How different types of PPIs are licensed in Romanian*

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Abstract. The aim of this paper is to present experimental evidence with native Romanian speakers with respect to the licensing of lexical positive polarity items in Romanian. This study works in the framework proposed by Szabolcsi (2004) and van der Wouden (1997) and shows that most PPIs in Romanian are compatible with downward entailing operators (puţini - 'few', cel mult N - 'at most N' etc.) and with anti-additive operators (fără - 'without', neagă - 'deny' etc.) and cannot occur in the immediate scope\(^1\) of clausemate negation, the antimorphic operator nu – 'not'\(^2\). This

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\(^1\) "The scope of an operator is the domain within which it has the ability to affect the interpretation of other expressions.

Some uncontroversial examples of an operator having scope over an expression and affecting some aspect of its interpretation are as follows:

<table>
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<th>Quantifier -- quantifier</th>
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<td>Quantifier -- pronoun</td>
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<td>Quantifier -- negative polarity item (NPI)</td>
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The notion of scope in (1) is quite similar to its counterpart in logical syntax. The scope of a logical operator is that segment of the formula, demarcated by parentheses (possibly suppressed when notational conventions make them recoverable) over which the operator can have a semantic effect. In (ia), only the \(x\) in \(fx\) is bound by the universal quantifier; in (ib), only the conjunction \(fa \land ga\) is affected by negation:

(a) \(\forall x[fx \land ga] \land hx\)

(b) \(\neg(fa \land ga) \lor \exists x[hx]\)

Definition (1) is syntactic in that it identifies the scope of an operator as the domain within which it has the potential to affect another expression's interpretation. Just as in logic, it does not require that the expressions within this domain be actually affected in any tangible way. Notice that in (ia), \(ga\) is within the universal quantifier's scope but is not affected by it, because it contains no free occurrence of the variable \(x\). Now compare (ii) with (iii):

(ii) I was not reading a book (when you came in).

'No book is such that I was reading it.'

(iii) A boy / Most boys did not laugh.

'There is a boy / a majority of the boys who did not laugh.'

When negation has an indefinite in its scope, as in (ii), it clearly affects its interpretation in that the existence of a relevant entity can no longer be inferred. When negation is within what normally counts as the subject quantifier's scope, as in (iii), negation is in no way affected by that quantifier, simply because no aspect of the interpretation of negation can ever be affected." (Szabolcsi, 1999)
squirb shows that ‘intr-o clipită/ cât ai clipi (in the blink of an eye) and cam (‘sorta’) and their synonyms are PPIs of medium strength, which means that they cannot scope below anti-additive operators like fără – ‘without’, neagă – ‘deny’, refuză – ‘refuse’. This paper claims that the licensing of PPIs involves the checking and activation of two negative features; following Szabolcsi (2004) PPIs are double NPIs, where each NPI-feature incorporated in the PPI represents one negation, thus something = ¬¬thing. 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 resumption 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.3

Keywords. downward entailing, antiadditive, antimorphic, lexical PPIs, clausemate negation

1. Previous research

Van der Wouden proposes to classify PSIs (Polarity Sensitive Items) and distinguish between them with the help of the following “laws of polarity” (van der Wouden: 130)

A. Strong PPIs are incompatible with all monotone decreasing contexts.
B. PPIs of medium strength are compatible with downward monotone contexts but incompatible with anti-additive ones.
C. Weak PPIs are compatible with downward monotonic and anti-additive contexts, but incompatible with antimorphic ones.

Szabolcsi (2004) argues that PPIs like ‘someone/ something’ are double NPIs, they have both a strong NPI feature, like ‘yet’, which requires a clausemate antiadditive licensor, without intervention and a weak NPI feature, like ‘ever’, which requires a DE operator (not necessarily clausemate), without intervention.

2. Distribution of PPIs in Romanian

Example (1) shows that PPIs cannot scope below clausemate negation.

2 A 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: \( f(X \cap Y) = f(X) \cup f(Y) \)

3 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).
Experimental evidence\(^4\) shows that 15% participants consider the example grammatical and 85% consider it as ungrammatical.

\(^4\) The aim of the experiments presented in this study 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 these experiments is to classify lexical PPIs as to how prototypical they are. The hypotheses tested in this study were as follows:

- that no PPI can scope below *nu* (‘not’) and other operators like *deloc*, *nicidecum* (‘not’, ‘not-at-all’).
- Most PPIs occur in the Scope of *fărâ* (‘without’) and *refuză* (‘refuse’) – Antiadditive Operators
- If *intr-o clipită*/*cât aí 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. If *intr-o clipită*/*cât aí 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.
- All PPIs in Romanian scope below downward-entailing operators like *puțini* – ‘few’, *cel mult N* – ‘at most N’
- 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 the first experiment, the participants were asked to perform grammaticality judgement tasks, evaluating 156 sentences, out of which 39 were assertive contexts and 39 were negative contexts and 78 were filler sentences. 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 PPIs are grammatical.

In the second experiment, a control experiment, the participants were asked to perform grammaticality judgement tasks, evaluating 56 sentences, out of which 14 were assertive contexts and 14 were negative contexts and 28 were filler sentences. 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 PPIs are grammatical.

With respect to the PPIs’ sensitivity to antiadditive operators like *fărâ* (‘without’) and to the sensitivity of PPIs to downward-entailing operators like *puțini* – ‘few’, *cel mult N* – ‘at most N’ we tested items/ phrases like *‘intr-o clipită* (‘in a jiffy’), *cât aí clipi* (before you could say Jack Robinson’), *cam* (‘sorta’) in 36 sentences, out of which 9 sentences contained PPIs in the scope of antiadditive operators and 9 sentences in the scope of downward entailing operators and 18 filler sentences. 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.
b. "Trimit scrisorile deloc intr-o cliptă.
Send-1st.p.sg. letter-pl.-the at all in a moment.
*I will send the letters in a jiffy at all.'

