

The meaning of going marked: A neo-Gricean pragmatic analysis of the alternate set {zero vs. full pronoun/anaphor} in Modern Greek

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ΠΕΡΙΛΗΨΗ

Η Ελληνική αποτελεί τυπική γλώσσα απαλοιφής υποκειμένου (pro-drop language), δηλαδή επιτρέπει την παράλειψη των αντωνυμιών στη θέση του εμφανούς υποκειμένου προτάσεων. Παρόλο που γενικά προτιμώνται δομές με μηδενικό υποκείμενο, υπάρχει και η επιλογή μιας πιο χαρακτηρισμένης αναφορικής έκφρασης όπως ο πλήρης αντωνυμικός τύπος *αυτός* ή το αναφορικό στοιχείο *ο ίδιος*. Το γεγονός αυτό εγείρει δύο σημαντικά ζητήματα: (α) Τι συμβαίνει όταν η αντωνυμία *αυτός* ή το αναφορικό στοιχείο *ο ίδιος* χρησιμοποιούνται αντί της μηδενικής αντωνυμίας; και (β) Ποιες είναι οι αρχές που ακολουθούν οι ομιλητές στη χρήση και ερμηνεία αυτών των αναφορικών εκφράσεων; Με βάση θεωρίες όπως των Levinson (1987, 1991, 2000) και Huang (2000, 2007) υποστηρίζεται ότι η προτίμηση για εκπεφρασμένη αναφορική έκφραση αντί της μηδενικής σχετίζεται με το αξίωμα του τρόπου του Levinson «μην χρησιμοποιείς μια περίπλοκη, ασαφή ή μαρκαρισμένη έκφραση χωρίς λόγο». Μια λύση αποτελεί η πρόταση να θεωρηθεί ότι αυτός ο «λόγος» σχετίζεται με μια διαζευκτική ή μια πιο μαρκαρισμένη ερμηνεία με όρους «μη προβλεψιμότητας».

KEYWORDS: implicature, neo-Gricean pragmatic theory, overt pronoun, point of view, zero pronoun

1. Introduction: Some basic facts

Modern Greek is a typical pro-drop language and, as a result, allows binding of a phonologically empty pronoun, typically identified as *pro* (pro-drop parameter).¹ Consider the following examples.

- (1) Ο Janis_i ipe oti Ø_i tha djavazi perisotero
the John said that (he) will study more
'John said that he will study more.'
- (2) Ø pai kathe mera sto sxolio
(s/he) go-3sg every day to the school
'She/he goes to school everyday.'

Nevertheless, since pro-dropping is only a general tendency, it means that a morphologically realised item can equally occupy the relevant slot in the clause. Among all potential candidates for filling in this slot, I will mainly focus on the full pronoun form *aftos* (him) and the anaphor *o idjos* (the same).

The pronoun *aftos* is the full or strong form of the personal pronoun.² The full pronoun mainly occurs in subject positions and is non-locally³ bound. As already mentioned, full pronouns, when in subject position, are optional in their occurrence and, as Joseph & Philippaki-Warburton (1987), note their presence is almost always associated with emphasis or contrast. *O idjos* is a long-distance anaphor and can occur both in subject and object positions. In contrast to *aftos*, the anaphor *o idjos* cannot have independent reference, but always needs to be bound by an antecedent in the sentence or in discourse.

At this point, consider the following examples:

- (3) Ο Janis_i nomizi oti Ø_i/aftos_{ij} ine kalos maθitis
the John thinks that (he)/he is good student
'John thinks that he is a good student.'

¹ The zero subjects of finite clauses is known as *pro*, hence the pro-drop parameter.

² Personal pronouns have also clitic forms, which function as direct or indirect objects.

³ In this sense *aftos* behaves like a Principle B pronoun.

- (4) O Janis_i nomizi oti Ø_i/o iðjos_i ine kalos maθitis
 the John thinks that (he)/the same is good student
 ‘John thinks that he/himself is a good student.’

On the basis of (3) and (4), I would like to address the following questions: (a) what is the reason for using either the pronoun *aftos* or the anaphor *o iðjos*, since syntax allows the unmarked zero pronoun to be used and (b) what are the principles speakers follow in order to use and interpret these anaphoric expressions. I will argue that there are good reasons to believe that the preference for the pronoun *aftos* or the anaphor *o iðjos* over the zero pronoun is inherently pragmatic. In other words, it will be claimed that speakers generally tend to avoid using the full pronoun *aftos* or the anaphor *o iðjos* without any particular purpose. By contrast, when they opt for one of these two marked anaphoric expressions, they intend to convey readings which cannot be inferred by the use of a zero pronoun.

2. The literature so far

The pro-drop phenomenon has been extensively analyzed in the syntactic literature.⁴ The main issues addressed by the various syntactic accounts can be summarized in a number of questions, namely what the nature of *pro* is and how it is licensed and identified. Nevertheless, what we are most interested in here is what triggers the use of an overt pronoun in a pro-drop language such as Modern Greek.

