

Dimitris Papazachariou
 University of Patras (Greece)
 papaz@upatras.gr

Argiris Archakis
 University of Patras (Greece)
 archakis@upatras.gr

THE DIALECTAL ROLE AND DISCOURSE FUNCTION OF SIX SEMANTIC-INTONATION VARIABLES IN NORTHERN GREEK*

Abstract

This paper focuses on the intonation variables in one-word polar questions appearing in the speech of adolescents in Goumenissa, a small mixed town in Northern Greece. Our basic aim is to demonstrate the important role of these intonation variables in the formation of a new regional Koiné. Thus, special emphasis is given to the presentation of the intonation variables, to their semantic delimitation, as well as to their possible combinations and discourse functions.

1 Background (linguistic and non-linguistic) of the area of research

Our paper is based on the material collected for the purposes of the doctoral thesis of Papazachariou (1998β) with the title: *Linguistic variation and the social construction of identity: The sociolinguistic role of intonation among adolescents in Northern Greece*. The data collection was held in the wider area of Goumenissa, a small mixed town in Northern Greece, an area with interesting phenomena of dialect contact and change.

Before discussing the role of the intonation variables in the formation of a new regional Koiné, a brief description of some particularities (linguistic and non-linguistic) of the area is in order. Adolescents in Goumenissa belong to three different groups of origin, i.e. a local -slavophone- group, and two returned refugee groups (East Romylians and Pontics), who settled in the area during the first part of the twentieth century, i.e. from 1914 to 1927. Although most of the middle-aged population (i.e. the parents and grand-parents of the adolescents under study) in the area are bilinguals (only the East Romylians are monolinguals in Greek), the overwhelming majority of adolescents are monolinguals in Greek, being exposed to at least two varieties of Greek that are used by the middle-aged people of the area. Apart from the standard Northern Greek that is used by all middle-aged people, regardless of their local or refugee status, the local middle-aged population also use another Greek variety –a local one, with distinct characteristics at the areas of intonation, segmental phonetics, segmental phonology and syntax –which are presented in the forth section of the paper, that are used neither by the refugee parents nor by any speaker of the standard Northern Greek.

2 Presentation of semantic-intonation variables and their combinations in discourse

During data collection it became apparent that many adolescents used intonation patterns² that a speaker of the standard northern Greek variety would not use or recognize. However,

* We would like to thank Stella Lambropoulou, Periklis Politis and George Xydopoulos for their comments on previous versions of this article.

the linguistic status of these patterns was not clearly identifiable. Were the local intonation patterns absolutely different units from those that exist in the northern standard variety -not only of a different form but also with a different linguistic function- or were they variants of intonation variables that a speaker of the standard Northern variety also uses? The answer to the above question, i.e. the identification of the intonation units, of which the intonation patterns were the realization, was the basis and prerequisite for Papazachariou (1998β), a study that led to the definition of six semantic-intonation variables on one-word polar questions.

In this part of the paper we present the six semantic-intonation variables that appear on one-word polar questions, (for the analytical steps of the definition of these variables, see Papazachariou 1998β). Most of the previous theoretical approaches, with the exemption of Pierrehumbert's theory (1986), agree that a nucleus consists of one tone, i.e. one intonation unit. In our study we realized that nuclei with a similar starting point, similar high peak and similar finishing point could have different internal structures, as will be shown in the third part of the paper. We assume that the differences in the internal structure of a nucleus have semantic consequences which are decisive for the various final discourse meanings that a question can convey, interacting also with other conversational parameters, as will be shown in the third part of this paper. This assumption led us to the recognition of the existence of *two meaningful units* that compose the nucleus of one-word polar questions and, consequently, to the identification of two groups of semantic intonation variables, i.e. the group of the Rising variables, and the group of the Falling variables. Each group consists of three meaningful variables (or units) and one variable from each group appears in succession on one-word polar questions.

We argue that the semantic delimitation of the two groups is based on the common core meaning that the variables of each group have, i.e. the *objective epistemic modality* for the group of Rising variables, and the *subjective epistemic modality* for the group of Falling variables.

The distinction between the two modalities is reflected in the following passage from Lyons (1977:797): "any utterance in which the speaker explicitly qualifies his commitment to the truth of the proposition expressed by the sentence he utters, whether this qualification is made explicit in the verbal component (...) or in the *prosodic* (our emphasis) or paralinguistic component, is an epistemically, modal or modalized, utterance. In principle, two kinds of epistemic modality can be distinguished: objective and subjective".

