THE SYSTEM OF POLARITY WITHIN FUNCTIONAL FRAMEWORK

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Abstract:In this paper we are concerned with the interpersonal metafunction which analyses the communicative exchange. We have to mention that we follow Halliday's systemic model, using the meta-language set up by him. We discuss the concepts of of Modality, Mood and Polarity, by taking into account their defining characteristics: Modality as the "speaker's judgment, or request of the judgment of the listener, on the status of what is being said", Mood as the grammaticalized expression of modality and Polarity as the opposite between positive and negative.
First of all, we must point out that speakers have basically two options to express their attitude towards what they are saying: modal auxiliaries and modal adjuncts. The domain of modality encompasses a wide range of semantic shades: obligatory, necessary, hypothetically, jussive etc., which have the purpose to add a supplementary sense to the most neutral semantic value of a sentence.
The paper is divided into two parts. In the first part, we point out that mood and modality are often discussed together, as they seem intimately connected. The second part analyses the most important means of expressing the concepts of polarity, namely positive and negative polarity items, their distribution and their licenses. The examples provided in this paper and their negation raises a number of questions that are in need for explanation.
We propose in this paper a brief overview of different possibilities for expressing polarity, discussing their values and degrees of commitment and responsibility.

Keywords: positive polarity items, negative polarity items, polarity, modality

I. General remarks

The notion of "polarity" has been in the focus of linguistic theories that were trying to deal with the vast amount of problems that this domain of study raises. Halliday claims that "polarity is the choice between positive and negative, as in is/ isn't, do/ don't " (Halliday, 1970: 338). When taking into consideration the way polarity works in English, it must be pointed out the fact that it is encoded in the finite verbal operator, which in its turn has two forms: a positive one and a negative one. Furthermore, the negative is based upon a morpheme (as a distinct morpheme n't or not) that is included in the structure of the verbal group not in the structure of the clause.

As we know, negative sentences are more restricted and less frequent than positive sentences; they tend to mark fewer grammatical distinctions and it is common to find restrictions on the scope of adverbs under negation, on the use of referential indefinites under negation, and on the use of negation in a range of complex constructions. If we proceed with a contrastive study between negation and affirmation, we could notice that affirmation is associated with truth and negation with falsity. Affirmative sentences are objective and relate directly to the world; negative sentences are subjective and relate merely to the affirmative sentences which they deny.

When analysing both types of sentences (affirmative and negative) we could point out that affirmative sentences are objective and relate directly to the world whereas negative sentences

are subjective and relate merely to the affirmative sentences which they deny. Taking into account the study of language as a system of communication, it results that the differences between negative and positive sentences are seen from a functional point of view, and, at the same time, we can notice that they perform different speech acts, in spite of the fact that they convey the same proposition". Regarding the distribution of both types of sentences, it is pointed out that negative sentences are characterized by more constraints than the positive ones. The same idea is supported by Allwood (1999) who notices that negative sentences, in order to become relevant, are bound to meet more and stronger requirements in comparison with the positive counterparts by negative indefinites. By their nature, positive sentences are neutrally informative, whereas their corresponding negatives are subject to responses, corrections of false assumptions. The examples below are illustrative for the way the interpretations work for both types of sentences:

e.g. *It's seven o'clock./ It isn't seven o'clock.*

As we can notice, the occurrence of the negator in the second example has the role to correct the information contained in the positive sentence, having more to be true than the positive one. On the contrary, if this constitutes an odd reply to the question *What is the time*? we remark that this is an improper answer as it does not provide the information asked for. The example below reveals the vagueness in interpreting its meaning.

e.g. *We haven't seen an accident.*

This sentence is not only vague but also very ambiguous. It could be paraphrased as:

e..g *What we have seen was not an accident.* (1)

During the whole journey we haven't seen a single accident. (2)

Another interpretation, beside the one made in discourse analysis, belongs to Halliday who classifies polarity (positive/ negative) as a binary system with an unmarked/ marked term. But he does not limit to this basic view of polarity as dichotomy and as a result of being inspired by the idea of the role of gradability in natural language, he also speculates that there are "intermediate degrees between yes and no : various kinds of indeterminacy that fall in between, like 'sometimes' or 'maybe'. (Halliday, 1994: 88) From this idea it can be drawn the conclusion that polarity relies on an option between positive and negative that is influenced by the presence of **not.**

II. Means of Realization of Polarity System

In this paper we are going to discuss the more important means of realization of polarity system, paying attention to the most frequently used ones.

