

Prosodic and informational aspects of polar questions in Neapolitan Italian

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Abstract

In this paper the relation between prosodic form and meaning is investigated in a sample of polar questions in Neapolitan Italian, taken from four Map Task dialogues. The sample is analyzed from both the informational and the prosodic point of view. The analysis of the information structure led to the constitution of four groups of questions which are distinguished by their function or by the degree of accessibility of the referents they contain. The groups were then put in relation to the conversational Map Task moves, and to the results of the prosodic analysis. The results of this analysis show that polar questions in Neapolitan Italian have a common prosodic pattern. Their different functions, i.e. confirmation-seeking and information-seeking, are expressed with a variety of means that, together with the information provided by the context, concur to orient the interpretation.

1. Introduction

It is known that it is possible to distinguish, within the group of polar questions (hereafter YNQs), questions with different functions. In the Map Task conversational scheme [1] three types of moves can be realized by means of a polar question: query, check and align. The first is an information-seeking question, while the other two are confirmation-seeking questions [2]. Check moves deal with information that the speaker has some reason to believe even if he is not completely sure [3], and align moves check the current state of the task, and the agreement between the speakers. Several studies ([4], [5], [6], [7], [8]) have investigated the relations between different prosodic patterns and different functions of the question. As pointed out in [8] (a study on Map Task dialogues in Bari Italian), in languages such as English, syntactic and prosodic aspects differentiate query from check and align moves, while in Italian similar syntactic differences are not present. Then (p.161), “in Italian the decision as to whether an utterance is a query or a check relied heavily on the speech file, whereas in English the speech file was an additional source of data but not the main one”. As the authors point out, from the methodological point of view, distinguishing queries and checks only on the basis of intonation entails a risk of circularity. Furthermore, the prosodic difference between the information-seeking question and the confirmation-seeking questions is not always clear-cut. For this reason, and in order to avoid the aforementioned circularity, Grice and Savino [8] (see also [9]) propose to classify the two types of question on the basis of the type of information requested. According to the authors, check moves can also be categorized on the basis of the degree of the speaker’s confidence on the correctness of his inferences [5].

This paper presents an exploratory investigation of the relation between the type of information requested, and the

prosodic form in YNQs in a corpus of Neapolitan Italian (for some remarks concerning the problems in evaluating the degree of confidence, which will be left aside in this work, see § 2.2.).

2. Theoretical background

2.1. Activation status of the referents

The type of information requested in a question can be classified according to the degree of activation. Chafe [10] distinguishes *given*, *new* and *accessible* information. *Given* information is information which is already active at the moment of speaking, while *new* information is being activated at this moment. *Accessible* information is semi-active and becomes activated at the time of speaking. On the basis of the source of the accessibility, Lambrecht [11] further divides the accessible information in three more types: accessible information which can be retrieved on the basis of the text (textually-accessible information), accessible information which can be retrieved by inferences made by the speaker (inferentially accessible information), and accessible information which can be retrieved on the basis of the situation (situationally accessible information).

2.2. Degree of confidence

It is rather difficult to measure the degree of confidence of a question, for it is related to the speakers’ beliefs. In order to measure it, we should be able to make explicit what the speaker believes about his question, i.e. if he believes to know already the answer to the question he is posing. A prototypical confirmation-seeking question could be considered the rhetorical question, where the speaker already knows the answer to his question. In the opposite case, represented by the prototypical information-seeking question, the speaker doesn’t know the answer to the question he is asking. Between these two extremes, there is a *continuum* of questions that are neither fully information-seeking nor confirmation-seeking questions. It is, however, difficult to conceive a method for measuring a parameter that could make explicit the set of presuppositions the speaker has in mind. A possible method for making the presupposition more explicit is paraphrasing. However, using paraphrases is rather problematic, since it presupposes a certain degree of synonymy between the original question and the paraphrased ones. In fact, such synonymy is far from evident [12], as it is doubtful whether paraphrases preserve the significance of the original question when put in other contexts. In conclusion then, the evaluation of the degree of confidence seems to be based more on subjective interpretations than on reliable and measurable facts. Therefore, the evaluation of the degree of