In an objectively modalized utterance, the speaker is committed to the factuality of the information that he is giving to the addressee (Lyons, 1977:799) and the reservations he expresses for the truth of the propositional content are due to real world factors, "relative to what is known" (Lyons, 1981:237). In a subjectively modalized utterance, there is an overt indication of the speaker's unwillingness or inability to endorse, or subscribe to, the factuality of the proposition expressed in his/her utterance (Lyons, 1977:799-800) and the expressed reservations arising from his/her lack of sufficient evidence are "agent's qualification" (Lyons, 1981:238). The objective epistemic qualification of a propositional

² With this term we refer to the movements of pitch, which are created by the vibration of the vocal folds while the air passes through the larynx during the production of speech. The pitch is calculated in Hz and is represented by the fundamental frequency of the human voice (i.e. the fundamental harmonic).

content concerns the proposition - real world relationship, whereas the subjective epistemic qualification concerns the stance of the speaker towards the content of his/her utterance (for the above, see also Πολίτης, 2000:15-51).

It is well attested (see, for example, Lyons, 1977, 1981, cited above) that epistemic modality (either in its objective or in its subjective form) is a gradable notion, which extends over a continuum with various values. We have already identified the group of Rising variables, claiming that their common core meaning is the objective epistemic modality. We can moreover assume that this meaning can be specified by the three intonation variables of this group as great, little or fifty-fifty likelihood that the propositional content of the one-word polar questions is true. Similarly, we assume that the subjective epistemic meaning, i.e. the common core meaning of the Falling variables, can be specified as great, little or fifty-fifty certainty of the speaker that the propositional content of the one-word polar questions is true.

To sum up, it should be pointed out that the assumption that the nucleus in one-word polar questions is constructed by two meaningful intonation variables, which can be combined in various ways, was the key to understanding the particularities of the adolescents' intonation system (where co-existence of the local and the standard forms takes place). Moreover, this construction proved crucial in establishing the difference between the intonation system of adolescents and that of the middle-aged population. In what immediately follows we analytically present the six semantic-intonation variables of the adolescents' intonation system.

2.1 The group of Rising variables

The first group of intonation variables (three all together) has a rising (or according to Gussenhoven (1983), a LH) form as their standard realization and a flat form as their dialectal realization. Each variable has a different starting and finishing point, and all of them start on the stressed syllable of the word³. The semantics of this group is related to objective epistemic modality, that is to the degrees of the speaker's commitment to the truth of the propositional content according to real world factors. Each of the three variables expresses a different degree of objective commitment, i.e. great, little or fifty-fifty likelihood that the propositional content of the one-word polar questions is true.

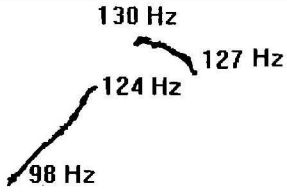
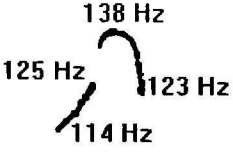
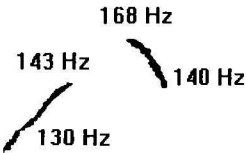
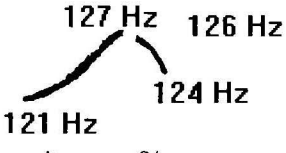
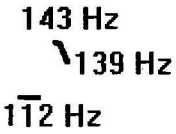
2.1.1 The Low Rising variable

The Low Rising variable is produced with a rising (LH) movement near the baseline and finishes between 100 Hz to 140 Hz for boys and 200 Hz to 270 Hz for girls. With this variable, the speakers indicate that there is great likelihood that the propositional content of their question is true.

The Low Rising variable also has a flat local variant (ex. 5), which appears at the same position as the rising variant, i.e. near the baseline.

³ All theories of intonation converge on the assumption that the tones are allocated on the stressed syllable of the nucleus (or the equivalent of nucleus in each different theory).

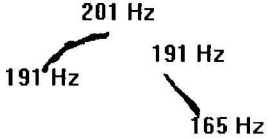
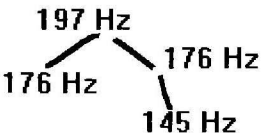
Table 1: Questions with a Low Rising variable as the first part of the intonation curve

 <p>(1) /oγδoda⁴---'e-----na?/ <i>Eighty one?</i></p>	 <p>(2) /'ne?/ <i>Really?</i></p>
 <p>(3) /'pe-----zi?/ <i>Is it recording?</i></p>	 <p>(4) /apo 'tsa---pa?/ <i>From a spade?</i></p>
 <p>(5) /o adel-'fo-su?/ <i>Your brother?</i></p>	

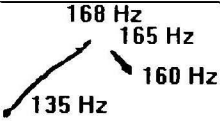
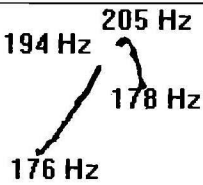
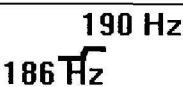
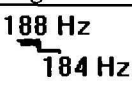
2.1.2 The High Rising variable

In the speech of male adolescents, the High Rising variable finishes higher than 160 Hz, usually around 200 Hz, and in the speech of female adolescents it finishes higher than 330 Hz, up to 400 Hz. With this variable, speakers indicate that there is little likelihood of what they are asking being true. The High Rising variable also has a flat local variant (ex.10, 11).