Along these lines, as Haegeman (1994) notes, the dropping of the overt subject can be related to a general “consideration of economy” in the sense that “the non-expression of the subject pronoun requires less effort than when the pronoun is present, and that therefore the subject will only be present when the added effort of the overt expression has some yield” (Haegeman 1994: 21). Chomsky (1981) formalizes this general consideration and refers to it as the *Avoid Pronoun principle*. According to this principle, overt subject pronouns should be avoided unless there is a reason for them to be present. By contrast, a null pronoun is preferred where co-reference is intended. Apparently, this general pattern is borne out in certain cases in Modern Greek. Given examples like the one in (5), Modern Greek speakers tend to prefer a non-co-referential reading of the full pronoun *aftos* when used instead of the unmarked zero pronoun, particularly when *aftos* is unstressed and there is not any kind of specific context.

- (5) O Janis_i nomizi oti Ø_i/aftos_z ine kalos maθitis
 the John thinks that (he)/he is good student
 ‘John thinks that he is a good student.’

It could be proposed then that a grammaticalized *Avoid Pronoun principle* can account for the phenomenon. This is not borne out, however, in examples like (6):

- (6) I Eleni den edose kambia simasia sto Jani_i paroti aftos_i (Ø_i) sinexize na tin kitai
 the Eleni not gave no attention to the John although he keeping to her look at
 ‘Helen didn’t pay attention to John even though he was keep looking at her.’

Greek speakers would prefer a co-referential interpretation of the full pronoun in example (6) despite the fact that it can also refer independently. One could argue that this interpretation is in line with Anagnostopoulou (2003), according to which pronoun *aftos* falls under Principle

⁴ For a detailed discussion see, among others, Chomsky (1982), Jaeggli (1982), Jaeggli and Safir (1989) and Haegeman (1994). In addition, Philippaki-Warbuton (1987) and Καρανάσιος (1989) account for empty categories and subject dropping with specific reference to Modern Greek.

C, i.e. it is disjoint from any c-commanding antecedent. In support of this argument, Anagnostopoulou (2003: 90) presents the following two contrasting examples.

(7) I Maria_i ayapuse ton Petro, prin pro_i/afti_s_i erotefti ton Kosta
 the Maria loved the Petros before she fall in love the Kostas
 ‘Mary loved Peter, before she fell in love with Kostas.’

(8) Ton Petro_i ton ayapuse i Maria, prin pro_i/aftos_i erotefti tin Katerina
 the Petros him loved the Maria before he fall in love the Katerina
 ‘Mary loved Peter, before he fell in love with Katerina.’

According to Anagnostopoulou (2003), in example (8) co-reference is accepted, since *aftos* is A'-bound by the fronted object. By contrast, this co-referential reading is not permitted in (7), since *aftos* would be A-bound, violating thus Principle C. Leaving aside the fact that the Principle C status of *aftos* is debated in the literature,⁵ native speakers would consider the disjoint reading of *aftos* in (7) as a preferred one, potentially accepting a co-referential interpretation as well. This is in support of the proposal that the choice of a full pronoun over a zero one has a clear pragmatic content and is heavily dependent upon context and communicative intention. In fact, although Chomsky (1981) considers that his *Avoid Pronoun principle* is a principle of grammar, he also acknowledges that it might be regarded as a subclass of a conversational principle.

Considering now the anaphor *o idjos*, there is controversy in the literature⁶ about its syntactic status. On the one hand, Iatridou (1986) argues that *o idjos* is an anaphor that is locally free but bound in sentence.⁷ On the other hand, Varlokosta & Hornstein (1993) and Varlokosta (1994) argue for an A'-bound pronominal status of *o idjos* when in object positions. What is more, Enç (1989) treats *o idjos* as locally A'-bound by a null logophoric operator. By contrast, what primarily interests us in this study is explaining what justifies the use of a marked anaphoric expression, like the anaphor *o idjos* when a zero pronoun would do the job in terms of reference. For instance, what would be the difference if in example (6), restated for convenience as (9), instead of the full pronoun *aftos* the speaker were to use the anaphor *o idjos*?

(9) I Eleni den edose kamia simasia sto Jani_i paroti o idjos_i sinexize na tin kitai
 the Eleni not gave no attention to the John although the same keeping to her look at
 ‘Helen didn’t pay attention to John even though he was keep looking at her.’

As will be discussed further on, it could be claimed that, for instance, *o idjos* in (9) can have a perspectival meaning, giving thus discourse prominence to its antecedent, which the pronoun *aftos* cannot have. It is clear that a pure syntactic account of any type cannot provide an explanation, since the differences between (6) and (9) hold on a level other than grammar. In short, as Levinson (2000: 364) notes, “if a pattern appears to be general but defeasible [...] the presumption must be that it does not belong to syntax”. Take for instance the pattern described in (5), i.e. that a marked expression instead of an unmarked one will be preferred for disjoint readings. This pattern is both general and defeasible or cancellable, as illustrated in example (6), for instance, where the full pronoun overlaps in reference with the zero one. There is reason to believe then that the use and interpretation of *aftos* and *o idjos* is

⁵ Sanoudaki (2003), based on evidence from language acquisition, suggests that *aftos* is a demonstrative, obeying Principle B.