Experimental evidence shows that 1,1% of the participants considered the example grammatical and 98,8% judged it as ungrammatical.

c. "Ajung la serviciu nicideon intr-o cliptă.
Get-1st.p.sg. at work not-at-all in a moment.
*I get to work in a jiffy not-at-all.'

Experimental evidence shows that 23,3% of the participants considered this example grammatical and 76,6% judged it as ungrammatical.

Example (2) shows that lexical PPIs can scope below superordinate negation.

(2) Nu cred că a ajuns intr-o cliptă.
Not believe-lst.p.sg that have-3rd.p.sg. arrived in a moment.
'I don’t think that he arrived in a jiffy.' √ not >[CP/IP intr-o cliptă

Example (3) shows that lexical PPIs can occur in the scope of negation if there is another operator, like fiecare ('every') or intotdeauna ('always') intervening.

(3) Maria nu a plecat de la fiecare şedinţă intr-o cliptă.
Maria not have-3rd.p.sg leave-past.part. from each meeting in a moment.
'Mary didn’t leave from every meeting in a jiffy.' √ not>every>intr-o cliptă

The aim of the last experiment was to see whether speakers of Romanian judge as grammatical or rule out the configurations where lexical PPIs in Romanian are doubly marked NPIs. In other words, the aim is to see whether Romanian speakers consider grammatical configurations where the PPI occurs in the scope of two licensers, specifically: in the scope of a downward entailing operator - cel mult N ('at most N') and pufini ('few') - and in the scope of the clausemate antimorphic operator - nu ('not') - at the same time. The hypothesis was that lexical PPIs in Romanian are felicitous in the scope of the clausemate antimorphic operator only if they are embedded in a configuration that features a downward entailing operator, as well. We tested items/ phrases like 'intr-o cliptă ('in a jiffy'), căt ai clipi (before you could say Jack Robinson'), cam ('sorta') in 24 sentences, out of which 6 sentences contained PPIs in the scope of cel mult N ('at most N') and in the scope of the clausemate antimorphic operator - nu ('not') - at the same time, 6 sentences contained PPIs in the scope of pufini ('few') and in the scope of the clausemate antimorphic operator - nu ('not') - at the same time, and the rest of 12 sentences were filler sentences.

All of the above mentioned experimental data were tested on 90 participants - 40 students of English philology (Faculty of Foreign Languages and Literatures, University of Bucharest) and 50 other native speakers (friends, family), aged 19-70 (mean age - 20 for the 50 students of English philology; mean age - 40 for the 50 other native speakers), with a ratio approximately 50/ 50 male – female participants.

As was mentioned before, the instructions were provided on the questionnaire, the participants had to mark Mark Yes or No, if the sentences seem correct or not in Romanian and all the participants were rewarded at the end with sweets. All the data was gathered during three years of research.
2.1. Licensing of PPIs in negative contexts

Most PPIs in Romanian are weak and occur in the scope of the anti-additive operator  
\( \text{fără} \) – ‘without’ or in the scope of  \( \text{refuză} \) – ‘refuse’, but not  \( \text{intr-o clipită} \), which is a medium strength PPI as example (4) shows.

(4)  "Concurenții au așteptat în culise  
\( \text{fără} \) a se emoționa  \( \text{intr-o clipită} \)."  
"The contestants waited backstage without getting nervous in a jiffy.'

Experimental evidence shows that 10% of the participants considered this example grammatical and 90% judged it as ungrammatical.

All PPIs in Romanian scope below downward-entailing operators like  \( \text{puțini} \) – ‘few’,  \( \text{cel mult N} \) – ‘at most N’ (remember: in Romanian there are no strong PPIs), just like  \( \text{intr-o clipită} \) does.

(5)  \( \text{Putine secretare} \) dactilografiază 100 de cuvinte  \( \text{intr-o clipită} \).  
Few secretaries type 100 words in a moment.

Experimental evidence shows that 96.6% of the participants considered this sentence grammatical and 3.3% judged it as ungrammatical.

Whenever the PPI occurs in a positive context or in the scope of a downward-entailing operator, the two negations incorporated in the PPI remain in situ cancel each other out and the sentence acquires an existential interpretation.

(6) a.  \( \text{Am} \) intalnit un prieten oarecare.  
\( \text{Have-1st.p.sg. met a friend whatsoever.} \)  
'I met some friend.'
\( \neg \exists x [\text{friend(x) & I met(x)}] \)

b.  \( \text{Putini studenti} \) au scris un articol oarecare.  
Few students wrote some article whatsoever.
'Few students wrote some article or other.'
\( \neg \forall y [\text{article(y) & wrote(y)(x)}] \)

According to Szabolcsi (2004), 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.

(7)  \( \text{Putini studenti} \) nu au ajuns in sala  
\( \text{Few student-pl. not have-3rd.p.pl. arrive-past.perf. in room-the of exam} \)  
\( \text{intr-o clipită} \).  
'Few students didn’t get to the exam room in a jiffy.'
Experimental evidence shows that 86% of the participants considered the sentence grammatical and 14% judged it ungrammatical.

3. Conclusion

The present study showed that native Romanian speakers are sensitive to the occurrence of lexical PPIs in different types of negative contexts. Another important conclusion of the experiments is that lexical PPIs in Romanian show a similar pattern of behaviour with something-type operators discussed by Szabolcsi (2004). Thus, 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 resumption 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.

Selected References