phrases like *în doi timpi și trei mișcări/ într-o clipită/ cât ai bate din palme* ('in a jiffy'), *o groază/ tone/ o armată* ('tons'), *un strop/ o umbră/ nițel/ o picătură* ('a bit/ a little'), *enorm/ nemaipomenit/ fabulos* ('extremely/ utterly') were considered ungrammatical by less than 70% of the participants. Nonetheless, we observe that within the same synonymic group, items/ phrases like *cât ai zice pește/ cât ai clipi* ('in a jiffy'), *o sumedenie* ('tons'), *o fărâcă/ un pic* ('a bit/ a little'), *exagerat de* ('extremely') were considered ungrammatical in the scope of clausemate negation by over 70% of the participants. When asked to provide explanations or rephrase sentences which seemed ungrammatical, we observed that the participants read the sentences as an emphatic denial of a similarly phrased statement (some PPIs can appear in the scope of clausemate negation if focused).

In conclusion, we consider that the differences in the percentages obtained within synonymic groups are not significant and thus, we consider that the hypothesis we started out from is valid.

3.1.2. Experiment 3 – PPIs in the scope of antimorphic operators

The aim of the third experiment is to see if speakers of Romanian rule out or judge as grammatical sentences where PPIs scope below antiadditive operators like *fără* ('without') and *refuză* ('refuse'). The hypothesis that if PPIs can scope below antiadditive operators like *fără* ('without') and *refuză* ('refuse') we talk about PPIs of medium strength and by contrast if the PPIs we test cannot scope below antiadditive operators like *fără* ('without') and *refuză* ('refuse') we talk about weak PPIs.

3.1.2.1. Procedure

With respect to the PPIs' sensitivity to antiadditive operators like *fără* ('without') we tested items/ phrases like *într-o clipită* ('in a jiffy'), *cât ai clipi* (before you could say Jack Robinson), *cam* ('sorta'), *când va face plopul pere și răchita micșunele* ('when hell freezes over'), *ca dracu* ('as hell'), *o fărâcă* ('a bit'), *o droaie* ('tons') on 90 participants – 40 students of English philology (Faculty of Foreign Languages and Literatures, University of Bucharest) and 50 other native speakers (friends, family).

We chose a two-factorial design with the factors PPI-hood (presumed PPI or non PPI) and Context (scoping under antiadditive operators or not scoping under antiadditive operators), which, crossed with each other yielded 4 conditions:

Conditions:

- (1) PPI scoping under antiadditive operators
- (2) PPI not scoping under antiadditive operators
- (3) Non polarity sensitive item PSI scoping under antiadditive operators
- (4) Non polarity sensitive item PSI not scoping under antiadditive operators.

As for the choice of the non-polarity sensitive item, we chose the non-polarity sensitive item (PSI) from the same category with a meaning as close as possible to the PPI we used in the other sentences. As fillers, we used sentences which featured unlicensed NPIs as the ones presented in (21).

- (21) a. Copiii ascultă de părinți fără un motiv încă.
Children listen to parents without a motif yet.
'Children listen to their parents without a motif yet.'
- b. Copiii refuză să mănânce încă.
Children refuse to eat yet.'
'The children refuse to eat yet.'

The instructions were provided on the questionnaire, and the participants had to mark Yes or No, if the sentences seemed correct/ acceptable or not in Romanian. As was previously mentioned we established the threshold of acceptability at 70% for the following examples. The participants read a number of 14 sentences where PPIs scoped under antiadditive operators and another 56 sentences which featured PPIs which were not scoping under antiadditive operators, non-PPIs scoping or not scoping under antiadditive operators and other sentences with unlicensed NPIs.¹⁸

- (22) a. * Concurenții au așteptat în culise **fără** a se emoționa
Contestant-pl.-the have-3rd.p.pl. waited in backstage without to get nervous
într-o clipită.
in a moment.
*The contestants waited backstage without getting nervous in a jiffy.’
- b. * Soldații vor răspunde la apelul comandantului **fără** să
Soldier-pl.the will-3rd.p.pl. answer at call-the commander-Gen. without SA
se gândească **cât ai clipi.**
CL-refl. think how much/ many would-2nd.p.sg. blink.
*The soldiers will answer the commander’s call without thinking in the
blink of an eye.’
- c. * Copiii au răspuns la întrebări **fără** să devină
Child-pl.the have-3rd.p.pl. answered at question-pl. without SA become
cam nepoliticoși.
sorta rude.
*The children answered the questions without being sorta rude.’
- d. Zmeii se vor transforma în prinți **fără** efort
Dragon-pl. CL-refl. will transform in prince-pl. without effort
când o să facă plopul pere și răchita micșunele.
when will.arch. make poplar-the pear-pl. and willow-the ten-week stock-pl.
‘The villains/ dragons will turn into princes when hell freezes over.’
- e. Elevii iau note mici **fără** a fi **ca dracu’** de proști.
Student-pl.the take mark-pl. small without to be like hell DE stupid
‘The students take low marks without being stupid as hell.’
- f. O conspirație **fără o fărâmbă** de romantism e ca o zeamă **fără oleacă** de piper.
A conspiracy without a crumb of romance is like a soup without a little of pepper
‘A conspiracy without a little bit of romance is like soup without a little pepper.’
- g. Potrivit pentru orice buzunar **fără o droaie** de opțiuni și extraopțiuni.
Suitable for any pocket without a bunch of options and extra-options.
‘It’s suitable for any kind of income, without tons of options and extra-options.’
- h. ? Politicienii **refuză** să voteze **într-o clipită.**
Politician-pl.the. refuse SA vote in a blink.
‘The politicians refuse to vote in the blink of an eye.’
- i. ? Copiii **refuză** să mănânce ciorba **cât ai clipi.**
Child-pl.the refuse SA eat soup-the how much/ many would-2nd.p.sg. blink.
‘The children refuse to eat in the blink of an eye.’
- j. ? Părinții **refuză** a se arăta **cam** dezamăgiți.
Parent-pl.the refuse to CL-refl. show sorta disappointed.
‘The parents refuse to look sorta disappointed.’