⁶ Some aspects of *o idjos* are also briefly discussed in Zribi-Hertz (1995), Kiparsky (2002), as well as in Kordoni (1995).

⁷ Dalrymple (1993) suggests, however, that *o idjos* does not in fact have to be bound in the sentence.

pragmatically conditioned and can be better accounted for by the employment of some kind of pragmatic explanation.

2.1. Null/overt NP contrast in other pro-drop languages: The case of Spanish and Italian
 Spanish, like Modern Greek, is a typical pro-drop language. As Blackwell (1994, 2001, 2003) notes, in Spanish there is a general tendency for the preference of zeros over morphologically realized pronouns when co-reference is intended.

- (10) Juan_i dijo que Ø_i llamaría a Maria
 John said that he will call to Mary
 ‘John said he will call Mary.’

However, this general tendency does not exclude the possibility of the use of an overt pronoun instead of the zero one. In these cases, the overt pronoun may be interpreted co-referentially or non-co-referentially with the matrix subject.

- (11) Juan_i dijo que él_{i/y}/Ø_i llamaría a Maria
 John said that he will call to Mary
 ‘John said he will call Mary.’

Luján (1985, 1986) and Montalbetti (1984, cited in Blackwell 1998: 608) show that in Spanish lexically specified pronouns behave and are interpreted differently from null pronouns. Luján (1985), in particular, proposes that the overt/null distinction in Spanish is related to the stressed/unstressed opposition found in non-pro-drop languages like English. In a nutshell, the use of overt pronouns instead of zeros has a rather contrastive and emphatic function.

In Italian, Carminati (2002) shows that the existence of both overt pronouns and zeros reflects a division of labour with respect to anaphora resolution in the sense that a zero pronoun tends to prefer co-referential readings with more prominent antecedents in contrast to its overt counterpart. This prediction is formulated as the *Position of Antecedent Hypothesis* (PAH), according to which zero prefers to retrieve an antecedent in the (highest) Spec IP, whereas overt pronouns prefer an antecedent in a lower syntactic position. By way of illustration, consider the following example.

- (12) Marta scriveva frequentemente a Piera quando Ø/lei era negli Stati Uniti
 Marta was writing frequently to Piera when she was in the USA
 ‘Marta was writing frequently to Piera when she was in the USA.’

According to Carminati (2002), 80.72% of the subjects interrogated preferred a co-referential interpretation between the zero pronoun and the matrix subject NP *Marta*, whereas the score for the overt pronoun fell to 16.67%. Nevertheless, the preference for a co-referential interpretation of the overt pronoun significantly increases by the presence of the so-called logocentric verbs (*say, believe, deny* etc).

- (13) Gregorio ha detto che Ø/lui sarà presente al matrimonio di Maria
 Gregorio said that he will be present at the wedding of Maria
 ‘Gregorio said that he will be present in Maria’s wedding.’

Here, while preferred co-reference for zero remains high (96.56%), the overt pronoun is also preferred as co-referential with the matrix NP (85.79%).

In a nutshell, the anaphoric patterns of zero and overt pronouns in Spanish and Italian appear to be quite similar to those of Modern Greek with the exception of the anaphor *o idjos*,

which is an important characteristic of Greek. In the rest of this paper I will argue that there is a systematic pragmatic contrast between the marked *o idjos* and *aftos*, on the one hand, and the zero pronoun, on the other, and thus a pragmatic analysis needs to be put forward. The analysis will be based on the neo-Gricean pragmatic account introduced and developed by Levinson (1987, 1991, 2000) and Huang (1994, 2000, 2007).

3. Levinson's neo-Gricean Pragmatic Principles

Levinson (1987, 1991, 2000) puts forth a neo-Gricean pragmatic model, which reduces the original Gricean maxims to three inferential pragmatic principles, namely the Q(uality), I(nformativeness) and M(anner)-principles. For our purposes, I will mainly focus on the I- and M-principles.⁸

I. The I-principle

- Speaker's Maxim (the Maxim of Minimization): "Say as little as necessary", i.e. produce the minimal linguistic information sufficient to achieve your communicational ends (bearing the Q-principle in mind).

- Recipient's Corollary (The Enrichment Rule): Amplify the informational content of the speaker's utterance, by finding the most specific interpretation, up to what you judge to be the speaker's M-intended point.

Specifically:

(a) Assume that stereotypical relations obtain between referents or events, unless (i) this is inconsistent with what is taken for granted; (ii) the speaker has broken the Maxim of Minimization by choosing a prolix expression.

(b) Assume the existence of actuality of what a sentence is "about" if that is consistent with what is taken for granted.

