

**The Discourse Function of Intonation in Central Kurdish: A Phonological Account**Twana Saadi Hamid<sup>1</sup>, Tola Najm Taha<sup>2</sup><sup>1</sup>College of Language, University of Sulaimani, Sulaimaniya, Iraq<sup>2</sup>School of Language and Education, Charmo University, Sulaimaniya, IraqEmail: twana.hamid@univsul.edu.iq<sup>1</sup>, tola.najm@charmouniversity.org<sup>2</sup>**Abstract:**

This paper looks into the Discourse Functions of Intonation in Central Kurdish (CK henceforth). Although it is assumed that intonation is attested universally, its discourse function may differ cross-linguistically. Intonation can contribute to discourse directly and indirectly. The present study focuses on the former function which includes signalling turn-taking, topic-initiation and achieving coherence. Intonation can express some extra discourse functions such as showing interest, attention and agreement amongst the interlocutors. The Intonation tools used to add to the meaning of the utterances are usually by varying the pitch. Even though some studies examined intonation in Kurdish, to the best of the researchers' knowledge, no study has exclusively examined the discourse functions of intonation in CK. Therefore, this paper embarks on investigating the discourse functions that intonation can convey in CK. It is found out that rising the pitch signals the start of a new topic, and lowering the pitch indicates the end of a topic. Another finding of the paper was that CK interlocutors lower the pitch, reduce loudness and lengthen the final element to signal end-of-turn whereas final high pitch is typically used in lists, and when the speaker is unwilling to give up the turn. The paper also discovers that CK speakers use intonation to achieve cohesion. Finally, the study acknowledges that the findings are only applicable in standard cases and they are not applied across the board. The unexpected interruption of conversation is a case where the rules that govern the discourse functions of intonation are violated.

**Keywords:** Intonation, Tone, Functions of intonation, Discourse, Intonation in Discourse.**الملخص:**

تبحث هذه البحث في وظائف الخطاب في التنغيم باللغة الكردية الوسطى. على الرغم من أنه من المفترض أن التنغيم موجود عالمياً، إلا أن وظيفة الخطاب الخاصة به قد تختلف من الناحية اللغوية. يمكن أن يساهم التنغيم في الخطاب بشكل مباشر وغير مباشر. تركز الدراسة الحالية على الوظيفة السابقة التي تشمل تبادل الإشارات، وبدء الموضوع، وتحقيق الاتساق. يمكن أن يعبر التنغيم عن بعض وظائف الخطاب الإضافية مثل إظهار الاهتمام والانتباه والاتفاق بين المحاورين. عادةً ما تكون أدوات التنغيم المستخدمة في إضافة معنى الكلام عن طريق تغيير درجة الصوت. على الرغم من أن بعض الدراسات اختبرت التنغيم باللغة الكردية، على حد علم الباحثين، لم تفحص أي دراسة بشكل حصري وظائف الخطاب للتنغيم في الكردية الوسطى. لذلك، تشرع هذه الورقة في التحقيق في وظائف الخطاب التي يمكن أن ينقلها التنغيم في الكردية الوسطى. لقد تبين أن رفع درجة الصوت يشير إلى بداية موضوع جديد، وخفض درجة الصوت يشير إلى نهاية الموضوع. من النتائج الأخرى للورقة أن محوري الكردية الوسطى يخفضون درجة الصوت ويقللون من جهازة الصوت ويطيلون العنصر الأخير للإشارة إلى نهاية الدور بينما يتم استخدام النغمة العالية النهائية عادةً في القوائم، وعندما يكون المتحدث غير راغب في التخلي عن الدور. تكتشف الورقة أيضاً أن مكبرات الصوت CK تستخدم التنغيم لتحقيق التماسك. أخيراً، تفر الدراسة أن النتائج قابلة للتطبيق فقط في الحالات القياسية ولا يتم تطبيقها في جميع المجالات. المقاطعة غير المتوقعة للمحادثة هي حالة يتم فيها انتهاك القواعد التي تحكم وظائف الخطاب في التنغيم.