¹⁸ Example (22f,g)

<http://www.jurnal.md/ro/news/razi-tu-razi-harap-alb-scrisorile-lui-buraga-218624/>

<https://forum.vodafone.ro/t5/Cartel%C4%83-preplatit%C4%83/Propuneri-de-extraopțiuni/td-p/1015>

- k. Tinerii refuză să iasă în oraș când o face
 Youngster-pl.the refuse SA go in town when wil.arch. make
plopul pere și răchita micșunele
 poplar-the pear-pl. and willow-the ten-week stock-pl.
 ‘The youngsters refuse to go out into town when hell freezes over.’
- l. Maria refuză să mănânce o droaie de legume.
 Maria refuse SA eat a bunch of vegetable-pl.
 ‘Maria refuses to eat a bunch of vegetables.’
- m. Ion refuză să arate o fărâmbă de bun simț.
 Ion refuses SA show a crumb of good sense.
 ‘Ion refuses to show a bit of decency.’
- n. Profesorii refuză să fie ca dracu’ de umiliți.
 Teacher-pl.the refuse SA be like hell of humiliated.
 ‘The teachers refuse to be humiliated as hell.’

The results show that 10% of the participants considered (22a) grammatical and 90% judged it as ungrammatical, 17,7% of the participants considered (22b) grammatical and 82,2% judged it as ungrammatical, 32,2% of the participants considered (22c) grammatical and 67,7% judged it as ungrammatical, 70% of the participants considered (22d), while 30% judged it as ungrammatical and 63,3% of the participants considered (22e) grammatical and 36,6% judged it as ungrammatical.

The aim of the third experiment was to see if speakers of Romanian rule out or judge as grammatical sentences where PPIs scope below antiadditive operators like *fără* (‘without’).

The percentage shows that around 70% of the participants considered that *ca dracu’* (‘as hell’), *când va face plopul pere și răchita micșunele* (‘when hell freezes over’), are acceptable in the scope of *fără* (‘without’).

The percentages show that *într-o clipită* (‘in a jiffy’), *cât ai clipi* (before you could say Jack Robinson’), *cam* (‘sorta’) were judged as ungrammatical by many participants. Thus, the inability of *într-o clipită* (‘in a jiffy’), *cât ai clipi* (before you could say Jack Robinson’), *cam* (‘sorta’) to scope below *fără* (‘without’) and *refuză* (‘refuse’) makes them, for now, PPIs of medium strength.

By contrast, the percentages show that *când va face plopul pere și răchita micșunele* (‘when hell freezes over’), *ca dracu’* (‘as hell’) were judged as grammatical by a considerable number of the participants. The examples show that *o fărâmbă* (‘a bit’), *o droaie* (‘tons’) are grammatical in the scope of *fără* (‘without’). We suggest that *când va face plopul pere și răchita micșunele* (‘when hell freezes over’), *ca dracu’* (‘as hell’), *o fărâmbă* (‘a bit’), *o droaie* (‘tons’) are acceptable in the scope of *fără* (‘without’) and *refuză* (‘refuse’), which makes them weak PPIs.

The experiment confirms the hypothesis that Romanian exhibits PPIs like *într-o clipită* (‘in a jiffy’), *cât ai clipi* (before you could say Jack Robinson’), *cam* (‘sorta’) that cannot scope below antiadditive operators like *fără* (‘without’) and *refuză* (‘refuse’), PPIs of medium strength and also, that Romanian exhibits PPIs that can scope below antiadditive operators like *fără* (‘without’) and *refuză* (‘refuse’), weak PPIs like *când va face plopul pere și răchita micșunele* (‘when hell freezes over’), *ca dracu’* (‘as hell’), *o fărâmbă* (‘a bit’), *o droaie* (‘tons’). In conclusion, we suggest that *într-o clipită/ cât ai clipi* (in the blink of an eye) and *cam* (‘sorta’) qualify as PPIs of medium strength.

If the results of the next experimental study reveal the fact that *într-o clipită/ cât ai clipi* (in the blink of an eye) and *cam* (‘sorta’) cannot scope below downward entailing operators like *puțini* (‘few’) and *cel mult N* (‘at most N’) we must conclude that they are strong PPIs.