Table 2: Questions with a High Rising variable as the first part of the intonation curve.

 <p>(6) /δen 'i-----xe?/ <i>There werent any?</i></p>	 <p>(7) /'vul--ya--ros?/ <i>Bulgarian?</i></p>
--	--

⁴ Spaces are used in order to clarify the correspondence between a syllable and its intonation. Moreover, the images show only the F0 of the vowels, in order to present the internal structure of word's intonation.

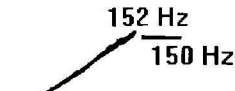
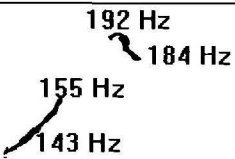
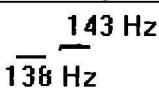
 <p>(8) /'pe-----zi?/ <i>Is it recording?</i></p>	 <p>(9) /to 'pi-----re?/ <i>Did he get it?</i></p>
 <p>(10) /o ksaɗel-'fo-su?/ <i>Your cousin?</i></p>	 <p>(11) /sto kil--'kis?/ <i>At Kilkis?</i></p>

2.1.3 The Middle Rising variable

This variable did not appear very frequently in the male adolescents' speech in our corpus, but it is quite common in the speech of female adolescents. The Middle Rising variable finishes between 140 Hz -155 Hz in the boys' speech and between 280 Hz - 320 Hz in the girls' speech. This variable expresses a fifty-fifty likelihood of what the speaker asks being true and it is expected in real polar questions.

The Middle Rising variable also has the characteristic flat local variant (ex.14).

Table 3: Questions with a Middle Rising variable as the first part of the intonation curve

 <p>(12) /ap' 'tsa-----pa?/ <i>From a spade?</i></p>	 <p>(13) /apo 'tsa-----pa?/ <i>From a spade?</i></p>
 <p>(14) /o 'mar-kos?/ <i>Markos?</i></p>	

2.2 The group of Falling variables

The second group of intonation variables (three as well) have a falling (or, according to Gussenhoven (1983), a HL) form as their standard realization and a flat form as their dialectal realization. The Falling variables are defined in relation to the finishing point of the preceding Rising variable. The group of Falling variables refers to subjective epistemic modality, i.e. to the degrees of the speaker's commitment to the truth of the propositional content according to his/her own subjective experience. Each of the three variables expresses a different degree of subjective commitment, i.e. great, little or fifty-fifty

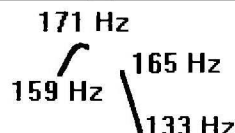
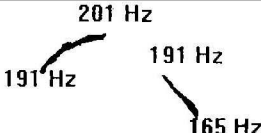
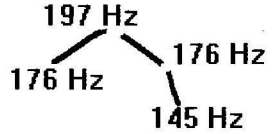
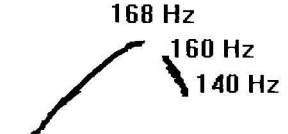
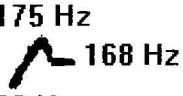
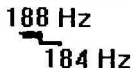
certainty of the speaker that the propositional content of the one-word polar questions is true.

2.2.1 The Low Falling variable

In particular, when the falling movement begins lower than the finishing point of the previous rising movement, the speaker expresses his/her great certainty about the truth of the propositional content of his/her utterance.

This unit also has a variant with a flat local form (ex. 19, 20) that appears lower than the finishing point of the previous -Rising- variable.