Table 1: *Examples of question on given, new or accessible information.*

Ex.1	QUESTION ON GIVEN INFORMATION	
F58: poi? G59: prosegui e arriva fino a dove sta scritto portico <pause> <i>la vedi la figura portico?</i> F:60 no non c'è		F58: and then? G59: go and continue until where there is written porch <pause> <i>can you see the picture porch?</i> F60: no, it is not there
Ex.2	QUESTION ON NEW INFORMATION	
G101: vai con questo punto tratteggiato fino ad albergo F102: <mh> G103: <i>c'è una figura sopra all'albergo che si chiama discoteca Zazà?</i>		G101: draw this dashed line until the hotel F102: <mh> G103: <i>is there a picture above the hotel which is called Zazà disco?</i>
Ex.3	QUESTION ON ACCESSIBLE INFORMATION	
G29: fai un altro mezzo cerchio sempre verso sinistra e inizia a arrivare verso dove sta la figura barche <pause> e fermati dove coincide la punta più alta della barca <pause> con i trattini F30: <eh> G31: ci sei arrivata? F32: sì [...] G37: perfetto, allora questa <pause> <i>sei arrivata dove sta la punta delle barche?</i>		G29: draw another semi-circle again toward the left, and start to go toward the picture boats <pause> and stop at the top of the boat <pause> with the dashes F30: <eh> G31: are you there? F32: yes [...] G37: perfect, so this <pause> <i>did you arrive at the top of the boats?</i>
Ex.4	QUESTION CHECKING INFORMATION TRANSFER	
G91: va bene allora passa <pause> tra ambulante e questa figura che c'è <pause> passaci <pause> fai un mezzo cerchio e passaci <pause> come se stessi facendo uno slalom <pause> tra queste due figure F92: no, ma sta più giù la figura barche [...] G95: e comunque passaci in mezzo F96: <mbe'>, poi? G97: <i>ci sei ? <pause> hai fatto?</i>		G91: ok, then go <pause> between the pedlar and this other picture <pause> go between <pause> draw a semi-circle and go between them <pause> as if you were doing a slalom <pause> between these two pictures F92: no, but the picture boats is standing lower [...] G95: and anyway go between them F96: ok, then? G97: <i>are you there? <pause> have you done it?</i>

confidence will be left aside in the analysis worked out in this paper.

2.3. Prosodic analysis of YNQs in Neapolitan Italian

Most studies devoted to YNQs in Neapolitan Italian, have been carried out in the framework of Autosegmental phonology. In [13] [14] [15] acoustic and perceptual aspects of YNQs speech have been investigated using read speech. According to these studies, in Neapolitan Italian YNQs have a rise-fall prosodic pattern. The rise movement can be analysed as L*+H, and the fall as phrase accent HL-, followed by an L% boundary tone [13] [14] [15]. The actual shape of this pattern is affected by the position and the scope of the focus. In particular, in cases of narrow focus on a long constituent (such as: “mamma [andava a ballare]_F da Lalla?”, “Did mom use to dance at Lalla’s?”, [14] p. 342) “the rise and fall appear to separate, with the rise staying anchored to the focal initial stressed syllable while the fall is realized later, reaching the target in the vicinity of the constituent right boundary [...]”. D’Imperio claims also that “the constituent final fall of interrogatives is analogous to the sentence accent of Swedish, in that this tone marks the end of the focus constituent as well as contributes to the perceived prominence of the focal accent.”

In other studies Caputo [16] arrived at similar conclusions for the intonation of YN questions in spontaneous speech. Overall, the results of his studies are in agreement with those on read speech, although the occasional presence of a final rise has been noted.

3. Corpus and method

Four Map Task dialogues were chosen in the API corpus [17]. The dialogues were performed by speakers from Naples, with a university education. The four speakers (two

male and two female) are the Route Givers of the dialogues. The corpus, consisting in 115 YNQs, was analyzed in two independent phases. First, the questions were analyzed from the informational point of view. Then, the prosodic analysis was carried on. The information analysis focussed on the activation status of the referents present in the questions. Following in this [8], only the textual givenness/newness /accessibility were taken into account. The referents present in the question were then labelled as (textually) given, new or accessible, and the questions were grouped according to the type of referent they contain. Then the different groups were put in relation with the conversational moves performed by the YNQs in the Map Task [3]. The conversational move analysis is not part of the present work, as it was provided together with the dialogues in the API corpus [18]. The prosodic analysis took as a starting point the aforementioned works on Neapolitan Italian, carried on in the frame of Autosegmental phonology [13] [14] [15]. The prosodic analysis was focussed on the shape of the pitch accents and the phrasal tones and on the position of the tonal targets, also with respect to the focus’ scope [19] [20]. The goal of the analysis is to evaluate if different prosodic descriptions are required for questions which differ from the informational and the conversational point of view.

4. Results

4.1. Information analysis

Four groups of questions, distinguished by the degree of accessibility of the referents they contain, were individuated. The first group contains the questions on given information, reiterated several times in the text (table 1, ex. 1). More than 40% of the questions in this group were classified as check moves; 7% were labelled as align and 56% as query moves.