1.1. Polarity items

Natural languages have two broad categories of polarity sensitive expressions: negative polarity items and positive polarity items. Szabolcsi (2004: 430) claims that "whatever property is desired by some negative polarity items will turn out to be detested by some positive polarity items".

Concerning the definition of polarity items, it must be pointed that there is actually no standard definition, being constructions whose use or interpretation is sensitive to polarity.

Polarity items are characterized by an inherent polarity and restrict their occurrence to certain types of sentence. We shall take as an example quantifier *any* and its compounds: *anyone, anything, anywhere*. There are two different uses of this quantifier: universal quantifier with the

meaning similar to *every* (i.e. *You can have everycake you like*) and the second use of *any r*egards it as a partitive quantifier which is similar to *some* and can be unstressed. Words and expressions that can occur only in affirmative sentences are called "affirmative polarity items" (now usually called "positive polarity items", PPIs), and those that can occur only in negative sentences are called "negative polarity items" (NPIs).

Regarding the most well-known and widely observed class of polarity items, we must include in our study on polarity the minimizers—NPIs in which a stereotypically minimal unit is employed to render an emphatic negation. Minimizers typically take the form of an indefinite NP which either combines freely with different predicates (*a jot, a red cent, a soul, a stitch of clothing, a stick of furniture*), or else is incorporated in a VP idiom (*lift a finger, sleep a wink, bat an eyelid, breathe a word, miss a beat, crack a book*). Moreover, minimizersare abundant within languages and widespread across languages, and their emphatic force is exemplary of an important trend found in many polarity items.

In his study, Krifka (1992) argues that while many NPIs denote minimal units of some sort, PPIs typically involve maximal units: for example, high scalar degree adverbs—forms like *utterly, thoroughly* are PPIs (cf. Hinds: 1974; Klein: 1998). Krifka proposes that polarity items are interpreted with respect to a set of alternatives, and that their sensitivity reflects a need to occur in contexts where they will be informative with respect to these alternatives.

1.1.1 Negative polarity items

Regarding their occurrence and distribution, negative polarity items (NPIs) are to be found in many languages and they typically occur in a specific class of contexts within the scope of negation.

A syntactic theory on negative polarity items pertains to Klima (1964) who asserted that NPIs must be "in concord with" or as it is claimed in recent studies "c-commanded by a *trigger"* (an overt negation or an affective element such as : the verb 'surprised'). According to a standard observation, NPIs must occur under the syntactic scope of their licensors that are downward entailing operators: e.g. expressions like *yet, at all* are licensed by downward - entailing operators: *anything,nobody, rarely* (Ladusaw, 1979).

e.g. *John didn't say anything.*
We were surprised that John said anything.

Another view on NPIs came on the part of Baker (1970) who eliminated "affective elements" (here the verb "surprise") and reduced the set of triggers to negation and he also claimed that NPIs may be licensed derivately by semantic entailment. The second example can be paraphrased as *We expected that John wouldn't say anything.*

Another situation regards the presence of negative polarity items in sentences that are not syntactically negative:

e.g. *I doubt his son is* ***all that intelligent***
Scarcely ***anybody*** *can pass the chemistry test.*
He disliked doing ***any****more than necessary.*

By approaching the usage of these words Klima (1964) states that *doubt, scarcely,* and *dislike* incorporate a phonologically empty "negative affix" which carries the feature *neg* and characterizes these sentences as being negative "in a deeper syntactic sense". The negative polarity items are allowed, since they occur in the presence of *neg,* and *Indef*-incorporation is

available to create them. On the other hand, Klima notices also that the words *any* and *ever* can also be licensed by some environments that cannot be claimed to be negative questions, restrictors of quantifiers and antecedents of conditionals:

e.g. *Have you ever been to Paris?*
If you have any problems, please let us know.
Everyone who has any interest in literature should get this book.

1.1.2 Negative Polarity Items and their Licensing

In what the origin the term "negative polarity items" (NPIs) is concerned, we must point out that is to be found in the works of Baker (1970). He considers that most words and idioms may occur in both affirmative and negative sentences, there are a handful which might be termed 'polarity-sensitive', in that they may occur only in affirmative, or only in negative sentences. Words and expressions that can occur only in affirmative sentences are called "affirmative polarity items" (now usually called "positive polarity items", PPIs), and those that can occur only in negative sentences are called "negative polarity items" (NPIs). Both types of items are 'polarity-sensitive', in that they may occur only in affirmative, or only in negative sentences.