Table 4: Questions with a Low Falling variable as the end of the intonation curve

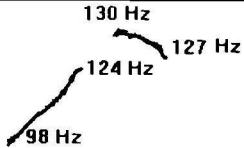
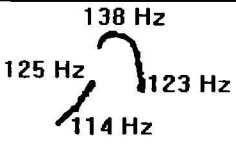
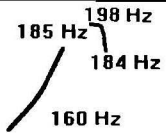
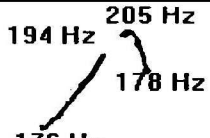
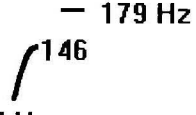
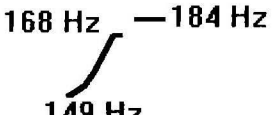
<p style="text-align: center;">171 Hz</p>  <p>(15) /me 'ko-smo?/ <i>Crowded?</i></p>	<p style="text-align: center;">201 Hz</p>  <p>(16) / ðen 'i-----xe?/ <i>There werent any ?</i></p>
<p style="text-align: center;">197 Hz</p>  <p>(17) /'vul--ya--ros?/ <i>Bulgarian?</i></p>	<p style="text-align: center;">168 Hz</p>  <p>(18) /'me-----sa?/ <i>Inside ?</i></p>
<p style="text-align: center;">175 Hz</p>  <p>(19) / a---'kus?/ <i>Are you listening?</i></p>	<p style="text-align: center;">188 Hz</p>  <p>(20) / sto kil--'kis?/ <i>At Kilkis?</i></p>

2.2.2 The High Falling variable

When the Falling variable begins higher (i.e. from a higher Hz frequency) than the finishing point of the previous Rising variable, the speaker is indicating his/her little certainty about the truth of the propositional content of his/her utterance.

Again, this unit has a flat local variant (ex. 25, 26), which appears higher than the finishing point of the previous -Rising- variable.

Table 5: Questions with a High Falling variable as the end of the intonation curve

 <p>(21) /oyðoda-----'e-----na?/ <i>Eighty one?</i></p>	 <p>(22) /'ne?/ <i>Really?</i></p>
 <p>(23) /'ðiplo-ma?/ <i>Driving licence?</i></p>	 <p>(24) /to 'pi-----re?/ <i>Did he get it?</i></p>
 <p>(25) /in a--'li---θia?/ <i>Is it true?</i></p>	 <p>(26) /i 'man--dra?/ <i>The fence?</i></p>


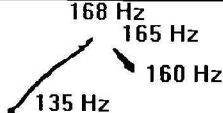
2.2.3 The Middle Falling variable

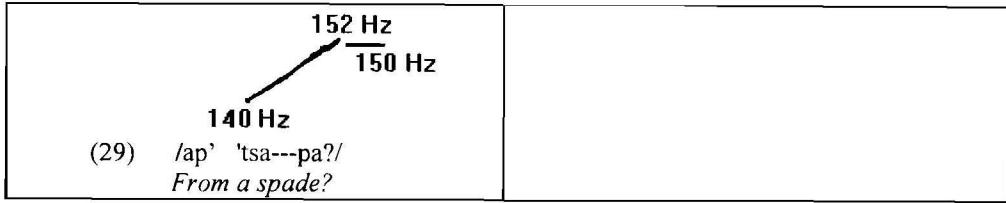
The adolescents in our study have another alternative, i.e. to express a fifty-fifty certainty and actually avoid signaling their subjective commitment to the propositional content of their utterance.

This is possible either with a small falling movement (less than 5 Hz), that starts almost at the same level as the finishing point of the previous rising movement, when the word is stressed on the penultimate or antepenultimate syllable (like 30 and 31), or with the absence of the falling movement altogether, when the word is stressed on the ultimate syllable, like (27). This variable was quite rare in the speech of male adolescents in our corpus, but it appeared more frequently in the speech of female adolescents. Examples of this variable appear in table 6.

As in the previous two units, the Middle Falling also has a flat local variant (29).

Table 6: Questions with a middle-Falling variable as the end of the intonation curve

 <p>(27) /'ikosio-----'xto?/ <i>Twenty eight?</i></p>	 <p>(28) /'pe-----zi?/ <i>Is it recording?</i></p>
--	--



3 The combinations of the semantic-intonation variables and their contribution to the final discourse meaning

Having finished with the brief presentation of the meaningful Rising and Falling variables and their flat variants, we would like to draw attention to the following points, before we exemplify their uses in discourse:

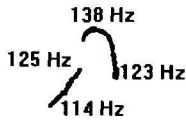
According to our data, in the speech of adolescents every -out of three- Rising variable, which expresses an objective epistemic commitment, can be combined with every -out of three- Falling variable, which expresses a subjective epistemic commitment. The meaning of the combined intonation variables applies to the propositional content of the question, qualifying it in various epistemic ways. Our data verify all the nine possible combinations of intonation variables.