(c) Avoid interpretations that multiply entities referred to (assume referential parsimony); specifically: prefer co-referential readings of reduced NP's (pronouns or zeros)

The I-principle is an upper bounding pragmatic principle; hence, when the speaker says "...*p*...", she/he conversationally implicates "... more than *p*..." (Huang 2000: 209). In other words, according to the dictum of the I-principle, informationally weak expressions tend to be informationally enriched by the hearer.

II. The M-Principle

- Speaker's Maxim: Don't use a prolix, obscure or marked expression without reason.

- Recipient's Corollary: If the speaker used a prolix or marked expression M, he or she did not mean the same as he or she would have, had he or she used the unmarked expression U-specifically he or she was trying to avoid the stereotypical associations and I-implicatures of U.

Unlike the Q- and I-principles, which primarily operate in terms of semantic informativeness, the metalinguistic M-principle⁹ is primarily operative in terms of a set of alternates that contrast in form. The fundamental axiom upon which this principle rests is that

⁸ For more on the Q-principle, see Levinson (1987, 1991, 2000).

⁹ The Levinsonian Manner principle is directly related to the Gricean maxim of Manner and more precisely to the sub-maxims "avoid obscurity of expression" and "avoid prolixity" (see Grice 1989).

the use of a marked or prolix¹⁰ expression M-implicates the negation of the interpretation associated with the use of an alternative, unmarked expression in the same set. M-implicatures therefore are generated by M-scales as shown in III and illustrated in example (14).

III. M-scale: {x, y}

$y \rightarrow_M \sim x$

(14a) The new manager is friendly.

I \rightarrow The new manager is friendly in the stereotypical sense

(14b) The new manager is not unfriendly.

M \rightarrow The new manager is less friendly than the utterance in (14a) suggests

This is tantamount to saying that genuine I-implicatures take precedence until the use of a marked linguistic expression triggers a complementary M-implicature to the negation of the applicability of the pertinent I-implicature (see e.g. Huang 2007 for further discussion).

3.1. Evaluating the Levinsonian principles

The interaction of the I- and M-principles, as discussed in Levinson (1987, 1991), produces a rather clear pattern. The use of reduced or unmarked (in terms of form) expressions will tend to promote co-referential interpretations. By contrast, the reversion to full, more marked anaphoric expressions favours non-co-referential interpretations. Nevertheless, when looking at Modern Greek data we note, for instance, that the use of the anaphor *o idjos* systematically overlaps in reference with the zero pronoun in subject positions, inducing thus co-referential readings. Consider example (15):

(15) O Janis_i nomizi oti Ø_i/o idjos_i ine kalos maθitis
 the John thinks that (he)/the same is good student
 ‘John thinks that he is a good student.’

The main assumption that marked forms will be preferred when non-co-reference is intended seems to predict erroneous interpretations in certain contexts. The fact that the M-principle predicts more disjoint readings with regard to the use of a full pronoun instead of a zero one does not only appear in Modern Greek. This is also the case with other pro-drop languages like Spanish. Blackwell (1994, 2000, 2001) notes that in certain contexts listeners, in a sense, “ignore” the markedness of anaphoric expressions and infer co-referential interpretations. In other words, she observes that in certain contexts the use of a more marked NP instead of a zero one did not result in an M-implicature of disjointness. According to her analysis, these readings can be attributed to the operation of consistency constraints, being thus in line with Huang (1994, 2000), who puts forth that implicatures should be subject to the requirement of consistency with a number of consistency constraints such as background assumptions, world knowledge and contextual factors.¹¹

This potential problem concerning the predictions made by the M-principle is also discussed in Ariel (1990, 1994, 1996) in the framework of *Accessibility theory*. The core idea of Accessibility theory is that some mental entities are more readily retrievable than others in

¹⁰ The notion of markedness employed for the M-principle is in the spirit of Horn (1989) and Levinson (1987, 2000). In terms of formal characteristics, marked forms, in comparison to corresponding unmarked forms, are more morphologically complex and less lexicalized, more prolix and periphrastic, less frequent or usual, as well as less neutral in register (Levinson 2000: 137). For a discussion of the different senses of “markedness” and the possibility of doing away with it, see Haspelmath (2006).

¹¹ For more on consistency constraints, see Blackwell (1994, 2000, 2001) and Huang (1994, 2000).

the addressee's memory. In addition, the speaker uses different kind of anaphoric expressions to help the addressee recover the mental entity that the speaker intended in the first place. According to Accessibility theory, anaphoric expressions are accessibility markers and therefore "speakers choose their referring expressions by taking into consideration the degree of accessibility of the mental entity for the addressee" (Ariel 1996: 20).