In case the study reveals that they can scope below downward entailing operators like *puțini* (‘few’) and *cel mult N* (‘at most N’) and keeping in mind the hierarchy of negative

strength we will conclude that *‘într-o clipită/ cât ai clipi* (in the blink of an eye) and *cam* (‘sorta’) are PPIs of medium strength.

The previous experiment showed that *‘când va face plopul pere și răchita micșunele* (‘when hell freezes over’), *ca dracu* (‘as hell’), *o fărâcă* (‘a little’), *o droaie* (‘a bunch’) can happily scope below clausemate antiadditive operators like *fără* (‘without’) and *refuză* (‘refuse’), which makes them weak PPIs. We expect that the following experimental study will show that *‘când va face plopul pere și răchita micșunele* (‘when hell freezes over’), *ca dracu* (‘as hell’), *o fărâcă* (‘a little’), *o droaie* (‘a bunch’) can also happily scope below downward entailing operators like *puțini* (‘few’) and *cel mult N* (‘at most N’). Remember that the three licensing conditions within the hierarchy of monotone decreasing functors: (cf. van der Wouden (1997) – Monotone decreasing: $f(X \subseteq Y) \rightarrow f(Y) \subseteq f(X)$ – few, seldom, hardly; Antimultiplicative: $f(X \cap Y) = f(X) \cup f(Y)$ – not every, not always; Anti-additive: $f(X \cup Y) = f(X) \cap f(Y)$ – nobody, never, nothing; Antimorphic: $f(X \cap Y) = f(X) \cup f(Y) - f(X \cup Y) = f(X) \cap f(Y)$ – not, not the teacher, allerminst) are downwards applicable in the sense that they hold for PIs that are members of a class with a weaker condition.

Thus, we will be able to qualify these items/phrases as weak PPIs. In case the following experimental study shows us that *‘când va face plopul pere și răchita micșunele* (‘when hell freezes over’), *ca dracu* (‘as hell’), *o fărâcă* (‘a little’), *o droaie* (‘a bunch’) cannot scope below *puțini* (‘few’) and *cel mult N* (‘at most N’), we will be forced to consider invalid the results we obtained in this experimental study.

3.3. Experiment 4 – PPIs in the scope of downward-entailing operators

As the theory has it, strong PPIs are ruled out from the scope of downward entailing, antiadditive and antimorphic operators, PPIs of medium strength are ruled out from the scope of antiadditive and antimorphic operators and weak PPIs are ruled out only from the scope of clausemate antimorphic operators. The table under (23), as presented in van der Wouden (1997) and Szabolcsi (2004), summarizes all of the above.

(23) Positive polarity-sensitive Items

Negation/ Operators	Strong	Medium	Weak
Minimal/ Downward entailing (e.g. ‘few’)	*	√	√
Regular/ Antiadditive (e.g. ‘nobody’)	*	*	√
Classical/ Antimorphic (e.g. ‘not’)	*	*	*

While so far we have distinguished between weak and medium strength PPIs, now we wish to see if any of the items/phrases we presented so far encode strong PPI features.

The aim of the fourth experiment is to see if speakers of Romanian rule out or judge as grammatical sentences where PPIs like *‘când va face plopul pere și răchita micșunele* (‘when hell freezes over’), *ca dracu* (‘as hell’), *o fărâcă* (‘a little’), *o droaie* (‘a bunch’) scope below downward entailing operators like *puțini* (‘few’) and *cel mult N* (‘at most N’).

3.3.1. Procedure

With respect to the sensitivity of PPIs to operators like *puțini* (‘few’) and *cel mult N* (‘at most N’), we tested items/ phrases like *‘într-o clipită* (‘in a jiffy’), *cât ai bate din palme* (before you could say Jack Robinson’), *cam* (‘sorta’), *‘când va face plopul pere și răchita micșunele* (‘when hell freezes over’), *ca dracu* (‘as hell’), *o fărâcă* (‘a little’), *o droaie* (‘a bunch’) on 90 participants – 40 students of English philology (Faculty of Foreign Languages and Literatures, University of Bucharest) and 50 other native speakers (friends, family), where we tested the occurrence of the previously mentioned items in the scope of *puțini* (‘few’) and *cel mult N* (‘at most N’).

We chose a two-factorial design with the factors PPI-hood (presumed PPI or non PPI) and Context (scoping under downward-entailing operators or not scoping under downward-entailing operators), which, crossed with each other yielded 4 conditions:

Conditions:

- (1) PPI scoping under downward-entailing operators
- (2) PPI not scoping under downward-entailing operators
- (3) Non polarity sensitive item PSI scoping under downward-entailing operators
- (4) Non polarity sensitive item PSI not scoping under downward-entailing operators.

As for the choice of the non-polarity sensitive item, we chose the non-polarity sensitive item (PSI) from the same category with a meaning as close as possible to the PPI we used in the other sentences. As fillers, we used sentences which featured unlicensed NPIs as the ones presented in (24).

- (24) a. * Cel mult 5 elevi au înțeles lecția încă.
At most 5 students have understood the lesson yet.
‘*At most five students understood the lesson yet.’
- b. * Puțini elevi au ajuns încă.
Few students have arrived yet.
‘*Few students arrived yet.’

