

Title: Clashing nature of nuclear tones

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Abstract

For a long time intonation was regarded as “pronunciation” of grammar, i.e. intonation was viewed just as a means of uttering certain types of sentences – general question with rising tone, special questions, statements, exclamatory sentences with falling tone, etc. In the late XX century intonation was considered a powerful tool that contributes to the meaning of utterances. Still even current theories restrict the scope of intonation to just five or seven nuclear tones that convey definite attitudes, emotions or feelings. However, in discursive analysis intonation can reveal as many meanings as the number of contexts. Even simple nuclear tones such as low falling or low rising, which are believed to be unemphatic, are able to communicate variety of feelings used in different discourses. Emphatic tones are chiefly observed in ironical, sarcastic, humoristic discourses granting lexis to convey more than dictionary meaning. The research paper observes and illustrates numerous extracts from close-to-real-life situations, i.e. situational comedies and movies, to prove that the attitudes and meanings conveyed by nuclear tones cannot be limited to a certain number. In order to check the validity of observations, samples are included into Praat program which depicts temporal (red line), melodic (blue line) and dynamic (green line) parameters. The assumption is that intonation is capable to create as many meanings as the number of contexts. The article demonstrates cases when the same nucleus expresses a positive attitude in one situation, a negative connotation in another.

Keywords: pragmatic meaning, positive and negative connotations, nuclear tones

Introduction

Theories existing for centuries about intonation used to regard it either as a pronunciation of grammar, or considered it equivalent to sentence stress, and in other studies, it was judged to be only a means of showing finality or non-finality of thoughts. Towards the end of the XX century scholars have revealed that in order to get a thorough understanding of form, meaning and function of intonation one must go beyond the borders of a sentence and study it in connection to larger units of speech. This brought the term “discourse intonation” into linguistic literature. The approach originated in Britain and was evolved by David Brazil (1975, 1978, 1985, 1997) and other linguists (Brazil, Coulthard and Jones 1980; Coulthard and Brazil 1981; Coulthard and Montgomery 1981; Sinclair and Brazil 1982; Hewings 1990; Cauldwell 2003). Discursive approach explores the role of intonation in natural communication and intercourse. As a consequence of application of discursive approach, intonation began to be investigated more deeply in many perspectives and a number of theoretical approaches about it have come into existence.

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Discourse intonation links intonation directly to the process of communication. Guided by Brazil's model of intonation in 1997, Chun (2002) diverted attention from the form of intonation to its functions. He also shifted from grammatical and attitudinal/emotional functions of intonation to sociolinguistic and discursive ones. These are; functions referring to structure of information (emphasis, contrast, differentiating given and new information); illocutive function (the power of intentions of a speaker); textual functions (referring to coherence, shared knowledge, borders in discourse, speaker's expectations of interlocutor's answer); interactive functions (pointing to continuation or change of the topic, refraining the listener from replying, showing cooperation) and so forth.

In the process of realizing all the above mentioned functions, intonation can convey multifaceted messages many of which has not been examined yet. These meanings depend on contextual factors and thus, they are considered pragmatic. (see the findings of Ladd, 1980; 1996; Bolinger, 1986; 1989) Not only different elements of intonation (direction of nuclear tones, the range of voice, pauses, interrelation of accented and unaccented words in an intonation group) (Ladd et al., 1985; Lieberman and Michaels, 1962), but also entire intonation models contribute to the meaning expressed by utterances. (Scherer et al., 1984; Uldall, 1964) Although the paper focuses mainly on meanings expressed by nuclear tones depending on emotional state and intentions of speakers, at times it also switches to other elements that accompany them. All words in intonation group may fall into paradigms of nuclear tones. Semantic impact of nuclear tones is sometimes very subtle and vague, sometimes clear and distinct.