الكلمات المفتاحية: نغمة، وظائف التنغيم في الخطاب، وظائف التنغيم.

پوخته:

نهم توڙينهوه له نمرکی گوتاری ناواز دهکولنیموه له کوردی ناوهنددا. همرچهنده باوهر وایه که ناواز له ههموو زمانهکانی دونیادا ههمیه، نمرکی گوتاری له زمانیکهوه بو زمانیکه دیکه دهگوریت. ناواز دمتوانیت راستهوخو ناراستهوخو رولی ههمیت له گوتاردا. نهم توڙينهوه لهسهر رولی راستهوخو کار دهکات که توره گرتن له قسهکردندا، دهست پیکردنی بابیتیک و پهیوهندی دروستن. ناواز دمتوانیت چهند نمرکیکی دیکه ی گوتار ببینیت و مک پيشاندانی نارمزوو له گفتوگو، سرنجدان و ریکموتن لهنیو قسهکمراندا. نهم هوکارانه ی که ناواز بهکاریان دههینیت بو زیادکردنی واتا بو دهربرینهکان زورجار بههوی گورینی لههینهوهی دهنگهژیکانهوهیه. همرچهنده ههنديک توڙينهوه کراوه لهسهر ناواز له زمانی کوردیدا، بهلام نهوندهی نهمه ناگدار بین هپچ توڙينهوهیه که بهدیاریکراوی له نمرکی گوتاری ناواز نهکولنیموه له کوردی ناوهنددا. لهسهر نهمه نهم نهم توڙينهوه لهو نمرکه گوتاریانه دهکولنیموه که ناواز دمتوانیت بیان گویزیتیه له زمانی کوردیدا. دهرکوت که بهر زکردنهوهی دهنگه ژیکان ناماز مپیدهری دهست پیکردنی بابیتیک نوبیه له کاتی ناخاوتندا لهکاتیکدا نزمکردنهوهی دهنگهژیکان نیشانه ی کوتایی هینانی نهم بابیتیه. دهرنجامیکه دیکه ی توڙينهوه که ناخپورانی کوردی ناوهند دهنگه ژیکان نزم دهکهنهوه و دهنگ نزم دهکهنهوه و کوتا بهشی ناخاوتن دریز دهکهنهوه کاتیک بیانیه ی ناماز بهمه بکمن که نورمیان تهواو به له قسهکردندا لهکاتیکدا بهر زکردنهوهی لههینهوهی دهنگه ژیکان له کوتاییدا بهکار دیت کاتیک لیستیک دموتریت یان کاتیک ناخپور دهیویت بهردموام بیت له قسه کردن. توڙهران همره ها بو یان دهرکوت ناخپورانی کورد ناواز بهکار دههینن بو دهرکوتی یهکبابهتی. لهکوتاییدا، توڙينهوه که بهناگایه لهوهی که نهنجامهکان تهنها بهسهر دهربرینه ستانداردهکاندا جیهجهی دهین و بهسهر ههموو دهربرینیکدا جیهجهینابن. قسهپیرینی چاوهروان نهکراو لهکاتی ناخاوتندا یهکیکه لهو حالتهانه ی که یاساکانی نمرکی گوتاری ناواز پشت گوئ دهرخین.

کليله وشه: ناوازه، نمرکهکانی ناوازه، گفتوگو، ناوازه له گفتوگودا.

## 1. Introduction

Intonation is the taste of language. It has been claimed that varying the pitch of voice and floating among various tones from high to low to level to high again gives meaning to the utterances (Cruttenden, 1997; Bartels, 2013; Gussenhoven, 2007; Hedberg & Sosa, 2007; Gussenhoven, 2004; O'Connor & Arnold, 1973; Wells J. C., 2006; Fóngay, 1989; Roach, 2009). As has often been reported by these studies, the way an utterance is said is sometimes as important as the choice of words and the grammatical structure of the utterance. Therefore, it well-deserves proper investigation in any spoken language. Because of its multi-functionality, the study of intonation has a variety of theoretical methods, reflecting significant theoretical and representational distinctions.