The epistemic meanings of the two sets of intonation variables that we defined remain the same, irrespective of context (as Bolinger, 1951, Brazil, 1985, Gussenhoven, 1983, 1984, 1986, and Pierrehumbert & Hirschberg, 1990 argue). However, the final discourse meaning of a question is not only due to the semantics of intonation -as many scholars of the British Tradition maintained (cf. O' Connor & Arnold, 1961, Crystal, 1969, Halliday, 1967, 1970)-, but it is also a result of the combination of the *semantics of intonation* both with *the semantics of the sentence*, the former qualifying the latter in various epistemic ways, as well as with *the conversational structure and the shared knowledge* of the interlocutors. Therefore, the final meaning of the questions cannot be accounted for without consideration of the wider discourse context.

Thus, in what follows we shall show how different internal structures of intonation contours, which means different combinations of objective and subjective modalities, contribute to -but do not determine in a straightforward fashion- the final discourse meaning of one-word polar questions. Our exemplification will be based on politeness strategies, as in this locus the role of intonation is more than important (see Brown & Levinson, 1987). In other words, we will see how the different combinations of the meaningful intonation variables, and in particular how a Low Rising with a High Falling one and how a High Rising with a Low Falling one, can be used as realizations of specific politeness strategies.

The dialogue in (30) comes from a conversation the topic of which is the day of a party that would be held in one of the popular coffee shops of the research area. Speaker B starts the conversation presupposing that the day of the party is Wednesday. Speaker R immediately confronts him with what he thought was the correct date, a piece of information that seems to surprise speaker B. The latter insists on his opinion in a mitigated way. Speaker R continues in the following way:

30) R: /no'miz' ot' 'itan 'triti, 'gia'ena ke'nuryio 'snap/
I thought it was on Tuesday, to try a new snap



B: /'ne-e?/
Really?

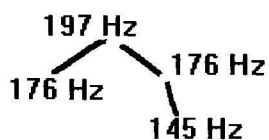
R: /ek'tos an 'line 'alo a'fto 'gia to 'snap ke 'alo to 'parti./
unless the two are different occasions -the snap thing and the party.

What is of interest in this dialogue is speaker's B reaction (the *ne* question) to the mild but supported by evidence insistence of speaker R. In particular, with the intonation he chooses to utter the reflex one-word polar question, he puts on a specific strategy of polite disagreement aiming, on the one hand, to save his interlocutor's positive face, that is his wants to be desirable to at least some others (Brown & Levinson, 1987:62), while, on the other, to keep on expressing his disagreement. The positive component of face is threatened exactly because of the expression of the disagreement⁵. In Brown & Levinson's (1987:113) words, speaker B seems to select the *Avoid disagreement* strategy according to which the desire to agree or appear to agree with hearer leads the speaker to mechanisms for pretending to agree (Brown & Levinson, 1987:113, see also Πολίτης & Αρχάκης, 2000:466). Speaker B manages to perform this polite disagreement strategy, because with the intonation variables he imposes on his question he declares, according to our previous semantic identification of the intonation variables, that "there is great likelihood that what I am asking is true (Low Rising variable), but I am still not certain about it (High Falling variable)". Presumably it is this politeness strategy that forces Speaker R to be, after all, concessive in his next turn. The combination of Low Rising and High Falling variables in echo and reflex questions can function as a politeness strategy, because, on one hand, the meaning of the Low Rising variable does not challenge the previous statement of the interlocutor since it presents its truth as objectively highly probable and thus does not threaten his interlocutor's positive face, while, on the other hand, the meaning of the High Falling variable, where the disagreement can be detected, expresses only the speaker's subjective doubts.

The dialogue in (31) shows another interesting combination of the meanings of the intonation variables and its discourse consequences in a, this time, (im)polite strategy. The topic of this conversation is the bad performance of the national basketball team at an international match. In his previous turns speaker C has put the blame mainly on the referees. Speaker R goes on as follows:

⁵ This interpretation of speaker B's reaction was confirmed by ten more young speakers. In particular five of these adolescents were asked to define the meaning of this question. Two out of five replied "doubts of the speaker", while three out of five replied "polite objection". Another group of five adolescents who were asked to provide an alternative expression that would cover the same meaning, replied: "I am not really convinced" -two out of five-, "I still have some doubts"- two out of five- and "are you really sure?"

(31) R: /'ekane o 'vulyaros se 'kapiēs 'fasiēs 'kapiēs xo'draðes 'ala ðen//⁶
 At some points, the Bulgarian (referee) was lousy but no



C: /

'rosos/

you mean the Russian.

R: /'rosos 'rosos, si'ynomi 'rosos/

Russian, Russian, sorry the Russian

'vul--ya--ros?
 Bulgarian?