Alongside with literature review as support for grounded theories, the research paper illustrates numerous extracts from close-to-real-life situations, i.e. situational comedies and movies, to prove that the attitudes and meanings conveyed by nuclear tones cannot be limited. We have carefully watched sitcoms, such as "Yes, Minister", "Mind your Language", "Friend" and observed that very frequently people turn to intonation in order to express their attitude indirectly. The assumption is that intonation is capable to create as many meanings as the number of contexts. The article will demonstrate cases when the same nucleus expresses a positive attitude in one situation, a negative connotation in another. Moreover, we have used Praat program to prove the authenticity of our observations. The program provides us with graphs which illustrate temporal (red line), melodic (blue line) and dynamic (green line) parameters of utterances

Body

It is widely accepted that rising nuclear tone mitigates the utterance. Wells points out [11, p. 224] that "Would you like some tea" expresses polite offer with a low rise, while with a high rise it would sound more friendly, cheerful and airy. If the speaker pronounces the intonation group with high head and wider range, it will convey surprise. Mitigating role of rising tone compared with falling is valid when applied in alternative questions. Gimson specifies that alternatives said with falling tone urge listener to agree, while rising tone leaves choice to politely refuse. [4, p. 271] Would you like some tea| or coffeel - this offer can cause negative emotions in listener if uttered with low falling tone, because no other options besides *tea* and *coffee* are left for him. However, he can decline both alternatives and ask for another drink if the sentence is said with low rising tone.

A similar rule is applicable to greetings as well. With a high falling tone they sound sincere, with low falling tone brisk, with low rising tone they are accepted as polite. [4, p. 271]

ˊGood ˊmorning - high pre-head + high fall - cordial

ˊGood morning - high fall on *good* - happy and optimistic

ˊGood ˊmorning - rise-fall can make the utterance either important or ironic depending on the situation. These two somehow opposite meanings can confuse the reader at first glance, but accompanied with facial

expressions and gestures, understanding this type of implications does not cause any difficulties. If we imagine that parties are going to discuss something significant after the greeting, enthusiastic rise-fall will be heard. Contrary, if the boss is planning to threaten his employee or express his anger, and to show that “the morning is not good at all”, he uses ironic rise-fall.

This difference can also be observed in sentences with “*please*”. Wichmann highlights that intonation is capable to supplement or diminish positive meaning expressed in utterance. [12, p.1522] He conducted an experiment using “please” in all communicative types of sentences (questions, statements, commands, elliptical sentences, etc.) and in all positions, i.e. at the beginning, in the middle and at the end of sentences. The linguist concludes that accented in initial, unaccented in medial and rising in final positions, “*please*” conveys attitudes like compliance, listener orientedness, whereas used separately, it can be uttered with high falling nuclear tone and make requests ironic, malicious, angry and discontented. [12, p.1540] Nevertheless, the same intonation group communicates indifference with level tone, discourtesy and impoliteness with low falling nuclear tone. [12, p.1546]

Another experiment studying impact of nuclear tones on delivering positive attitudes was carried out by Uldall in 1960. This research was based on the following four sentences:

He expects to be here on Friday.

Did all of them come in the morning?

What time did they leave for Boston?

Turn right at the next corner.

The researcher involved 12 listeners (7 American men and 5 American women) in the experiment. They had to hear the pre-recorded sentences and evaluate whether they were boring versus interesting, rude versus polite, dissatisfied versus pleased, arrogant versus respectful. These four sentences had been recorded with 16 intonation models which differed from one another in direction of nuclear tone, range of voice, occurrence of accented and unaccented words. [10, p. 226] The participants regarded fall in narrower scale the most unpleasant and rise in questions and commands more pleasant. Uldall summarises that range is as crucial in meaning manifestation as direction of a nuclear tone. [10, p. 232]

Although it is widely accepted that rising nucleus is associated with politeness and respect, in the following examples we will witness negative implications of it:

The first example is from British sitcom “Mind your Language” where the school principal, Miss Courtney, reproaches the teacher, Mr. Brown, for not wearing appropriately to meet the Queen. With low level head and low rising tone the headmaster wants to sound patient and to control her anger, while reproach and irony is still not hidden.

'Haven't you 'got anything a little 'more 'formal?

/,hævnt ju: gɒt 'en θɪŋ ə lɪ t l mɔ: 'fɔ: m ə l/

All three line graphs in the first graph (**Graph 1**) depicting temporal (red line), melodic (blue line) and dynamic (green line) parameters are rising, which shows that attitudes in this utterance are expressed with low rising nuclear tone.