The degree of mental accessibility is determined by three main principles, namely informativity, rigidity and attenuation. On this basis, a highly accessible antecedent will pick an accessibility marker higher on an Accessibility Marking Scale (AMS).¹² Ariel describes AMS as follows:

IV. Accessibility Marking Scale (Ariel 1994: 30)

zero < reflexives < agreement markers < cliticised pronouns < unstressed pronouns < stressed pronouns < stressed pronouns + gesture < proximal demonstrative (+ NP) < distal demonstrative (+ NP) < proximal demonstrative (+ NP) + modifier < distal demonstrative (+NP) + modifier < first name < last name < short definite description < long definite description < full name < full name + modifier

Given the hierarchy in IV, a zero form is the highest accessibility marker among all the anaphoric expressions available, while a full name with a modifier scores the lowest on the accessibility scale. The speaker uses a high accessibility marker when referring to a highly accessible antecedent and a lower accessibility marker for a less accessible antecedent.

Within this framework, Ariel argues that the neo-Gricean theorizing does not fully explain how speakers and addressees determine antecedent selection, given that in various contexts an anaphoric expression can have more than one potential antecedents. Ariel (1996) notes that referring expressions, whether disjointly or co-referentially interpreted, do not occur in perfectly complementary environments. She presents naturally occurring data from Hebrew showing that the use of full anaphoric expressions (full pronouns and lexical NPs) instead of minimal ones (zero and cliticised pronouns) fail to generate M-implicatures to disjointness.

Considering Ariel's criticism on the M-predicted complementarity in reference between a zero and an overt pronoun, it will be argued that in these contexts in which complementarity in co-reference breaks down there should be another kind of contrast, namely emphatic reading or subjective point of view, which takes precedence over reference. Therefore, as will be shown, a neo-Gricean account is not embarrassed at all by an overlap in reference between the zero pronoun and *o idjos* in particular examples, since the M-principle can predict contrasts at different levels of interpretation.

Coming now to Ariel's point that the neo-Gricean framework does not fully explain how speakers and addressees determine antecedent selection, as Levinson (2000) argues, the neo-Gricean framework is not an exhaustive theory of anaphora, but is an apparatus that predicts preferred readings. "A full account will certainly involve topic, textual distance to antecedents, syntactic saliency, cognitive saliency and mutual accessibility and so on" (Levinson 2000: 273).

Specifically in Modern Greek, there are potential challenges to Accessibility theory. Consider, for instance, the following example:

¹² For more on the Accessibility Marking Scale see Ariel (1991, 1996, 2008: 137).

- (16) Ο *ipurγos_i* ipe oti *o idjos_i* ipeγrapse tis simvasis stis 23 dekemvriu afu
 the minister said that the same signed the contracts at the 23 December since
Ø_i diapistose oti *iγan diasfalisti ta simferonta tu OTE*
 (he) ascertained that had secured the interests of Greek Telecoms
 ‘The minister said that he signed the contracts in December 23 since he was certain
 that the interests of Greek Telecoms were guaranteed.’

Assuming that *o idjos* corresponds to a reflexive in the AMS, it is considered a lower accessibility marker than the zero pronoun. In (16), the antecedent *o ipurγos* is the most salient NP and therefore should be coded by the highest accessibility marker, i.e. a zero pronoun; nevertheless, this is not borne out, since the anaphor *o idjos* is used instead. Furthermore, consider example (17):

- (17) Ο *proθipurγos_i* arniθike oti *Ø_i/aftos_i /o idjos_i* prokalese tis fimes
 the prime minister denied that (he)/he/the same caused the rumours
 ‘The PM denied that he caused the rumours.’

Examples like (16) bring up a general weakness of the theory, namely what happens in cases where the same antecedent can be encoded by more than one accessibility marker, reversing thus Ariel’s original argument. Cases like (17) show that the choice of the anaphoric expression is not purely a matter of accessibility, but there are good reasons to believe that it is heavily dependent on speaker’s intentions and the presumption of this intention by the addressee.

3.2. A revised neo-Gricean Pragmatic Theory of Anaphora

Huang (1994, 2000, 2007), applying the Levinsonian pragmatic principles, proposes a neo-Gricean pragmatic apparatus for the interpretation of anaphora as follows:

V. Huang’s revised neo-Gricean pragmatic apparatus for anaphora:

(a) Interpretation principles

- (i) The use of an anaphoric expression *x* I-implicates a local co-referential interpretation unless (ii) or (iii):
- (ii) There is an anaphoric Q-scale¹³ $\langle x, y \rangle$, in which case the use of *y* Q-implicates the complement of the I-implicature associated with the use of *x*, in terms of reference.
- (iii) There is an anaphoric M-scale $\{x, y\}$, in which case the use of *y* M-implicates the complement of the I-implicature associated with the use of *x*, in terms of either reference or expectedness.

(b) Consistency Constraints

Any interpretation implicated by (a) is subject to the requirement of consistency with:

- (i) the DRP¹⁴
- (ii) information saliency, so that
 - (a) implicatures due to matrix constructions may take precedence over implicatures due to subordinate constructions, and

¹³ Q-scale: $\langle x, y \rangle$
 $Y \rightarrow Q \sim x$

Some of the students failed the exam, $Q \rightarrow$ not all of the students failed the exam.