In this dialogue speaker C interrupting speaker R provides a correction to speaker R's contribution in relation to the previously wrongly mentioned referee's nationality. That is, he puts on the repair mechanism (cf. Schegloff, Jefferson & Sacks, 1977) by means of which speakers locate and accommodate problems or troubles in interaction. The repair apparatus works through hierarchically ranked discourse choices where the self-initiated self repair is the most preferable, and the other-initiated other-repair is the least preferable (cf. Levinson, 1983:341-2). According to some conversation analysts (cf. Makri-Tsilipakou, 1991:82 ff, Sifianou, 1999:222, 227) this preference organization is closely related to the need of avoiding face-threatening activities. Thus, as Sifianou (1999:227) puts it, by allowing self-repair to precede other-repair, interlocutors appear considerate both to their own face needs and to those of the other.

In example (31) speaker C, being the one who initiates and provides the repair, selects the most face-threatening opportunity without using any kind of prefaces. Of particular interest is, however, that his direct opposition is clearly obvious even from the initiation part of the repair because of the combination of the intonation variables he selects for the performance of the first part of the repair, that is the utterance of the echo one-word polar question *vulyaros?*⁷ In particular, speaker C combines the High Rising intonation variable (i.e. there is little likelihood that what I am asking is true) with the Low Falling intonation variable (i.e. I am highly certain about the truth of the whole propositional content of the utterance). With this choice speaker C challenges his interlocutor's previous statement presenting a disagreement with it, while at the same time shows his own high degree of certainty about the presented disagreement. In this way, a face-threatening act is

⁶ Double slash, viz. //, indicates interruption.

⁷ This interpretation of speaker C's reaction was confirmed by ten more young speakers. In particular, the first five adolescents who were asked to define the meaning of this question interpreted it as: "strong opposition" -two out of five-, "clear opposition of the speaker to the previous statement", "forced negation", and "strong expression of opposite knowledge". The other five adolescents who were asked to provide an alternative expression used expressions like: "no way!!!" -three out of five-, "you are wrong" and "it is not true".

performed baldly on record, without any redress (Brown & Levinson, 1987:69). Under this attack Speaker R immediately accepts the repair and apologizes for his previous mistake.

It is worth noting, however, that this strategy is normally avoided when the interactants are not on very intimate terms. In our data it is not rare between male adolescents, who share many common social ties in the community, and thus their fellowship relations and their faces cannot actually be threatened.

4 The role of the intonation variables of one-word polar questions in the formation of a new Koiné dialect

So far, we have presented the linguistic description of the intonation variables under investigation and we have given examples of their combinations from real discourse extracts. In this section we will describe the role of these intonation variables in the formation of a new Koiné dialect in the area.

As we mentioned in the first part of this paper, the local middle-aged population also uses a local Greek variety with distinct characteristics from the standard Greek at the areas of intonation, segmental phonetics, segmental phonology and syntax. One of the most distinct differences of the local dialect with respect to the standard Northern Greek is reflected in the semantic-intonation local variants that appear on polar questions. Along with this distinct intonation difference, there are also differences at the phonetic level. The local variety makes frequent use of tense vowels (like [ɪ], [e] and [æ]), in contrast to the other varieties, which have mainly lax vowels (like [i], [e] and [a]). A further phonetic difference between the two varieties is that speakers of the local variety mainly use the palato-alveolar fricatives [ʃ] and [ʒ], while speakers of the other varieties use the alveolars [s] and [z] respectively.

The local Greek variety -but not the standard one- allows for the possibility of unstressed vowel deletion; for example, the standard pronunciation of the word 'dog' is [ski'li]; in the local dialect the word is pronounced [ʃ'kli]. This phonological alteration is also common in other regional Greek dialects of Northern Greece.

A further difference between the local Greek dialect and the standard appears at the syntactic level. In particular, in the standard Northern Greek, some connectives -at least- occur at the beginning of subordinate clauses, for example:

32) /a'fu tu 'kseris, 'ti ro'tas?/¹

Since you know it, why are you asking?

In the local variety, on the other hand, the conjunction appears at the end of the subordinate clause:

33) /to 'kseris a'fu, 'ti ro'tas?/

You know it since, why are you asking?

Interestingly, local adolescents in Goumenissa do not use any other of the marked characteristics of the local dialect apart from the local intonation variables. Furthermore, all

¹ The Greek excerpts in the examples are given in a phonological transcription. The English translation is only approximate in order to give an equivalent that makes sense in English.

adolescents, regardless of their group of origin, use the local variants of the semantic-intonation variables. The attrition of the marked features of one of the dialects in contact, along with the adoption of one salient dialect feature, i.e. the local intonation variables on polar questions, by all the adolescents, irrespective of their group of origin, is characterized as **levelling**, an important parameter in the formation process of a new Koiné (Trudgill, 1986). It should be pointed out that the adoption on the part of the adolescents of the local forms of the intonation variables does not level out their standard forms, but both co-exist as variants.