In the class of negative polarity items we may include the following list: the determiner *any*, the adverbs *ever, anymore, yet, in years, much, too, until*. Moreover, NPs such as " a thin dime", "a red cent", verbs and verb phrase idioms: " budge an inch", " lift a finger", "have a hope in hell", " cut (any) ice", "hold a candle to", and so forth.

e.g. *Michael didn't speak **any** Italian.*
*They didn't **lift a finger** to help the injured woman.*
*There hasn't been an accident **in years**.*
*I haven't **ever** cheated on him.*
*She doesn't **much** like them.*

As it can be noticed, these expressions are allowed only in negative environments, (negative sentences) and are denied acceptability in positive counterparts:

e.g. *Michael spoke any Italian.*
They lifted a finger to help the injured woman.
There has been an accident in years.
I have ever cheated on him.
She much likes them.
John didn't invite any students.
Any students weren't invited by John.

In addition to overt negation, we should add that NPIs are also licensed in English by a number of expressions which are listed below:

(i) indefinite pronouns

e.g. *Few people have any interest in this.*
Some people have any interest in this.
John is too tired to give a damn.
John is tired enough to give a damn.
Only John has a hope in hell of passing.
Even John has a hope in hell of passing.

(ii) adversative predicates

e.g. *She was surprised that there was any food left.*
She was sure that there was any food left.
(iii) antecedent of Conditional:
If you steal any food they will arrest you.
If you steal food, they will ever arrest you.
(iv) comparatives
e.g. *He was taller than we ever thought he will be.*
He was so tall that we ever thought he would bump his head.
(v) relative clauses headed by a universal quantifier
e.g. *Everyone who knows a damn thing about English knows that it's an SVO language.*
Someone who knows a damn thing about English knows that it's an SVO language.
(vi) questions:
e.g. *Have you ever met George?*
You have ever met George.
Who gives a damn about Bill?
Bob gives a damn about Bill.

What we should notice in the examples above is the ungrammaticality regarding the distribution of NPIs that should be captured by grammatical rules. Regarding the NPI acceptability, we should point out that it varies considerably as a function of the inherent strength of the NPI. That is, weak NPIs such as *any* are acceptable in a much wider range of environments than strict NPIs such as *until*.

Klima (1964) proposed an additional rule deriving NPIs from positive counterparts: *any* for example was derived from *some*; *yet* from *already*; *anymore* from still.[1]

We should add that this rule applies to expressions preceded and commanded by an overt negation or by an affective element: we have to take into consideration that all the examples bear lexical feature specification [+ affective]. However, this analysis confronted a number of difficulties that we will consider here: not all NPIs have positive counterparts and some contexts allow both NPIs and their positive counterparts, although with different meaning.

Trying to deal with these problems in his account of polarity licensing, Baker (1970) observed that positive polarity expressions which are usually denied acceptability in negative contexts, may occur in sentences like those that are given below:

e.g. *Someone isn't still holed up in this cave.* (1.a)
You can't convince me that someone isn't still holed up in this cave. (1.b)

Furthermore, Baker proposed that positive polarity expression is licensed by the entailment from 1.b to the example 2 below:

e.g. *I firmly believe that someone is still holed up in this cave*. (2)

From the examples provided above we can draw the conclusion that licensing expressions for NPIs license NPIs by virtue of negative entailments. For instance, *too* is a licensing expression because of entailment we can notice in the examples 3 and 4:

e.g. *John is too tired to give a damn.* (3)

[1] Klima, E. S. 1964. *Negation in English*. In Jerry A. Fodor and Jerrold J. Katz, *The Structure of Language*. New York: Prentice Hall

John doesn't give a damn. (4)

We shall conclude that negative polarity expressions are appropriate in structures within the scope of negation, whereas affirmative-polarity items are appropriate elsewhere, being identical with Klima 's and Jackendoff's rules. As a result, the scope of negation is to be defined over surface structure.

From here, it results that NPI licensing is a two-stage process reflected like this: either the sentence containing the NPI must contain an overt negation commanding the NPI, or else the NPI must be licensed by entailment. Furthermore, NPIs also occur in other types of contexts that include first argument position of universal quantifiers, interrogatives, the scope of items such as at most DPs or semi-negative expressions like *hardly*:

e.g. *Every student who comes to school by car is tasteless.* (5)
John hardly speaks any French. (6)
At most hundred people came to the demonstration. (7)

Regarding the licensing of NPIs, Fauconnier (1979) and Ladusaw (1980) claimed that they are licensed in contexts that are scale-reversing or downward entailing and that in their turn allow inferences from more general to more specific properties. NPIs have to occur in the immediate scope of their licenser . The following sentence illustrates that only the narrow-scope reading of *every party* is possible, not the wide-scope reading (i.e. there are no earrings that Mary wore to every the party.) not the wide-scope reading (i.e. it was not to every party that Mary wore earrings.)

e.g. *Mary didn't wear any earrings to every party*.