The instructions were provided on the questionnaire, and the participants had to mark Yes or No, if the sentences seem correct/ acceptable or not in Romanian. As was previously mentioned we established the threshold of acceptability at 70% for the following examples. The participants read a number of 14 sentences where PPIs scoped under downward-entailing operators and another 56 sentences which featured PPIs which were not scoping under downward-entailing operators, non-PPIs scoping or not scoping under downward-entailing operators and other sentences with unlicensed NPIs.

- (25) a. **Puțini** zmei se vor transforma în prinți când o face
Few dragon-pl. CL-refl. will transform in prince-pl. when will.arch. make
plopul pere și răchita micșunele.
poplar-the pear-pl. and willow-the ten-week stock-pl.
‘Few dragons will turn into princes when hell freezes over.’
- b. **Puțini** politicieni au o fărâmbă de bun simț.
Few politician-pl. have-3rd.p.pl. a crumb of good sense.
‘Few politicians have a bit of decency.’
- c. **Puțini** elevi sunt ca dracu’ de proști.
Few student-pl. are like hell of stupid.
‘Few students are stupid as hell.’
- d. **Puțini** copii sunt cam dezamăgiți de lipsa de atenție din partea
Few child-pl. are sorta disappointed by lack-the of attention from part-the
parintilor.
parent-pl.Gen.
‘Few children are sorta disappointed by their parents’ lack of attention/
involvement.’
- e. **Puțini** moderatori fac o droaie de gafe.
Few presenter-pl. make a bunch of mistakes.
‘Few presenters make tons of mistakes.’
- f. **Puțini** studenți rezolvă problema cât ai bate din palme.
Few student-pl. solve problem-the how much would-2nd.psg. clap from palms
‘Few students can solve the problem before you could say Jack Robinson.’

- g. **Puține** secretare dactilografiază 100 de cuvinte **într-o clipită**.
Few secretary-pl. type 100 of word-pl. in a moment.
'Few secretaries type 100 words in a New York minute.'
- h. **Cel mult 5 adolescenți** sunt **cam** dezorientați în alegerea unei cariere.
At most 5 teenager-pl. are sorta clueless in choosing one-Gen. career.
'At most 5 teenagers are sorta clueless when choosing a career.'
- i. **Cel mult 5 profesori** semnează protestul **într-o clipită**.
At most 5 teacher-pl. sign protest-the in a moment.
'At most 5 teenagers sign the protest in a jiffy.'
- j. **Cel mult 5 elevi** sunt **ca dracu'** de proști.
At most 5 student-pl. are like hell of stupid.
'At most 5 students are stupid as hell.'
- k. **Cel mult 5 reporteri** scriu **o droaie** de tâmpenii.
At most 5 reporter-pl. write a bunch of idiocy-pl.
'At most 5 reporters write tons of idiocies.'
- l. **Cel mult 5 broscoi** se vor transforma în prinți când o face
At most 5 toad-pl. CL-refl. will transform in prince-pl. when will.arch. make
plopul pere și răchita micșunele.
poplar-the pear-pl. and willow-the ten-week stock-pl.
'At most 5 toads will turn into princes when hell freezes over.'
- m. **Cel mult 5 secretare** scriu raportul **cât ai clipi**
At most 5 secretary-pl. write report-the how much would-2nd.p.sg. blink.
'At most 5 secretaries write the report in a New York minute.'
- n. **Cel mult 5 locatari** au **o fărâmbă** de bun simț.
At most 5 tenant-pl. have-3rd.p.pl. a crumb of good sense.
'At most 5 tenants have got a bit of decency.'

The results show that 70% of the participants considered (25a) grammatical and 30% judged it as ungrammatical, 71% of the participants considered (25b) grammatical and 29% judged it as ungrammatical, 74,4% of the participants considered (25c) grammatical and 25,5% judged it as ungrammatical, 74,4% of the participants considered (25d) grammatical and 25,5% judged it as ungrammatical, 80% of the participants considered (25e) grammatical and 20% judged it as ungrammatical, 95,5% of the participants considered (25f) grammatical and 4,4% judged it as ungrammatical, 96,6% of the participants considered (25g) grammatical and 3,3% judged it as ungrammatical, 75,5% of the participants considered (25h) grammatical and 24,4% judged it as ungrammatical, 76,6% of the participants considered (25i) grammatical and 23,3% judged it as ungrammatical, 76,6% of the participants considered (25j) grammatical and 23,3% judged it as ungrammatical, 77,7% of the participants considered (25k) grammatical and 22,2% judged it as ungrammatical, 80% of the participants considered (25l) grammatical and 20% judged it as ungrammatical, 87,7% of the participants considered (25m) grammatical and 12,2% judged it as ungrammatical and 93,3% of the participants considered (25n) grammatical and 6,6% judged it as ungrammatical.

