

Broad Focus Across Sentence Types in Greek

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Abstract

In Greek main sentence stress is located on the rightmost constituent in ‘all new’ declaratives, but for all-new negatives, polar questions, and wh-questions it is located on the negative particle, main verb, and wh-word respectively. I discuss the implications of this pattern for the focus projection rules and for the accentedness of discourse new constituents.

1. Introduction

In the literature of focus in English, ‘main sentence stress’—also called Nuclear Pitch Accent (NPA) ([9])—is seen as the realization of an abstract focus feature F, assigned in the syntax, and the word carrying this accent is called the *focus exponent* ([10]). The intended focus of the utterance can be the phrase containing the focus exponent, or even bigger syntactic constituents containing that phrase. Selkirk proposed rules that allow F to ‘project’ (from complement to head to maximal projection) to the entire constituent for English. The highest syntactic node having the F-feature is called the *focus* of the sentence (in [10] the *FOC*). Focused constituents are assumed by scholars to be new and carry pitch accents; *old* or *given* constituents carry no accents and are not assumed to be focused.

In this paper I claim that the focus projection rules do not explain the location of main stress in all-new, broad focus (called ‘presentational focus’ in [12]) sentences in Greek for non-declarative sentences. For Germanic and Romance, the main stress in broad focus sentences is the rightmost constituent across sentence types (declarative, interrogative). In Greek, the location of main stress in affirmative declaratives is the same as that in English, i.e., the last content word in the sentence. However, the location of main stress differs in negative statements, yes-no polar questions, and wh-questions. In broad focus polar questions the default NPA location is the verb, in broad focus wh-questions it is the wh-word, and in broad focus negatives, the negative particle ([5]). This phenomenon is not unique in Greek as far as polar questions are concerned: Hungarian, Turkish, and Slavic broad focus polar questions also align the NPA with the verb like in Greek, as described in [8].

Two issues are raised in this paper in connection with these non-affirmative (NA) sentence types in Greek: First, the syntax-based focus projection in [10], although successful in capturing a wide range of sentences in English cannot accommodate the NA patterns in Greek. I claim instead that the location of main stress in Greek is a means for marking sentence type in a language that lacks morpho-syntactic means of doing so. This ‘irregular’ NPA location expresses the illocutionary force of the sentence. The second

issue involves the widely held assumption that discourse new material carries accents. This claim is also falsified by these NA Greek sentences: the early NPA leaves the rest of the elements in the sentence unaccented, even though they are new. I propose that in Greek the prosodic need to de-accent post-nuclear material is a stronger constraint than the need to accent new constituents.

I present broad focus declaratives in section 2 and negatives, polar questions, and wh-questions in sections 3, 4, and 5 respectively. Section 6 is the conclusion.

2. Broad focus declaratives

Figure 1 shows a typical declarative sentence uttered in an *all new/broad focus* context, where no word carries narrow focus:

- (1) *I Eléni ki o Manólis tha páne sinemá*
 the Eleni and the Manolis will go-2p movies
 ‘Eleni and Manolis will go to the movies’

(1) is very natural at the beginning of a conversation and as a form of invitation is followed by *thelis na pas mazi tus?* ‘Do you want to go with them?’ The tune is L*+H H* L L%. L*+H is typical pre-nuclear pitch accent in Greek ([4], [3]) and it is found here on all three pre-nuclear words, *Eleni*, *Manolis*, and *páne*. The H* nuclear pitch accent (NPA) on the final word, *sinema*, is followed by a L L% boundary.

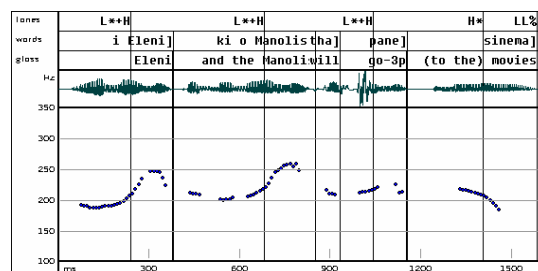


Figure 1. Broad focus declarative *I Eléni ki o Manólis tha páne sinemá* ‘Eleni and Manolis will go to the movies’

The focus structure of (1) is shown in (2): capitals indicate location of the NPA and square brackets indicate the focus. Since this is an all-new utterance, all its constituents carry the F-feature.