The second example is taken from American sitcom “Friends”. The dialogue happens between Rachel and her friend from school who says that he was in a club of boys who hated her during school. The woman's

reply shows doubt and irritation towards the man's statement. Again these negative feeling are conveyed by low rising nuclear tone and validity of the conclusion is supported by **Graph 2**.

Friend: We had a ,club |

Rachel: you had a ,clubbbb |

The next example is a conversation between an official who came to school to see Miss Courtney and Mr. Brown, who met him instead. The official asked with ironic low rising tone, while the teacher's answer has a threatening tone. (**Graph 3**)

Official: 'Are you 'Miss ,Courtney?

Mr. Brown: 'Do I 'look like Miss ,Courtney?

Alongside the cynical associations, low rising tone is still used in a number of situations delivering some favorable feelings. The following sentence is used in sitcom "Mr. President" where Ms. Gullickson shows her sympathy and care towards the president who has a toothache. It should be noted that *wh* questions are said with low falling tone in neutral, unemphatic speech.

- What's wrong with your ,tooth?

Next dialogue happens between Mr. Brown and father of one of his learners. The teacher says that his two learners have fallen in love at first sight and they must marry. However, the parent highlights the fact that his son has already got a wife, so he cannot marry another woman. Low rising tone in "*English people do*" is soothing.

Mr. Brown: It was love at first sight.

Parent: People do `not fall in `love at first sight.

Mr. Brown: English people ,do.

Parent: I `tell you he can `not marry an `English `wife.

Mr. Brown: Why not?

Parent: Because he's already have a ,Russian wife.

Now we will move on to a next intonation contour which is considered a modification of rising nucleus by some (e.g. Gimson), and an independent contour by majority of linguists. This is a fall-rise contour. The former group of linguists consider this nucleus softer and more polite variant on low rising tone. Indeed, in some cases fall-rise can just be used instead of simple rising tone, making the utterance more lively and energetic.

,Well | I expect we all to be ,there | and get ready for their ar,rivall

Gregory Ward and Julia Hirschberg [7, p.747] postulate that the fall-rise can be realized under certain circumstances: first, context in which fall-rise is used must demand scalar relations; second, speaker must have reasonable uncertainty about the scale or scalar relations. As for Halliday, fall-rise is assertion depending on some conditions (there is "but" about the statement). [6, p.27] J.Bing thinks that fall-rise is a condition, or something that is not said but implied. [1, p. 205-206], whereas M.Liberman and E.Sag consider fall-rise to be a contradictory tone. [9, p.423-425] K.Gussenhoven writes that fall-rise is highlighting of variable out of common knowledge. [5] Contrasting fall-rise with low fall, R.Ladd claims that falling tone is new and unexpected, while fall-rise links new element to the group implied in the context. If falling nucleus is harsh, fall-rise is polite softening, if fall is agreement, fall-rise is disagreement and correction.

A: Do you want a glass of water? /Ladd, example 19/

B: I'll have \beer/.

R.Ladd interpretes the answer with a fall-rise as following: ‘You offered me something to drink – how about beer instead of water?’ He adds that with a fall the answer would sound rude as there is no polite word or expression in the sentence in order to refuse and want some other drink instead. [8. p. 155]

Literature review makes it clear that a falling-rising nucleus can contribute to interpretation of an utterance even with context-free meanings, such as uncertainty, hesitation and so forth. Therefore, there are variety of attitudes expressed by fall-rise, some of which are opposite in connotation. In the following dialogue the principal, being sure that the new teacher cannot endure the foreign learners, asks Mr. Brown whether he is tired of working in her school. With fall-rise on *already* she hints at their first conversation about inappropriateness of a man in teaching position. Although the teacher is tired already, he conceals this with a brisk and confident rise-fall.

Miss Courtney: *Job getting you down , al ready?*

Mr. Brown: *¬No, ¬no, I'm ^fine.*

Fall-rise in the next dialogue has a more negative connotation compared to the previous one. Here, Miss Courtney threatens Mr. Brown who has just unintentionally broken her gift.