The percentages show that over 70% of the participants judged as grammatical the occurrence of PPIs like '*când va face plopul pere și răchita micșunele*' ('when hell freezes over'), *ca dracu'* ('as hell'), *o fărâmbă* ('a little'), *o droaie* ('a bunch')' below downward entailing operators like *puțini* ('few') and *cel mult N* ('at most N'). To further distinguish between these items/ phrases we can say that *o droaie* ('a bunch') was judged as grammatical (by 80% of the participants) in the scope of like *puțini* ('few') by a greater number of participants than '*când va face plopul pere și răchita micșunele*' ('when hell freezes over') which was considered grammatical in the scope of *puțini* ('few') by 70% of the participants. Also, the percentages show that *o fărâmbă* ('a little') was considered grammatical in the scope

of *cel mult N* ('at most N') by 93,3% of the participants by contrast with *ca dracu* ('as hell'), which was considered grammatical by only 76,6% of the participants.

The hypothesis that: '*când va face plopul pere și răchita micșunele* ('when hell freezes over'), *ca dracu* ('as hell'), *o fărâmă* ('a little'), *o droaie* ('a bunch')' can scope below downward entailing operators like *puțini* ('few') and *cel mult N* ('at most N') is valid. Following the requirements imposed by the hierarchy of negative strength '*când va face plopul pere și răchita micșunele* ('when hell freezes over'), *ca dracu* ('as hell'), *o fărâmă* ('a little'), *o droaie* ('a bunch')' are weak PPIs.

Also, the percentages show that *într-o clipită/ cât ai clipi* (in the blink of an eye) and *cam* ('sorta') can scope below downward entailing operators like *puțini* ('few') and *cel mult N* ('at most N') we must conclude that they are PPIs of medium strength and not strong PPIs. Within this group we notice that the archaic phrase *cât ai clipi* (in the blink of an eye) was considered grammatical (by 87,7% of the participants) in the scope of *cel mult N* ('at most N') by a greater number of participants than *cam* ('sorta'), which was considered grammatical in the scope of *cel mult N* ('at most N') by only 75,5% of the participants. With respect to the occurrence in the scope of *puțini* ('few'), again, surprisingly we notice that the archaic phrase *într-o clipită* (in the blink of an eye) was considered grammatical (by 96,6% of the participants) by a greater number of participants than *cam* ('sorta'), which was considered grammatical in the scope of *puțini* ('few') by only 74,4% of the participants.

In conclusion the aim of the four experiments we presented above was to see if speakers of Romanian judge as grammatical or rule out the occurrence of PPIs in the scope of the antimorphic operator *nu* ('not'), in the scope of antiadditive operators like *fără* ('without') and *refuză* ('refuse') and in the scope of downward entailing operators like *puțini* ('few') and *cel mult N* ('at most N'). In other words, the aim of the experiments was to see what differences there are between typical NPI licensing contexts.

The hypothesis we started out from, according to which PPIs in Romanian cannot scope below the clausemate antimorphic operator *nu* ('not'), is valid. As this is the first experimental study that aimed at classifying PPIs in Romanian with respect to non-assertive contexts, which typically license NPIs, we can conclude that, according to the experimental results obtained, Romanian does not exhibit any strong PPIs, '*când va face plopul pere și răchita micșunele* ('when hell freezes over'), *ca dracu* ('as hell'), *o fărâmă* ('a little'), *o droaie* ('a bunch')' and their synonyms are PPIs of the weak type, while '*într-o clipită/ cât ai clipi* (in the blink of an eye) and *cam* ('sorta') and their synonyms are PPIs of medium strength. With respect to sensitivity to clausemate negation *nu* ('not') and operators like *deloc/ nicidecum* ('not-at-all') we suggest that the examples where we obtained a good percentage of acceptability is motivated by the fact that the respective items/ phrases are frequently broadcast/ used in the media or maybe by the fact that the participants have learned these items/ expressions during their school years. We suggest that the examples where we obtained a lower percentage of acceptability than what we had expected can be motivated by the fact that maybe some of these items/ phrases were not learned by our participants during their school years, maybe by the fact that these items/ expressions are not that frequently used in the media, or maybe the participants read the sentences as an emphatic denial of a similarly phrased statement (some PPIs can appear in the scope of clausemate negation if focused).

4. MORE ON THE DISTRIBUTION OF PPIs

Research on the distributional properties of lexical PPIs in Romanian started with the studies proposed by Szabolcsi (2004) and Falas (2008), where it is claimed that PPIs cannot scope below clausemate negation, just like in the following examples in (26 a, b). We claim that the analysis Szabolcsi proposed extends to Romanian lexical PPIs as well, and thus the examples under (26c - f) are just as felicitous as (26a, b).