In general, two main directions can be well recognised. First, those researchers who place a premium focus on the symbolic representation of intonation and the number of prosodic units (intonation forms). There are a number of proposed models of such representations. For example, in Pierrehumbert's model pitch accents, phrase accents, and boundary tones are all examples of atomistic local events that make up intonation (Pierrehumbert, 1980). But, this study mostly focuses on the second direction which is concerned with what functions the forms of intonation can have with a given utterance. Within these functions, the discourse function is specifically intended.

A variety of studies on the discourse function of intonation has been conducted in English showing the importance of intonation in shaping the conversations which take place in daily life (Levis & Wichmann, 2015; Wichmann, 2015; Brown, Currie, & Kenworthy, 2015; Nolan, Intonation, 2006). All these studies insist on the crucial role which intonation plays in helping the participants smoothly run the conversation; to know where to begin and where to stop, when to start

a new topic and when to follow the same topic, and how to achieve coherence in their speech. In other words, it is the intonation that helps the participants to cooperate in the conversation.

In English, both rising and falling tones have been recognised as end-of-turn markers associated with other linguistic or para-linguistic features such as reduced loudness, lengthening of turn final elements, and creaky voice (Brazil, Coulthard, & Johns, 1980; Brown, Currie, & Kenworthy, 2015). A rising tone is also claimed to be a trademark of the beginning of a new topic or semi-topic. When a new subject or subtopic is introduced, there is a concomitant conspicuous rise following the first stressed word, while the end of a sub-subject or topic is signalled by a reduction of stressed peaks and a modest lowering of the baseline (Chafe, 1994; Brazil, Coulthard, & Johns, 1980; Wichmann, 2013). Rising and level tones alongside the cohesive device signal the way utterances are related and in what direction the conversation is going to go. The intonational pattern, in this case, changes according to the type of cohesive device and the speaker's wish (Couper-Kuhlen & Selting, 1996; Wennerstrom, 1998; Halliday & Hasan, 1976).

As far as Central Kurdish CK is concerned, both forms and functions of intonation have been studied from different angles, for some phonologists, the main focus is the forms of intonation (Fattah, 1997; Musa, 2009; Xarib, 2019) for others much emphasis is given to functions (Al-Bazzaz & Qadir, 2016; Hasan, 2012; Qadir, 2011; Ali, 2013). However, in all these studies the discourse function of intonation is not given the attention it really deserves, almost all the studies are more concerned with other grammatical, attitudinal and information structure functions of intonation other than the discourse one or their attention is on other dialects rather than CK. If ever discourse function has been mentioned in these studies, it is within the scope of other functions and hence not investigated properly. It is then quite important for researchers to pay more attention to such a vital function of intonation in CK. This study is an attempt to fill the gap of having no proper investigation that deals with the discourse function of intonation in CK. From this perspective, this study hypothesizes that CK intonation can have similar contributions to ongoing conversations as it has in English hoping to initiate some grounds for future discussion on this function in the Kurdish language.

In the remaining sections, this paper presents the discourse function of intonation and the way it shapes speech exchange in CK. Therefore, to make discussions clear, the tones have symbolized as follows; falling ( \ ), rising ( / ), rising-falling ( ^ ), falling-rising ( v ) and level ( - ), and also these symbols ( ¯ ), ( \_ ), ( | ) and ( || ) represent high pitch, low pitch, minor boundary and major boundary respectively. Then the models which have been set up to illustrate the intonation-discourse relationship will be applied to CK to test its validity (section 2). Finally, the findings of this paper will be presented in (section 3).

## **2. Discourse Function of intonation in Central Kurdish**

Sometimes intonation is defined as the punctuation of speech in discourse (Nolan, 2006). It shapes the way conversation goes and how participants recognize their roles during the exchange. Broadly speaking, intonation contributes to the discourse in two main respects; directly and indirectly. The indirect effect is that discourse is where all the other functions of intonation can be seen in practice since grammatical, attitudinal and information structure functions are better realized when they are uttered partly because sentences are seldom said separated, and when spoken language is involved,

intonation interferes. The direct effect, on the other hand, includes signalling turn-taking, topic initiation, and achieving coherence.