Nevertheless, the system of meaningful intonation variables that appear on one-word polar questions presented in sections 2 and 3 is that of the speech of adolescents, who produce all the possible combinations (i.e. nine out of nine). However, the local intonation system that the middle-aged locals use is not exactly the same. In particular, middle-aged locals⁸ seem to use only four intonation variables, i.e. the Low Rising, the High Rising, the Low Falling and the High Falling. Furthermore, in the sample of middle-aged people that was studied, there was no combination of Low Rising and Low Falling variables, an absence that limits the regularity of the system (i.e. three combinations out of the possible four). Finally, middle-aged locals do not combine local and standard forms, using only a combination of the flat forms when they use the local variety.

Comparing the two intonation systems, that of the adolescents and that of the middle-aged locals, we can claim that the system of adolescents is more regular, as it presents two more variables, thus allowing for the expression of intermediate degrees of epistemic modality. This development increases the creativity of the adolescents' intonation system and its possible pragmatic exploitations, as adolescents have at their disposal five more possible meaningful combinations in order to comment epistemically on the propositional content of one-word polar questions. Moreover, the system of adolescents employs all the possible combinations of the two sets of intonation variables (i.e. nine out of nine), as opposed to the system of the middle-aged, which employs only three out of the possible four combinations. Finally, middle-aged locals do not combine standard and local forms, a limitation that does not exist in the speech of adolescents, who can combine local and standard forms in one intonation contour.

The increase of regularity is a characteristic phenomenon of dialect contact and has been defined as **simplification** (Mühlhäusler, 1985, Trudgill, 1986, Hinskens, 1992, Kerswill, 1994, 1995, Britain, 1997a, 1997b). Therefore, in view of our observations in the preceding paragraph, we can speak of simplification in the case of this particular dialect.

A further step of simplification, according to Trudgill (1986), is the linguistic or sociolinguistic **reallocation** of the simplified linguistic units or variables, i.e. their different linguistic or sociolinguistic function or reference. Interestingly enough, our data present a sociolinguistic reallocation of the intonation variables under study in the speech of adolescents. In particular, the local forms of the intonation variables under investigation expressed the local identity of their users, in opposition to the refugee identity, as they were used only by the local Greeks and not by the immigrants. However, as we mentioned at the beginning of section 4, this situation has changed in the group of adolescents, as all of them, irrespective of their group of origin, use the local variants. Moreover, statistical tests showed that there is no significant correlation between the percentages of local forms and the group of origin of adolescents. It seems that different parameters are reflected through

⁸ Based on a small comparative study of the speech of three middle-aged locals.

the use of the local variants. In particular, observations based on ethnographic methods of data collection and verified by statistical analysis (Παπαζαχαρίου 1998α) led us to realise that young male adults in Goumenissa, irrespective of their group of origin, express their Goumenissian identity and their membership in the local community by using the local forms of the six meaningful intonation variables.

Trudgill (1986), in a thorough study of dialect contact phenomena (i.e. dialect mixture and new dialect formation) that appear in many different languages and under different contact conditions, defines **koinéization**, the formation of a new dialect, as the result of the combination of dialect levelling and simplification –with or without reallocation. In view of the results of our study, the linguistic variety that adolescents use in everyday casual situations can be easily characterized as a new Koiné dialect, as it has undergone both dialect levelling, (i.e. the loss of phonetic, morphological and syntactic variants that belonged to the local Greek variety, as well as the adoption of the local intonation forms of all adolescents irrespective of their group of origin), simplification, and reallocation.

5 Conclusions

In this paper we argued about a new approach to the definition of semantic-intonation variables on polar questions as they appear in a northern Greek dialect. In particular, we argued that the intonation contour that appears on one-word polar questions in this particular dialect is composed of two intonation variables. The first variable is selected out of a group of three and it can indicate different degrees of objective epistemic modality; the second is selected out of another group of three, indicating different degrees of subjective epistemic modality. We also tried to present the importance of the composition of these two meanings -which are also combined with the propositional content of the question- and their necessity to the realisation of final meaning that a polar question takes in a conversation. Finally, we described the important role of these intonation variables in the formation of a new regional Koiné dialect through the processes of levelling, simplification and reallocation.