- (26) a. * I didn't call **someone**.^{19*} not > some
 b. * **Nu** m-am înscris la un curs oarecare.²⁰ * not > oarecare
 NEG REFL have.1SG registered to a course whatsoever
 'I didn't register for any course.'
 c. * Mondenii **nu** au suflat premiul APTR
 (The T.V. Show) 'Mondenii' not have-3rd.p,pl. blown prize-the APTR
 într-o clipită.
 in a moment.²¹ *not > într-o clipită
 'The T.V. show 'Mondenii' didn't snatch the APTR prize in a New York minute.'
 d. * Noua haină **nu** îi vine ca dracu' lui Traian Bănescu!
 New-the jacket not CL-3rd.p,sg.Dat. come like hell to Traian Basescu
 'The new jacket doesn't suit Traian Basescu as hell!'²² *not > ca dracu
 e. * Tomșani, locul unde **nu** s-a născut "o fărâmă de veșnicie".
 Tomșani, place-the where not CL-refl. have-3rd.p,sg. born a crumb of eternity
 'Tomșani is the place where there wasn't born a bit of eternity.'²³ *not > o fărâmă
 f. * Primele zile am avut 27 grade și **nu** era cam cald.
 First-the day-pl. have-1st.p,sg. had 27 degree-pl. and not was sorta hot
 'In the first few days we had around 27 degrees and it wasn't sorta hot.'²⁴
 *not > cam

The following examples show that besides someone-PPIs and *un N oarecare*, which can scope below **superordinate** negation, lexical PPIs can scope below superordinate negation, as well. Each of the following examples show that it is sufficient for negation to be located in a distinct clause for PPIs to be licit under it, otherwise it is illicit. Therefore, we need to highlight again the fact that lexical PPIs are clearly sensitive to the locality of the potential anti-licenser.²⁵

- (27) a. I don't think that you will invite someone.²⁶ √ not > [CP/IP some
 b. **Nu** cred că s-a înscris la un curs oarecare.²⁷
 NEG think.1SG that REFL-have.3SG registered to a course whatsoever
 'I don't think that he has registered for any course.' √ not > [CP/IP oarecare
 c. **Nu** cred că a ajuns în doi timpi și trei mișcări.
 Not believe-1st.p,sg that have-3rd.p,sg. arrived in two times and three moves.
 'I don't think that he arrived in a jiffy.' √ not > [CP/IP în doi timpi și trei mișcări
 d. **Nu** cred că pot ajunge într-o clipită.
 Not think-1st.p,sg. that can arrive in a moment.
 'I don't think that I can arrive in a New York minute.' √ not > [CP/IP într-o clipită

Someone – type PPIs, *un N oarecare* and lexical PPIs can occur in the scope of negation if there is another operator, like *fiecare* ('every') and *întotdeauna* ('always') intervening

¹⁹ Szabolcsi (2004)

²⁰ Falaus (2008)

²¹ <http://webcache.googleusercontent.com/search?q=cache:BPwWvy0T7gwJ:www.time4news.ro/monden/mondenii-au-suflat-premiul-aptr-intro-clipita/+intr-o+clipita&cd=6&hl=ro&ct=clnk&gl=ro>

²² <http://webcache.googleusercontent.com/search?q=cache:Jb85iQm2H6kJ:www.jurnalul.ro/stire-editorial/ion-cristoiu-noua-haina-ii-vine-ca-dracu-lui-traian-basescu-134534.html+ca+dracu%27&cd=53&hl=ro&ct=clnk&gl=ro>

²³ <http://bibliotecom.blogspot.com/2010/06/tomsani-locul-unde-s-nascut-o-farama-de.html>

²⁴ <http://www.misiuneacasa.ro/forum/viewtopic.php?t=10489&start=120&sid=7d719fa5e6ceff0e14be4babf4b42831>

²⁵ See Homer (2010: 18) for further details on the Licensing Condition of *some*: *Some* is licensed in sentence S only if it is contained in at least one eligible constituent A of S which is not Downwardentailing w.r.t. its position. (<http://www.semanticsarchive.net/Archive/DlmZmM1Y/domains.pdf>)

²⁶ Szabolcsi (2004)

²⁷ Falaus (2008)

(phenomenon known as ‘shielding’). Thus, the following examples show that the relation between PPIs and negation is subject to intervention effects.

- (28) a. I **don’t always** call someone before my arrival.²⁸ $\sqrt{\text{not}} > \text{always} > \text{some}$
 b. Mircea **nu** a plecat de la **fiecare** ședință sub un pretext **oarecare**.²⁹
 Mircea NEG have.3SG left from every meeting under a pretext whatsoever
 ‘Mircea hasn’t left every meeting under some pretext.’ $\sqrt{\text{not}} > \text{every} > \text{oarecare}$
 c. Maria **nu** a plecat de la **fiecare** ședință
 Maria not have-3rd.p.sg leave-past.part. from each meeting
în doi timpi și trei mișcări.
 in two times and three moves.
 ‘Mary didn’t leave from every meeting in a jiffy.’
 $\sqrt{\text{not}} > \text{every} > \text{în doi timpi și trei mișcări}$
 d. Maria **nu** a ajuns **întotdeauna** **în doi timpi și trei mișcări.**
 Maria not have-3rd.p.sg. arrived always in two time-pl. and three move-pl.
 ‘Maria didn’t always arrive in a jiffy.’ $\sqrt{\text{not}} > \text{always} > \text{în doi timpi și trei mișcări}$

In conclusion, in this section we observed that besides the ban to occur in the scope of clausemate negation, which nevertheless was confirmed by the experimental results we obtained in previous sections, lexical PPIs can scope below superordinate negation and are subject to intervention effects. The purpose of the examples proposed in this subsection is to open the ground for argumentation in favour of a unified analysis of polarity items, in the spirit of Szabolcsi (2004) where PPIs are doubly marked NPIs.