In several cases, the questions on given information have a negative form (i.e.: “Non c’è la figura fiume?”, “The picture river doesn’t exist?”, fig.2). In these cases, morphosyntax orients the interpretation of the question as a confirmation-seeking question. The second group contains questions on new referents which are not yet used and which cannot be inferred (table 1, ex. 2). These utterances can be considered prototypical information-seeking questions. Most of them (88%) are classified as query moves. The third group contains questions on textually accessible referents, previously mentioned in the dialogue, usually labelled as query moves (68%) or check moves (18%). The questions of the fourth group concern the transfer of the information during the dialogue. The speaker wants to check if the information expressed in previous utterances (an explanation, an instruction, etc.) has been correctly understood or accomplished by his partner. These questions are usually made by a VP such as “Hai fatto?” (“Done?”), “Hai capito?” (“Did you understand?”), “Ci sei?” (“Are you with me?”), checking the current state of the task, and the agreement between the speakers. This particular group of questions contain the conversational move called align (91% of the occurrences).

Summing up, new referents are usually found in query moves; accessible referents in query or checks; given referents are often found in checks (but are also very frequent in queries). Moreover, a special group of questions corresponding to the align moves was found. The data show that the correspondences between the activation status of the referent recalled in the question and the conversational move is not exact (a large number of questions were labelled as query across the four groups), although it is quite regular. Furthermore, it is noteworthy that, in several cases, it seems not possible to decide if an utterance is a confirmation-seeking or an information-seeking question.

4.2. Prosodic analysis

The results of the present prosodic analysis confirm and generalize the description of YNQs found in previous studies on Neapolitan Italian. Both information and confirmation seeking questions have a global fall-rise shape, composed of two phases, currently analyzed as L*+H and HL- [13] [14]. The nuclear accent L*+H is anchored to the first stressed syllable of the focus constituent, and the HL- fall to the last (see [13] and [14] for details concerning the alignment of the pitch accents in different prosodic context). This general pattern is found in each of the four groups of questions isolated by means of the information analysis (see fig. 1, 2).

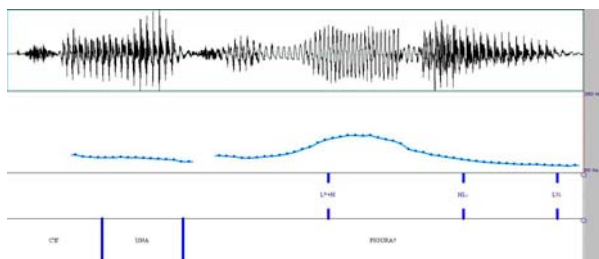


Figure 1: *Query on new information: “C’è la figura fiume?” (“Is there a picture river?”).*

Similar results were found for Pisa Italian in [21]. In Neapolitan and Pisa Italian the functional distinctions of questions seem not to be prosodically specified, differently

from what happens in varieties such as Bari Italian [5] [6] [7] [8].

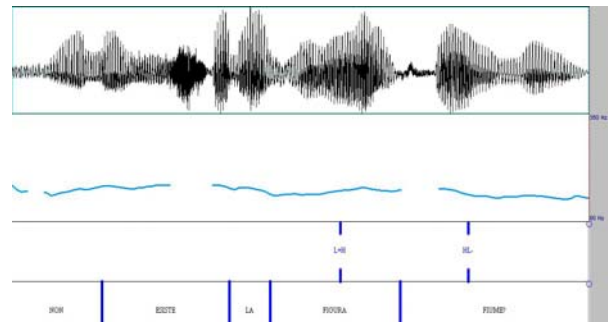


Figure 2: *Check on given information: “Non esiste la figura fiume?” (“The picture river doesn’t exist?”).*

The pattern of the YNQ in Neapolitan Italian appears to be affected by the position of the prosodic focus [19] [20] [13] [14], and by the length of the focussed constituent. The separation of the nuclear accent in two phases, a rising sequence (LH) and the falling sequence (HL) is found in utterances with narrow focus on a long constituent [13] [14], and also in cases of broad focus utterances. The focus constituent appears to be delimited on the left by the LH rise and on the right by the HL fall. A high pitch plateau is frequently present between the rise and the fall (fig.3). Delimiting the right boundary of the focussed constituent is not the only function of the HL fall. This sequence seems to play an important role also in the perception of interrogative meaning. The repetition of the HL sequence on the last stressed syllable in utterances with early narrow focus suggests this interpretation. However, further investigations are needed before assuming that the focus-final fall, and utterance-final fall can be considered as the same tonal event (fig. 4).