1.2. Negative indefinites

We must point out that a class of expressions closely related to NPIs is negative indefinites. In English, a sentence containing an NPI indefinite and the licensing negation is more or less equivalent to one with a negative indefinite:

e.g. *I didn't see anyone. / I saw no-one.*

In order to recognize the negativity of a sentence, Jackendoff (1992) provides the following explanations. Thus, a sentence is an instance of sentence negation if exists a paraphrase (disregarding presuppositions): *It is not sothat [X-Y]*. The negative operator is extracted from the sentence and then put in front of it where it denies the whole proposition.If we make a comparison between this paraphrasing approach and some empirical tests for negative sentences that are widely recognized among linguists (Quirk et al. 1985), here considering the reverse polarity of the question tag (*is it/isn't it?*), we come to the conclusion that the presence of an explicitly negative element in the sentence is not a necessary condition of negativity, as it is illustrated below:

e.g. *He was hardly audible, was he?*
**He was hardly audible, wasn't he?*

Another author, Klima (1964) considers the following for testing negative-sentence: either-conjoining, the negative-appositive tag *not even* and the *neith*er-tag. On the other hand, the example bellow illustrates that the presence of a negator does not guarantee for the negativization of that specific sentence:

e.g. *With no job I could be quite happy.*

1.3. Positive polarity items

Positive polarity items are expressions that are outside the scope of negation and thus barred from negative sentences. The most common case when PPIs are encountered is a result of the fact that are anti-licensed by sentential negation: i.e. they cannot be interpreted in the scope of sentential negation.

For example, in sentence 1.a below, the existential indefinite introduced by the positive polarity item *some* can only be interpreted with wide scope relative to negation. We can interpret this by pointing out that among these books there were some they did not find, but not that they found none of them. Example 1.b is unacceptable, as word order prevents the positive polarity item *sometimes* from taking semantic scope over the preceding negation.

e.g. *They didn't find some of these books.* (1.a)
** They didn't sometimes complain*. (1.b)

Another situation regards that positive polarity items can also be anti-licensed by other negative expressions, such as quantifiers introduced by *no.* Sentence 2.a below means that some of these types were found by no one, but not that no-one found any of them. Example 2.b is unacceptable, as the position of the adverb prevents it from taking semantic scope over the subject.

e.g. *No one found some of these typos.* (2.a)
**No one sometimes complained*. (2.b)

Ladusaw (1979) states that positive polarity items can often be interpreted in the scope of a potential anti-licenser as long as they are not interpreted in its *immediate* scope. Baker (1970) was the first who identified PPIs as a class. The list provided by the literature includes expressions like: *some, already, would rather* and speaker-oriented adverbs:

e.g. *John bought some books.*
Susan would rather stay at home and watch TV.
Unfortunately, John died.
He is far taller than his uncle.

As we can observe, *some books* exhibits the scope outside negation that *any* lacks. A context where two books were bought by Bill and ten books were not, would verify *John didn't buy some books* but falsify *John didn't buy any books*. PPIs like *some* are thus the opposite of NPIs in terms of referential properties: they tend to be specific, and take wide scope.

Baker observed that a negative clause with a positive polarity item that is unacceptable in isolation can be acceptable if it is a part of a larger negative sentence. What is more, this phenomenon is called by Baker "polarity reversal" whereas Szabolcsi calls it "rescuing".

e.g. **He wouldn't rather be in Montpellier.* (1.a)
There isn't anybody in this camp who wouldn't rather be in Montpellier. (1.b)
They couldn't do pretty well on that exam. (2.a)
George has never come across anyone who couldn't do pretty well on that exam.(2.b)

We may assume that all the operators in 3.a below, namely the negation, the quantificational adverb *always*, and the indefinite, can be interpreted with surface scope. Thus,

the sentence can be read as denying that they always found books. And in 3.b, the indefinite can be interpreted within the embedded clause, that is, the embedded clause can be understood as expressing the proposition that they found books.

e.g. *They didn't always find some books.* (3.a)
I didn't say they found some books. (3.b)

Conclusions

The present paperapproaches the concept of polarity by presenting some important theories regarding the way negation works in English and the means it is achieved. We have also dealt with the conditions that determine the occurrence of negative and positive polarity items. As a result, we provide an account of the conditions under which NPIs may be triggered by negation: these will be sufficient but not necessary conditions on NPI acceptability.

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