References

- Bolinger, D. L. (1951). Intonation: Levels vs. configurations. In *Word* 7, 199-210.
- Brazil, D. (1985). Phonology: Intonation in discourse. In Van Dijk, T. A. (ed.), *Handbook of discourse analysis II: Dimensions of discourse*. London: Academic Press, 57-75.
- Britain, D. (1997a). Dialect contact, focusing and phonological rule complexity: The koinéisation of Fenland English. In Boberg, C., Meyerhoff, M. & Strassel, S. (eds.), *University of Pennsylvania working papers in Linguistics: A selection of papers from NWAVE 25*. 4:1, 141-170.
- Britain, D. (1997b). Dialect contact and phonological reallocation: “Canadian raising” in the English Fens. In *Language in Society* 26:1, 15-46.
- Brown, P. & Levinson, S. C. (1987), *Politeness: Some universals in language usage*. Cambridge: Cambridge University Press.
- Crystal, D. (1969). *Prosodic systems and intonation in English*. Cambridge: Cambridge University Press.

- Gussenhoven, C. (1983). Focus, mode, and the nucleus. In *Journal of Linguistics* 19, 377-417.
- _____ (1984). *On the grammar and semantics of sentence accents*. Dordrecht: Foris.
- _____ (1986). The intonation of George and Mildred: Post-nuclear generalisations. In Johns-Lewis, C. (ed.), *Intonation in discourse*. London: Croom Helm, 77-123
- Halliday, M.A.C. (1967). *Intonation and grammar in British English*. The Hague: Mouton.
- _____ (1970). *A course in spoken English: Intonation*. London: Oxford University Press.
- Hinskens, F. (1986). The selection of linguistic variables in empirical research on variation and change in dialects. In Weltens, B., De Bot, K. & Van Els, T. (eds.), *Language attrition in progress*. Dordrecht: Foris, 53-74.
- Kerswill, P. (1994). *Dialects converging: Rural speech in urban Norway*. Oxford: Clarendon Press.
- _____ (1995). Phonological convergence in dialect contact: Evidence from citation forms. In *Language variation and change* 7, 195-207.
- Levinson, S. C. (1983), *Pragmatics*. Cambridge: Cambridge University Press.
- Lyons, J. (1977), *Semantics, Vol. II*. London: Cambridge University Press.
- _____ (1981), *Language, meaning and context*. London: Fontana.
- Makri-Tsilipakou, M. (1991), *Agreement/disagreement: Affiliative vs. disaffiliative display in cross-sex conversations*. Unpublished Ph.D. dissertation, Aristotle University of Thessaloniki.
- Mühlhaußer, P. (1985). Patterns of contact, mixture, creation and nativization: Their contribution to a general theory of language. In Bailey, C. J. N., & Harris, R. (eds.), *Developmental mechanics of language*. Oxford: Pergamon Press, 51-87.
- O' Connor, J. D. & Arnold, G. F. (1961). *Intonation of colloquial English: A practical handbook*. London: Longman.
- Παπαζαχαρίου, Δ. (1998α). Εθνογραφικός ορισμός του όρου “κοινωνικό φύλο” και η συσχέτιση του με τη γλωσσική ποικιλία των εφήβων στη Γουμένισσα. Στο *Μελέτες για την Ελληνική Γλώσσα* 18. 386-400.
- Papazachariou, D. (1998β). *Language variation and the social construction of identity: The sociolinguistic role of intonation among adolescents in Northern Greece*. Unpublished Ph.D. dissertation, University of Essex.
- Πολίτης, Π. (2000), *Η επιστημική τροπικότητα στο πλαίσιο της συνομιλίας: Η περίπτωση των δοξαστικών ρημάτων*. Αδημοσίευτη διδακτορική διατριβή. Αριστοτέλειο Πανεπιστήμιο Θεσσαλονίκης.
- Πολίτης, Π. & Αρχάκης Α. (2000), Χρήσεις του *ναι* αλλά στο λόγο, *Μελέτες για την Ελληνική Γλώσσα*, Πρακτικά της 20^{ης} ετήσιας συνάντησης του Τομέα Γλωσσολογίας της Φιλοσοφικής Σχολής του Α.Π.Θ., 23 – 25 Απριλίου 1999, Θεσσαλονίκη, 457-468.
- Pierrehumbert, J. (1986), *The Phonology and phonetics of English intonation*. Bloomington: Indiana University Linguistics Club Publications.
- Pierrehumbert, J. & Hirschberg, J. (1990), The meaning of intonational contours in the interpretation of discourse. In Cohen, P., Morgan, J. & Pollack, M. (eds.), *Intentions in Communication*. Cambridge, Mass.: MIT Press, 271-311.
- Schegloff, E. A., Jefferson, G. & Sacks, H. (1977), The preference for self correction in the organization of repair in conversation, *Language*, 53:361-82.
- Sifianou, M. (1999), *Discourse analysis: An Introduction*. Παρουσία, 48. Αθήνα.
- Trudgill, P. (1986). *Dialects in contact*. Oxford: Blackwell.