Although the prosody of the YNQs seems to be rather homogeneous, regardless to the function played by the question in the context, some interesting phonetic particularities are found in checks concerning given information. Occasionally in short confirmation-seeking questions, the tonal targets show a different alignment from the one found in most of the corpus utterances. As shown in fig. 5, the L target of the rise is located on the syllable preceding the nucleus, and the HL fall takes place on the stressed vowel. The resulting configuration appears to be similar to the one described in [8] as the typical accent of prototypical checks in Bari Italian. The second phonetic particularity is related to the pitch range that appears to be reduced in several checks on given information (see fig. 2). Although these phonetic particularities could be related to the function of the question (confirmation-seeking; check) the number of occurrences is too small to allow interpretations.

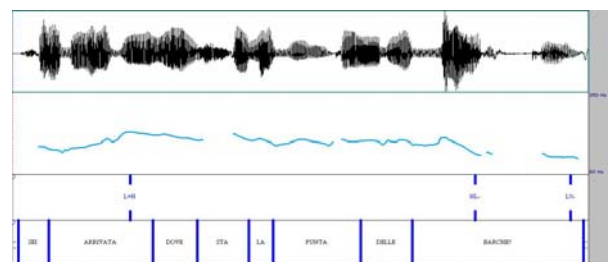


Figure 3: *Broad focus utterance; high plateau between LH and HL (align; accessible inf.), “Sei arrivata dove sta la punta delle barche?” (“ Did you arrive at the top of the boats?”).*

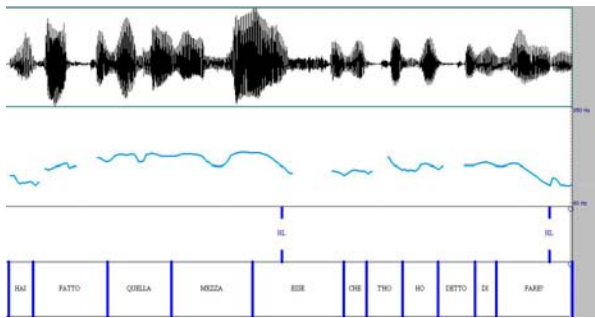


Figure 4: Repetition of the HL fall in early narrow focus utterance (align; accessible information): “Hai fatto quella “S” che ti ho detto di fare?” (“Did you draw that half “S” as I told you?”).

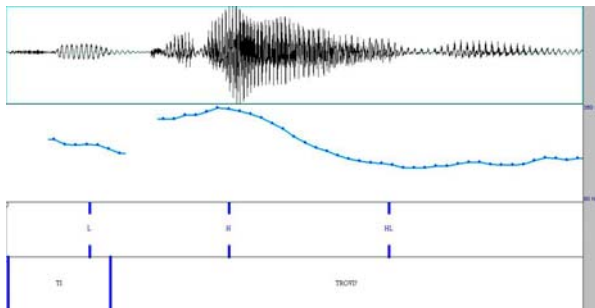


Figure 5: align move: “Ti trovi?” (“Do you agree?”).

5. Discussion

The distinction between information-seeking questions and confirmation-seeking questions in Neapolitan Italian appears not to be clear-cut, both from the informational and the prosodic point of view. The information analysis distinguishes four groups of questions that can be put in relation with the conversational moves query, check and align. Although the relation between activation status of the referents and type of conversational move is quite regular, the interpretation of the questions does not depend entirely on that factor. This lack of exact correspondence between activation status of the referents and conversational moves, can be explained referring to a number of factors that play an important role in orienting the interpretation of the question. First, speakers can exploit morphosyntactic means, i.e. they can select a question with negative form (see fig. 2). Then, although these preliminary results need to be confirmed on a larger base of data, the difference in the tonal targets position, and the reduction of the pitch range occasionally found in check moves on given information, suggest that the speakers can use prosodic means for marking different function of the question. Finally, the focal structure of the utterance is yet another factor that is crucial for the interpretation of the question. Speakers can modulate the scope of the focus in order to recall different sets of presuppositions in the hearer’s mind, orientating the interpretation of the question in a specific sense, regardless of the activation status of the referent present in the utterance. The utterance “Devo [cerchiare]_F viale della verità?” (“Must I [draw a circle around]_F truth avenue?”) is a plain information-seeking question (concerning the action indicated by the VP), despite the presence of a given referent (“viale della verità”). The YNQs questions in Neapolitan Italian have a common prosodic pattern. Their different functions, i.e. confirmation-seeking and information-seeking, are expressed with a variety

of means that orient the interpretation of the question in the context.

6. Conclusions

The functional distinctions in the class of the YNQs do not correspond to a univocal linguistic coding. A variety of grammatical means (negative form, focus scope variation, etc.) can be exploited by the speaker to express his believes and attitudes toward the question. However, the lack of a univocal linguistic coding for distinguishing different types of questions, suggests that a crucial role in the correct interpretation of the utterance is played by the context.

7. References

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