¹⁴ This refers to Disjoint Reference Presumption. The basic idea behind the DRP is that the co-arguments of a predicate, when not reflexive-marked, are preferably disjoint in reference.

- (b) implicatures of co-reference may be preferred according to the saliency of the antecedent, in line with the following hierarchy:
 topic > subject > object, etc.; and
 (iii) general implicature constraints (see Huang 2000).

In this paper, the focus will be on interpretation principle (iii) of the revised neo-Gricean pragmatic apparatus for anaphora.

4. A pragmatic account of the alternate set {zero, full pronoun/anaphor}

In this section I will propose an analysis of the alternate set {zero, full pronoun/anaphor}, which incorporates all potential interpretations that follow from the use of a marked anaphoric expression instead of a zero pronoun.

Let us set off our discussion by considering the case where the full pronoun *aftos* is chosen instead of the unmarked zero pronoun:

- (18) O Janis_i θeli Ø_i/aftos_j na fiyi.
 the John wants (John) he to go
 ‘John wants (him) to go.’
- (19) Kapjos_i ipe oti Ø_i/aftos_j ide ti Maria sto parti
 somebody said that (he)/he saw the Mary at the party
 ‘Somebody said that he saw Mary at the party.’

It is clear that in both examples the use of the full pronoun intends a different meaning from the meaning associated with the zero one. Here, the zero pronoun is subject to I-interpretation and therefore receives an enriched interpretation to a specific referent, i.e. the most relevant NP, hence the co-referential reading. This co-referential interpretation, however, cannot get through when the more marked pronoun is used. Instead M-implicature takes over and predicts that the use of the full pronoun will intend a non-co-referential interpretation. More specifically, in examples (18) and (19) there is an M-scale {Ø, *aftos*} such that the use of the more marked *aftos* will M-implicate the complement of the I-implicature associated with the use of the unmarked zero, i.e. a disjoint reading.

4.1. Contrary-to-expectation interpretations

The study of more data nevertheless brings to light cases in which the apparent complementarity in reference between *aftos* and the zero pronoun breaks down. In other words, contrary to what might be expected in examples like (20) below, the co-referential reading of *aftos* is preferred¹⁵ over the non-co-referential one, resulting in an overlap in reference with the zero pronoun.

- (20) O Janis_i katalave oti Ø_i/aftos_i kerδise to laxio
 the John realized that (he)/he won the lottery
 ‘John realized that he won the lottery.’

Moreover, turning to the anaphor *o idjos*, we observe that this overlap in reference with the zero pronoun is rather systematic. In fact, if one considers examples like (21), *o idjos* cannot receive another interpretation but the co-referential one with the subject *o Janis*.

¹⁵ In contexts like this the full pronoun is normally stressed. Stress effects play a part in the actual process of pronoun resolution and are generally considered to be pragmatic. However, further analysis of the role of stress is beyond the scope of this study. (For more details, see Kameyama 1999, de Hoop 2003).

- (21) Ο Janis_i nomizi oti Ø_i/o iðjos_i ine kalos maθitis
 the John thinks that (he)/the same is good student
 ‘John thinks that he/himself is a good student.’

Indeed, the use of a more marked anaphoric expression in examples (20) and (21) does not seem to follow the M-pattern described in the previous section, giving thus a disjoint reading.

So, the question that needs to be addressed here is if the M-principle is defective in contexts like these. The answer is negative. Since languages are not redundant in this sense, there is a recurring intuition that the overt pronoun *aftos* and the anaphor *o iðjos* contrast in some other way with the zero pronoun. Relying on previous work (Edmondson & Plank 1978, Huang 2000, Levinson 2000), I will assume that there is some sort of unexpectedness, that is interpretations which are “contrary-to-expectation” (Levinson 2000: 333). As Huang (2000: 225) notes, “this unexpectedness may turn out to be logophoricity, emphaticness/contrastiveness or something yet to be discovered”.

4.1.1 Emphasis/contrastiveness

Modern Greek does not codify emphasis/contrastiveness with purpose-specific pronouns. Emphasis/contrastiveness is mainly expressed by the use of the anaphor *o iðjos*, the full personal pronoun *aftos* and, in some contexts, the reflexive *o eaftos mu*; all these cases are accompanied by contrastive stress. Baker (1995) points out that the use of an emphatic is subject to two conditions, namely contrastiveness and relative discourse prominence.

VI. Conditions on the use of emphatics (Baker 1995: 77, 80):

Contrastiveness condition: Emphatics are appropriate only in contexts in which emphasis or contrast is desired.

Relative discourse prominence condition: Emphatics can only be used to mark a character in a sentence or discourse that is relatively more prominent or central than other characters.

Let us pick a typical case of an emphatic use of *o iðjos* in Modern Greek.