- (2) $[[I \text{ Eléni } ki \text{ o } \text{ Manólis}]_F [tha \text{ páne}]_F [SINEMA]_F]_{FOC}$

Selkirk’s focus projection theory in [10] proposed for English can be easily adopted to account for declarative

main stress patterns in Greek (for detailed discussion see [5]). Considerations of space do not allow discussion of the narrow focus stress patterns, but these have been shown in [5] to be easily accommodated by the Selkirk's 1995 model as well. In general, for affirmative declaratives in Greek, the rightmost constituent carries the main stress in the default case and de-accented material encodes given information, like in English. The similarities between Greek and English, however, do not extend beyond affirmative declaratives.

3. Negative declaratives

The melody of negative declaratives as described in GRT0BI, [3], is either $L^*+H\ L\ !H\%$ or $L^*+H\ L\ L\%$. These tunes are used for negative sentences when the negation represents new information. In [5] it is shown that when negation is old information a different tune is used. In the present paper I limit the discussion to new information negation.

The $L^*+H\ L\ !H\%$ or $L^*+H\ L\ L\%$ tunes are used both for out-of-the-blue negative statements, where all constituents are new, as well as for negative statements where some of the constituents are given. In both kinds, negation, which is typically first in linear order, carries the L^*+H NPA and all following material carries no accent regardless its information status as new or old.

The second sentence in (3) is an out-of-the-blue negative:

- (3) *Ksipna Manoli! Den esthánome kalá*
 wake up-imp Manoli-voc not feel-1s well
 'Wake up Manoli! I'm not feeling well.'

The pitch track of the negative utterance is shown in Figure 2. The negative particle 'den' carries the L^*+H NPA, and F_0 falls during the following verb, reaching the bottom level of the speaker's range. All post-nuclear material carries no accents, despite the fact that it is new. The final syllable aligns with a $!H\%$ boundary tone reaching the middle level of the speaker's range. The L phrase accent is realized on the stressed syllable of the last word, which forms an 'elbow', the turning point from the L to the $!H\%$. For all negative sentences in Greek the NPA is on the negative particle and all following material is de-accented.

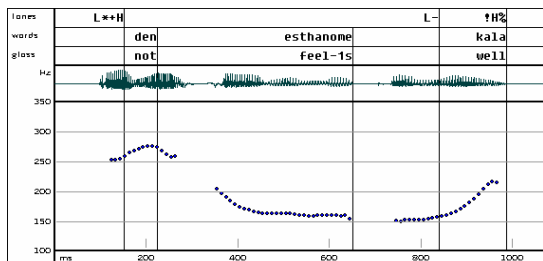


Figure 2: Typical melody of an 'all-new' negative:
Den esthánome kalá 'I'm not feeling well.'

Since all items are new, the whole sentence is focused. The focus structure for this sentence is given in (4):

- (4) $[DEN_F\ [esthánome\ kalá]_F]_{FOC}$

It is not clear, in terms of Selkirk's projection rule, how the F-feature in (4) can project in syntactic structure from the negative particle to the verb and adverb so that the whole sentence can be focused (FOC).

Furthermore, the requirement for aligning pitch accents with discourse new elements and de-accenting old elements does not hold for negatives: the verb and adverb do not carry accents despite being new. This suggests that accenting discourse new items is not an absolute universal, but a constraint that can be violated to satisfy higher ranking constraints in a given language. For Greek, the requirement for post-NPA de-accenting is stronger than the requirement for accents on discourse new constituents.

This pattern—an early nucleus followed by new material which is de-accented—is repeated with all the non-affirmative sentence types in Greek presented in the next two sections.

4. Polar interrogatives

The claim that NPA location marks 'illocutionary force' of a sentence is most clearly supported by polar questions, which in Greek are string identical to declaratives and are only distinguished from them by intonation. The tune for polar questions has been described in the literature as a L^* NPA followed by a $H\ L\%$ boundary ([8], [6], [7], [2], [3]).

Figure 3 illustrates the out-of-the-blue/all new intonation for polar questions, shown in (5):

- (5) *páme sinemá?*
 go-1p movies
 'Shall we go to the movies?'

This question can be uttered at the beginning of conversation as an invitation, without any preceding context. The nucleus is on the verb *páme* and the object *sinema* carries no pitch accent. The H tone aligned with the stressed syllable of the object, *-ma*, is the phrase accent described many times in the literature for Greek polar questions ([6], [7], [5], [2], [3]). Unlike English, this phrase accent is aligned with the stressed syllable of the IP final word.