4.1. Romanian Positive Polarity Items as double Negative Polarity Items

In this section we analyze PPIs as doubly-marked NPIs, on the basis of the distributional properties of *someone*-type PPIs, as proposed by Szabolcsi (2004). According to the theory we presented in chapter II of this thesis, PPIs, whose licensing implies the checking and activation of two negative features, together with the semantic operator that normally anti-licenses them - form a non-lexical NPI, subject to familiar constraints on NPI-licensing. In other words, ‘whatever property is desired by some NPI will turn out to be detested by some PPI and/or to function as a rescuer thereof’ (Szabolcsi (2004 : 430)).

4.1.1. Interpreting Positive Polarity Items in Romanian

We claim that PPIs are double NPIs, where each NPI-feature represents one negation. We argue that when the PPI occurs in a positive context or in the scope of a downward-entailing operator, the two negations incorporated in the PPI (*something* = $\neg\neg\exists\text{thing}$) remain in situ cancel each other out and the sentence acquires an existential interpretation.

- (29) a. Am întâlnit un prieten **oarecare**.³⁰
 Have-1st.p.sg. met a friend whatsoever.
 ‘I met some friend.’
 $\neg\neg\exists x [\text{friend}(x) \ \& \ \text{I met}(x)]$

²⁸ Szabolcsi (2004)

²⁹ Falaus (2008)

³⁰ Falaus (2008)

- b. **Puțini** studenți au scris un articol **oarecare**.³¹
 Few student-pl. have-3rd.p.pl. written an article whatsoever.
 ‘Few students wrote some article or other.’
 Few $x[\text{student}(x)] \& [\neg \exists y[\text{article}(y) \& \text{wrote}(y)(x)]]$

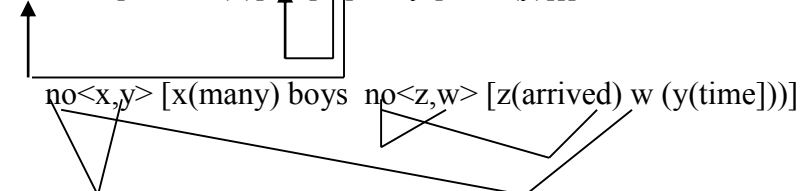
The intuition is that in the previous contexts the semantically negative contexts incorporated in the PPI remain inactive. Whenever the PPI occurs in the immediate scope of clausemate negation, the two semantically negative features incorporated in the PPI get activated, but the problem is that only one of the negative features can be licensed by resumption³² with the higher operator *not*, and this is the reason why the sentence is considered ungrammatical. The only way to rescue the sentence is to embed the configuration in a context where there is another NPI-licenser.³³ Thus, the following sentences are grammatical because the doubly-marked PPIs occurs in the scope of two licensers, specifically: in the scope of *puțini* (‘few’) or *cel mult* (‘at most’) – the downward-entailing operators and in the scope of *nu* (‘not’) – the antimorphic operator – at the same time.

Following Szabolcsi (2004) we propose the following interpretations and structures for lexical PPIs in Romanian. The solution we propose for each of the following examples is to factor out the negative components of the two licensers and to allow each of these licensers to form a binary quantifier with the two negations incorporated in the PPI (negations corresponding to each of the NPI-features incorporated in the PPI). What happens, when we absorb the licenser negation and the licensee negation in one single negative quantifier, is that we eliminate the licensee and the two negations incorporated in the PPI disappear.

- (30) a. **Puțini** student **nu** au ajuns în sala de examen
 Few student-pl. not have-3rd.p.pl. arrive-past.perf. in room-the of exam
în doi timpi și trei mișcări.
 in two times and three moves.

‘Few students didn’t get to the exam room in a jiffy.’

Few $x[\text{student}(x)] \& [\neg [\neg \exists y [\text{time}(y)]]]$



³¹ Falaus (2008)

³² As proposed by Szabolcsi (2004), the semantic mechanism of interpretation for positive polarity is resumptive quantification. The main characteristic of resumptive quantification that makes it important for polarity is that it presupposes quantification over pairs of variables.

³³ As proposed by Szabolcsi (2004): Szabolcsi: “deletion” = entering into resumptive quantification with what Postal calls the deleter.

Some fills gaps in Postal’s system:

(i) Spelling out underlying $\neg \exists$:

- a. one \neg deleted DP-internally, NO (He didn’t say NOthing)
 other \neg stays in place
 b. one \neg deleted DP-internally, any (He didn’t say anything)
 other \neg externally
 c. both \neg ’s stay in place some (He/Few men said something)
 d. both \neg ’s deleted externally some (Few men didn’t say something)

- b. **Puțini** magistrați **nu** au avut **o fărâmbă** de bun simț.
 Few magistrate-pl. not have-3rd.p.pl. had a crumb of good sense.
 ‘Few magistrates didn’t have a bit of decency.’