- (22) Ο Janis_i lei oti o iðjos_i ine kalos maθitis
 the John says that the same is good student
 ‘John says he is a good student.’

It becomes clear from this example that the use of *o iðjos* in these contexts satisfies both conditions; more specifically, *o iðjos* marks contrastive or emphatic content, which is also accompanied by a natural negative gloss of the sort “and not any other of the possible salient referents”. This also applies to the pronoun *aftos*, in cases where it is used with an emphatic/contrastive intention.

4.1.2. Logophoricity

Logophoricity and the use of logophoric pronouns were initially observed in a number of African languages such as Ewe, Dogon, Tuburi, Aghem and so on (see Huang 2000 for a variety of examples). In these languages there is a separate paradigm of logophoric pronouns, i.e. a class of pronouns dedicated to the encoding of logophoric interpretations. Nevertheless, apart from the purpose-specific logophoric pronouns, reflexives can be used logophorically under certain conditions (see Sells 1987, Zribi-Hertz 1989, Huang 1991, 1994, 2000, Culy 1994, 1997).

According to Culy (1997: 845), “logophoric pronouns are usually described as pronouns that are used to refer to the person whose speech, thoughts, or feelings are reported or reflected in a given linguistic context”. This “person” is also referred to as the “internal protagonist” (Huang 2000) or the “minimal subject of consciousness” (Zribi-Hertz 1989). In particular, Zribi-Hertz (1989) identifies the subject of consciousness with Kuno’s (1987) sense of logophoricity as “a semantic property assigned to a referent whose thoughts or feelings, optionally expressed in speech, are conveyed by a portion of the discourse” (Zribi-Hertz 1989: 711). Logophoricity is also related to the notion of *point of view*, yet Culy (1997) claims that logophoricity proper is rather distinct from point of view. More precisely, Culy points out that “morphologically distinct logophoric pronouns are grammatically licensed in indirect discourse [...] and only secondarily indicate point of view” (Culy 1997: 846). In a similar fashion, “indirect reflexives” (reflexives which can be used logophorically) “can express point of view if they do not have grammatically determined antecedents” (Culy 1997: 856).

As Kuno (1987) and Kuno & Kaburaki (1977) note, the contrast between a pronoun and an anaphor, where there is a free choice, is semantic/pragmatic in nature and is associated with the notion of *point of view* or *logophoric perspective* (Kuno 1987, 2004). The distribution { ...zero / *o iðjos* ... } seems to fit the above description, in the sense that both the zero and *o iðjos* are in free variation in contexts like (23) below.

- (23) O Janis_i lei oti Ø_i/o iðjos_i ine o kaliteros maθitis
 the John says that (he)/the same is the best student
 ‘John says that he is the best student.’

Concerning now their contrast, there is intuitive evidence that the use of *o iðjos*, apart from emphasis, also encodes some kind of subtle pragmatic meaning associated with perspectival readings or, in other terms, with the notion of *logophoric perspective* in the sense of Kuno (1987, 2004). This pragmatic meaning can be spelled out as follows: The zero pronoun intends to be co-referential but is unmarked for the notion of *point of view*. By contrast, when *o iðjos* is used, apart from the co-referential reading, the thoughts or feelings of the referent of the main clause are being reported. Therefore, I assume that there is a distinction between the perspectives of the current speaker, as opposed to that of the internal protagonist of the sentence, which results in this logophoric perspective.

This perspectival aspect of *o iðjos* can be partially explained by its long-distance (or non-local) binding effects. It is claimed that anaphors that exhibit long-distance binding properties also tend to encourage logophoric interpretations as well (see Maling 1984, Sells 1987, Huang 1991, Levinson 1991). More precisely, Reinhart & Reuland (1993) state that anaphors which fail to find a local antecedent are taken to be logophors. Moreover, Kuno (1987), discussing similar cases, in which the use of a pronoun and non-local anaphor in the same position is not syntactically constrained, argues that the use of the anaphor is different from the pronoun in terms of point of view.

In addition, cross-linguistic evidence (see Stirling 1993, Huang 2000) shows that certain verbs allow the logophoric interpretation of long-distance reflexives to a higher degree than others. This observation is illustrated in the following hierarchy, which suggests a kind of implicational universal:

VII. Universal for logocentric predicates (Huang 2000: 185):

Speech predicates > epistemic predicates > psychological predicates > knowledge predicates > perceptive predicates.

This hierarchy is actually an implicational universal in the sense that, if a language allows a certain type of logophoric predicates to establish a logophoric domain, then it will also allow predicates of every class higher on the hierarchy to do the same. So, for instance, if psychological predicates are possible, then both epistemic and speech predicates are equally allowed and so on. In the case of Modern Greek, perceptive predicates create logophoric domains and anaphor *o iðjos* is allowed after this type of predicates.

Perceptive predicates

- (24) O Janis_i iðe oti ta lefta anikun ston iðjo_i
 the John saw that the money belong to the same
 ‘John understood that the money belong to him.’