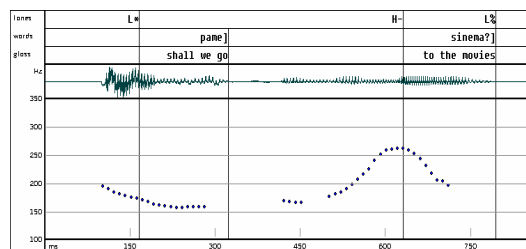


Figure 3: Broad focus pattern for polar questions shown in *páme sinemá?* 'Shall we go to the movies?'

This prosodic pattern is typical for 'all-new' polar questions and the whole sentence is F-marked: after the verb nucleus all post-nuclear material is de-accented, notwithstanding its status as new information, just like in

negative utterances. The focus marking for the all new question in Figure 3 is shown in (6).

- (6) [PAME sinema]_{Foc}
 go-1p movies
 ‘Shall we go to the movies?’

Again it is difficult to see how the F-feature projects from the verb to the sentence in the syntactic structure. Note that all-new polar questions can be very long, as shown in Figure 4 (*PAME sinema apose na doume mia kainourgia tainia ton adelfon Koen?* ‘Shall we go to the movies tonight to see a new Cohen brothers’ film?’) and still display the same pattern. The F feature needs to spread to the whole subordinate clause from the main verb, something that cannot be done with the focus projection rules. In the utterance in Figure 4 the tones are the L* on the verb *pame*, the first word, and the H-L% boundary which is realized on the last word *Koen*. Between these two targets there is F₀ interpolation with the pitch slowly rising before it sharply rises to the H- target.

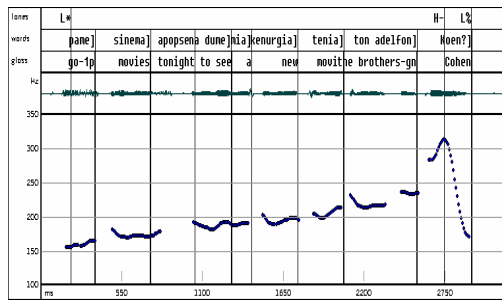


Figure 4: Long all-new polar question, *Páme sinemá apópse na dúme mia kainúrgia tainía ton adelfón Koén?* ‘Shall we go to the movies tonight to see a new Cohen brothers’ movie?’

Moreover, perhaps an even worse problem for the focus projection algorithm is that NPA on any other constituent in polar questions, such as the object for example, only results in narrow focus, that is, F can never project from the object NPA to higher constituents in this case, contrary to the focus projection rules (for details on narrow focus polar interrogatives see [5]).

All these facts make it hard to maintain a connection between prosodic prominence and a syntactic F-feature which projects to all the discourse new elements. Instead I claim that just like in negative sentences, the nucleus in polar questions is the element that indicates the illocutionary force of the sentence in the absence of any other morpho-syntactic marker, such as ‘do-support’ in English. More evidence for this claim comes from a special kind of polar question in Greek which contains the question particle *mipos* similar in meaning to the French *est-ce que*. Compare Figures 5 and 6, prosodic realizations of (7) and (8), identical polar questions, apart from the question particle which is present in (8) but not in (7):

- (7) *boreís na peráseis gíro stis dódeka*
 can-2s to come-2s round to-the twelve

- (8) *mípos boreís na peráseis gíro stis dódeka*
 Q-part can-2s to come-2s round to-the twelve
 ‘Can you come around twelve?’

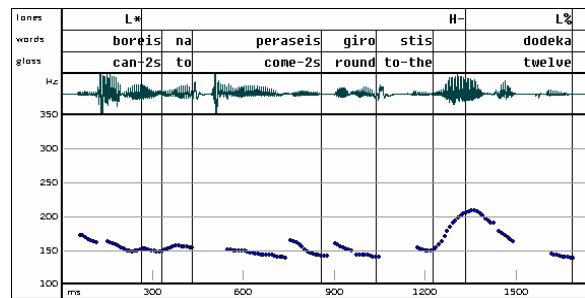


Figure 5: Polar question without question particle *boreis na peraseis giro stis dodeka?* ‘Can you come around twelve?’

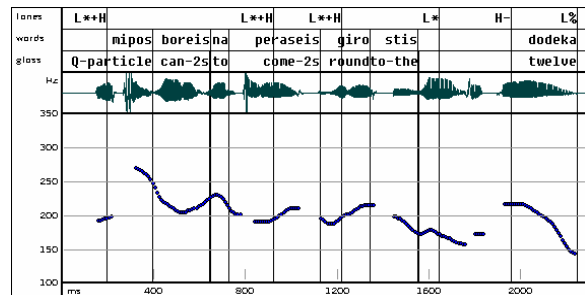


Figure 6: Polar question with question particle *mipos boreis na peraseis giro stis dodeka?* ‘Can you come around twelve?’