Mr. Brown: *It ,wasn't ...*

Miss Courtney: *It ,was*

Negative and positive associations are even true about simple low falling tone that is mostly regarded as final, complete and definite. After a brief review of existing literature about this nucleus, low falling tone will be studied in different episodes of movies. Halliday links this contour to the main information (Halliday, 1967, 1994), whereas A.L.Trachterov regards the fall that begins on the mid-level restrained, calm and unemotional, and the fall that starts lower than mid-level is gloomy, unsociable, mysterious, even angry and ruthless. This nucleus is never emotional. [13]

The following dialogue can be an illustration of different connotations of the fall in close-to-real-life situations.

Worker: *Quite , honestly ,minister | I want a job where I don't spend endless hours circulating information that isn't relevant | about subjects that don't matter | to people who aren't ,interested |*

Secretary: *I 'don't un-der-,stand.*

Worker: *I ,know. 'that's why I'm ,leaving.*

Prime Minister: *You're not saying that the 'government of 'Britain is `unimportant.*

Worker: *No. It's `very important. It's just that I haven't met anyone who is ,doing it |*

The extract is from British political sitcom “Yes, Minister” and it takes place among three people – Prime Minister, Secretary and a female worker who wants to leave her position in ministry. The woman begins in a very calm and reserved manner and criticizes public servants for doing unimportant and useless work. Her desire to be involved in a more productive job makes her leave the office. Secretary Humphrey's comment also ends in falling conclusion, but he pronounces the word, which carries the tone, slower dividing it into syllables. Thus by falling tone, accompanied by increase of intervals between syllables, he shows his anger in a more patient and acceptable way.

at 'dəʊnt ,An də,stænd | |

Line graphs showing properties of the above syntagm in **Graph 4** are falling, which proves that connotations in this utterance are expressed with low falling nuclear tone.

The next nuclear tone that the article has been planned to cover is a complex rise-fall. Some linguists (David Crystal, Halliday and others) assume that emotions expressed by low falling and high falling tones can be reinforced by a rise-fall. This nucleus is bidirectional – starting from the mid-level of a speaker's range of voice it reaches the upper limit, then extends to the lowest pitch level. It is considered to be confident and impressed contour as we can understand from the next extract.

Inspector: - Your Mr. Brown is a remarkable ,man.

Miss Courtney: - He´is |

Jeremy Brown: - I´am |

Inspector: - ^Yes||

Inspector, who participated in Mr. Brown's class as a learner, praises him to the principal with a definite falling tone. This unexpected appraisal confuses both the woman and the teacher. The inspector confirms his remark with a dominant and confident rise-fall.

On the other hand, this melody can be quite teasing.

Mr. Brown: She thought the whole ,thing was free.

Inspector: ^Yes.

Mr. Brown: So it's not her ~fault.

Inspector: If anyone is to ~blame, it's the `person who is 'teaching her `English.

The conversation happens in a police station where one of Mr. Brown's learners is suspended for stealing different types of goods from different shops. As the woman does not speak English, the police officer calls her teacher. When Mr. Brown clears up the situation, the angry inspector confirms his thought with a rise-fall, which was in fact a teasing comment. This case is depicted in the graphs as well. **(Graph 5)**

Another ironic rise-fall falls on the word *time* in the following dialogue:

Mr. Brown: Hello, Miss Courtney. Sorry I'm ,late.

Miss Courtney: But you're ,not.

Mr. Brown: ,Really?

Miss Courtney: According to your students you were here all the ^time.

In this episode from "Mind your Language", the teacher, being late for ten minutes, meets the headmaster and asks for an excuse, but he does not know that Miss Courtney has already talked about him with the learners. The learners have said that Mr. Brown left for the canteen to bring tea. So the headmaster turns furious and gives her comment with an ironic rise-fall.

Finally, the utterance below is from "Mr. President" where Ms. Gullickson protests against her life resembling a prison with an antagonistic rise-fall.

Not everyone gets used to ^ jail necklace.

Conclusion

The article has viewed nuclear tones as a strong tool for modifying the meaning of an utterance. They are capable to change the direct meaning of a sentence to a completely opposite angle. The validity and reliability of the hypothesis has been proven by an experiment. However, this field is too broad to be studied in the scope of one article or even a single dissertation. Further studies must be conducted to find out all the meanings intonation is capable to infer. This may be done by observing and analyzing as many speeches and dialogues as possible and deduce variations in connotation nuclear tones are associated with.

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