Therefore according to VII, it is predicted that *o iðjos* will be allowed after all the other predicate types. This prediction is confirmed by the data as illustrated in examples (25)-(31).

Knowledge predicates

- (25) O Janis_i kseri oti o iðjos_i ine o kaliteros maθitis
 the John knows that the same is the best student
 ‘John knows that he is the best student.’

Psychological predicates

- (26) O Janis_i fovate oti o iðjos_i tha plirosi ja oti eyine
 the John is afraid that the same will pay for what happened
 ‘John is afraid that he will pay for everything.’

- (27) O Janis_i eknevrizete otan o iðjos_i xani sto podosfero
 the John gets angry when the same loses in the football
 ‘John gets angry when he losses in football.’

Epistemic and factive predicates

- (28) O Janis_i nomizi oti o iðjos_i ine o kaliteros maθitis
 the John thinks that the same is the best student
 ‘John thinks that he is the best student.’

- (29) O Janis_i iðe oti o iðjos_i ðen içe kamia elpiða stis eksetasis
 the John saw that the same not had no hope in the exams
 ‘John saw that he had no hope in the exams.’

Speech predicates

- (30) O Janis_i lei oti o iðjos_i ine o kaliteros maθitis
 the John says that the same is the best student
 ‘John says that he is the best student.’

- (31) O Janis_i rotise an o iðjos_i bori na erθi sto parti
 the John asked if the same can to come to the party
 ‘John asked if he can come to the party.’

4.2. Analysis of contrary-to-expectation interpretations

The discussion so far suggests that the use of anaphoric expressions that may intend emphatic/contrastive or logophoric readings is incorporated in the revised neo-Gricean pragmatic theory of anaphora (Huang 2000, 2007) under the notion of *unexpectedness* in the operation of M-scales. In this way, it is predicted that M-contrasts operate at various pragmatic levels of interpretation other than reference, being thus consistent with what the

speaker may intend, given the assumed state of mutual knowledge (Huang 1991). According to this, we can now give a complete account of the contrary-to-expectation interpretations described in the previous section, based on the systematic interaction of the neo-Gricean pragmatic principles of communication.

Starting with the alternate set $\{\emptyset, aftos\}$, it has already been explained how the use of the full pronoun may intend an M-contrast in terms of reference. Nevertheless, in contexts where co-reference is maintained, the use of the full pronoun in a sense “warns” the addressee that another kind of contrast is intended by the speaker. In these contexts the use of *aftos* promotes an emphatic and contrastive, contrary-to-expectation reading. This reading can be described in terms of the interaction of the I- and M-principles in the following way: There is an M-scale $\{\emptyset, aftos\}$ such that the use of the more marked *aftos* will M-implicate the complement of the I-implicature associated with the use of the unmarked zero in terms of emphasis and contrast.

In a similar manner we can account for the logophoric interpretation intended by the use of the anaphor *o idjos*, while co-reference is maintained. The point I have been making here is that the anaphor *o idjos* and the zero pronoun form an M-scale $\{\emptyset, o idjos\}$, in which case the use of the more marked expression, where the unmarked one could have been used, M-implicates the complement of the interpretation associated with the use of the unmarked form. In this case the use of *o idjos* intends the following interpretations: a) an emphatic/contrastive interpretation and b) a logophoric interpretation, i.e. the current speaker intends to report the perspective of the internal protagonist of the sentence.

What is offered here is an elegant explanation for the fact that the use of a marked anaphoric expression (pronoun or anaphor) instead of an unmarked one (zero) is not only associated with an M-implicated reading in terms of reference, but can also intend an M-implicated interpretation at another level of pragmatic meaning, labelled here as “expectedness”. This distinction is very important, since it allows us to account for the subtle differences in the intended meanings which follow from the use of anaphoric expressions.

5. Conclusion

Our discussion about the choice of the overt pronoun *aftos* or the anaphor *o idjos* instead of the unmarked zero pronoun can be summarized with reference to the example below. The indexation indicates the preferred interpretations.

- (32) O Janis_i pistevi oti $\emptyset_i/aftos_{zi}/o idjos_i$ ine eksipnos
 the John believes that (he)/he/the same is clever
 ‘John believes that he is clever.’

In the case of the unmarked zero pronoun, we are forced, in a sense, to the co-referential interpretation following the pattern that minimal forms will opt for informationally amplified readings, given the I-principle. Reversion now to a more marked alternative, such as *aftos* or *o idjos*, will implicate complementary interpretations by the M-principle. It was shown that these complementary interpretations may lie, on the one hand, in terms of reference or, on the other hand, in terms of contrast/emphasis or logophoricity (“unexpected” readings). This analysis elegantly explains the meaning of marking in a pro-drop language like Greek. Moreover, it was argued that the choice and interpretation of anaphoric expressions is heavily dependent on the speaker’s communicative intentions, given the assumed state of mutual knowledge, and can be best captured by the neo-Gricean pragmatic principles of communication.

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