In Figure 5 the NPA is on the main verb *boreis* which carries the L* and the remaining material is unaccented. In Figure 6, on the other hand, the L* NPA aligns with the last word *dodeka* and all previous words carry pre-nuclear pitch accents. I attribute this difference to the presence in (8) of the question particle which morphologically marks the question. In such cases, the nucleus does not need to indicate the illocutionary force and it is on the rightmost element by default, just like in declaratives. This default nucleus location can be captured by an ALIGN-R constraint in the spirit of [11], [12], and [13].

5. Wh-interrogatives

The tune for wh-questions has been described in the literature as a L*+H nuclear pitch accent aligned with the wh-word, followed by a L !H% boundary, with the L spreading between the nuclear pitch accent and the final !H%, which remains approximately in the middle of the speaker’s range ([1], [3]).

The nucleus in wh-questions invariably stays with the wh-word. A very common all-new broad focus wh-question is shown in (9):

- (9) *pos se léne?*
 how you-acc call-3p
 ‘What’s your name?’

This question, illustrated in Figure 7, shows that the L*+H nucleus is on the wh-word. The L̄ phrase accent is aligned with the stressed syllable *le-* of the last word *lene* and F₀ rises after that to the !H% boundary at the last syllable.

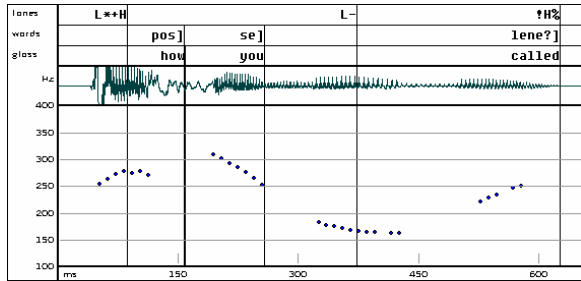


Figure 7: All new wh-question, *pos se lene?*
'What's your name?'

The focus structure of the question in Figure 7 is

(10) [*POS se lene?*]_{Foc}

and again the nucleus is not aligned with the right edge element, but with the wh-word, marking illocutionary force. In this case too, according to Selkirk's rule, the F-feature cannot spread from the wh-word to the rest of the words. Also the post-nuclear words are unaccented even though they are new. Note that English wh-questions behave just like affirmatives, that is, the focus structure of this question in English would be [*what's your NAME?*]_{Foc}.

Figure 8 shows the wh-question melody for a long question which makes clear the absence of accents on the material following the wh-word. The question is *pión ídes sto pártý me tin Eléni extés?* (who-acc saw-2s at-the party with the Eleni-acc yesterday) 'Who did you see at the party with Helen yesterday?'. F₀ rapidly falls after the wh-word and remains low until the last stressed syllable which is the lowest L target (marked with a L̄ phrase accent) before the rise for the !H% boundary.

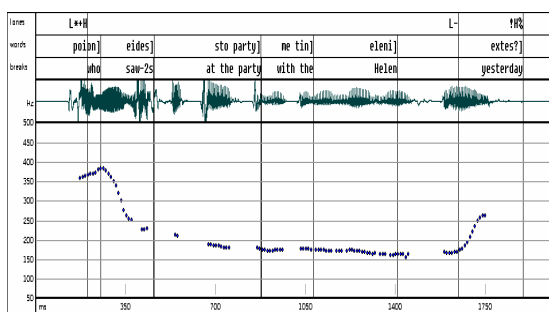


Figure 8: The wh-question melody realized on a long question, *pión ídes sto pártý me tin Eléni extés?*
'Who did you see at the party with Helenyesterday?'

6. Conclusion

In this paper I showed that a syntax-based algorithm of deriving the focus status of sentence constituents runs into problems in non-affirmative sentences in Greek. Therefore we cannot rely on the syntactic algorithm when predicting

the prosodic structure of utterances. I argued that the location of NPA in those sentences is related to the illocutionary force of the sentence. I also showed that accenting discourse new items is not an absolute universal, but a constraint that can be violated to satisfy higher ranking prosodic constraints such as the Greek requirement for post-nuclear de-accentuation. In order to develop general rules of deriving the focus structure, we need to examine the intonation of different sentence types cross-linguistically in connection with the location of NPA and the accent status of discourse new elements.

7. References

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