Few x [magistrate (x)] & [¬ [¬∃ y [quantity(y)]]]
 no<x,y> [x (many) magistrates no<z,w> [z (have) w (y(quantity))]]

- c. **Puțini** profesori **nu** au scris **o droaie** de prostii la examenul final.
 Few teacher-pl. not have-3rd.p.pl. written a bunch of idiocy-pl. at exam-the final.
 ‘Few teachers didn’t write tons of idiocies at the final exam.’

Few x [teacher (x)] & [¬ [¬∃ y [quantity(y)]]]
 no<x,y> [x (many) teachers no<z,w> [z (write) w (y(quantity))]]

In conclusion in this section we proposed that the adequate semantic mechanism in the interpretation of PPIs in Romanian is similar to the one proposed by Szabolcsi (2004), through resumptive quantification.

Thus, the semantically negative contexts incorporated in the PPI remain inactive whenever the PPI occurs in an assertive context or in the scope of a downward entailing operator. But, by contrast, whenever the PPI occurs in the immediate scope of clausemate negation or, in the case of some lexical PPIs in Romanian, in the scope of antiadditive operators, the two semantically negative features incorporated in the PPI get activated. In this case, we are confronted with the situation that only one of the two negative features can be licensed by resumption with the higher operator *not*. The only way to rescue the sentence, from being ungrammatical, is to embed the configuration in a context where there is another NPI-licenser. Thus, in this section we managed to propose relevant structures and modes of interpretation for lexical PPIs in Romanian.

5. CONCLUSIONS

First we explained the distribution of PPIs in terms of their inherent meaning/ lexical semantics. We analysed PPIs as scalar operators.

Second, since the distribution of PPIs doesn’t follow entirely from their inherent lexical semantics we explained the distribution of PPIs in licensing terms, building on the NPI – PPI parallelism. We thus adopted Szabolcsi’s (2004) proposal, where PPIs like ‘someone/ something’ simultaneously need to be licensed by two non-assertive contexts:

- (1) they must be in the scope of an additive operator (for example ‘before/ refuse/ deny/ nobody’) and
- (2) they must be in the scope of a downward entailing operator (for example ‘at most/ few/ several/ hardly’) (cf. van der Wouden’s typology, as was shown in chapter III).

This paper proposed that PPIs do not occur in the immediate scope of a clausemate antimorphic operator³⁴ (classical negation ‘not’) AM-Op (‘*Nu m-am înscris la un curs oarecare.*’ where *not > oarecare³⁵), unless the [AM-Op > PPI] unit itself is in an NPI-

³⁴ As previously proposed by Falaus (2008).

³⁵ Example borrowed from Falaus (2008).

licensing context (*‘Am ajuns cunoscut **nu fără** un merit oarecare.’* where $\sqrt{\text{not}} > \text{without} > \text{oarecare}$), where “immediate” means that there is no scopal intervener.³⁶

The paper also presented a classification of PPIs with respect to the class of non – assertive contexts, the class of contexts which license negative polarity items. The aim of this chapter was also that of providing experimental evidence for the line of analysis that we proposed. Thus, the experiments confirmed the hypothesis that speakers of Romanian can rule out the occurrence of PPIs in the scope of the antimorphic operator *nu* (‘not’) and operators like *deloc/ nicidecum* (‘not at all’).

As this is the first experimental study that aimed at classifying PPIs in Romanian with respect to non-assertive contexts, which typically license NPIs, we can conclude that, according to the experimental results obtained, Romanian does not exhibit any strong PPIs, as there are no PPIs that cannot scope below downward-entailing operators like *puțini* (‘few’) and *cel mult* (‘at most’). Another finding is that *‘când va face ploaie și răchita micșunele* (‘when hell freezes over’), *ca dracu* (‘as hell’), *o fărâșă* (‘a little’), *o droaie* (‘a bunch’) and their synonyms are PPIs of the weak type, because they are able to scope below downward-entailing operators like *puțini* (‘few’) and *cel mult* (‘at most’) and antiadditive operators like *refuză* (‘refuse’) and *fără* (‘without’), but they cannot scope below the antimorphic operator *nu* (‘not’). We also found out that *‘într-o clipită/ cât ai clipi* (in the blink of an eye) and *cam* (‘sorta’) and their synonyms are PPIs of medium strength, because they are able to scope below downward-entailing operators like *puțini* (‘few’) and *cel mult* (‘at most’), but they cannot scope below antiadditive operators like *refuză* (‘refuse’) and *fără* (‘without’), but they cannot scope below the antimorphic operator *nu* (‘not’).

With respect to sensitivity to clausemate negation *nu* (‘not’) and operators like *deloc/ nicidecum* (‘not-at-all’) we suggest that the examples where we obtained a good percentage of acceptability is motivated by the fact that the respective items/ phrases are frequently broadcast/ used in the media or maybe by the fact that the participants have learned these items/ expressions during their school years. We suggest that the examples where we obtained a lower percentage of acceptability than what we had expected can be motivated by the fact that maybe some of these items/ phrases were not learned by our participants during their school years, maybe by the fact that these items/ expressions are not that frequently used in the media, or maybe the participants read the sentences as an emphatic denial of a similarly phrased statement (some PPIs can appear in the scope of clausemate negation if focused).

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³⁶ Here and elsewhere we do not interpret clausemate negation as emphatic denial of a similarly phrased statement.

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