According to the results of a recent study conducted to compare and contrast the Kurdish and English intonations, it has been found that intonation has the same functions in both languages (Parsa, 2012). Based on this finding, it is quite fair to hypothesize that what has been found to be true for English could be equally applied to Kurdish as well. Therefore, in the below sections, the phases in which intonation plays a role in discourse will be applied to CK.

## 2.1. Intonation as a turn-taking marker

There are some complicated processes in communication which require additional linguistic and non-linguistic aspects of language, other than intonation, to be involved in explaining how it takes place in discourse. Turn-taking is one of those processes which is partly cued by intonation and partly by other linguistic or non-linguistic factors (Wichmann, 2015). It is important, though, to note that intonational cues for turn-taking will be given much focus for now as this aspect could only be phonologically analysed and more related to the scope of this study.

One basic question in the discourse function of intonation is: how participants can do turn-taking during a conversation? What form of tone is used when the speaker wants to stop and let the other participant start speaking? The answer to these two questions seems to be simple on the surface but complicated in practice since it appears to be easy for participants to recognize their turn-ceding and turn-taking. This gives the impression that this turn-recognition aspect in conversation and the smooth flow of the conversation results from using some simple discursual techniques by the participants which may not be hard to understand. But, the fact that various interrelated factors (intonation plays only a part) interact to signal the shift in turns makes it difficult to give a reliable straightforward description of these techniques separately disregarding others (Wichmann, 2015).

It is necessary to start this discussion by presenting the most common and widely-noted tones at the end and the start of a turn. Frequently used end-of-turn markers include low pitch, reduced loudness, rallentando (lengthening of turn final elements), and creaky voice, while the absence of slowdown (or perhaps the presence of accelerando) in the second utterance, along with the speaker's continued final high pitch, which is typically used in lists, signals that there is more to come and the speaker is unwilling to give up the floor (Brown, Currie, & Kenworthy, 2015; Cutler & Pearson, 1985; Chafe, 1994; Schaffer, 1983; Nolan, 2006).

(1) A: / Dwêne | roştin bo \ Hewraman. (yesterday, we went to Hawraman)

B: Kê u kê \ roştin? (who and who?)

C: / Min | u / daykim | u / bawkim | u \ brakem. (me, my mother, my father, and my brother.)

At the end of every turn in this exchange, the falling tone can be seen. After the speaker utters (1-A-) which is an informative sentence he expresses his wish to give the floor to the addressee by choosing the falling tone on the last lexical item. This choice not only shows the desire of the speaker to give a chance to the hearer to participate in the conversation but also it is the unmarked tone for declaratives. If the speaker

wants to provide more information he would choose the rising tone on the last lexical item to indicate that there is more to come like (2).

(2) / Dwêne | roştin bo / Hewraman | bes zu \ hatinewe.  
(yesterday, we went to Hawraman, but we came back early.)

Similarly, in (1-B) falling tone is used with the question. This is at the same time the unmarked tone of wh-questions and expresses the speaker's wish to give the turn and wait for an answer. In (1-C), the speaker is listing those who are involved in the action which has been indicated, therefore, the tone for each member is rising so that he tells the listener that the list is still not over, until he comes to the last item for which he uses the falling tone to say that it is all over and it is your turn. These choices of tones in each turn help the conversation run smoothly since each speaker knows where to start and where to finish his turn.

The main reason why a falling tone is regarded as the prototypical way of ending a turn is that the falling tone has the meaning of finality or completeness (Leemann, 2012). In their experimental study, Cutler & Pearson (1985) found out that rising intonation is a good cue for turn-holding and falling tone for turn-yielding, yet in many cases, the participants in their experiment found it difficult to recognise where exactly one's turn ends and the other's turn starts because of other prosodic and vocal factors which interfere. Therefore, they propose that in natural speech, speakers and listeners may have access to a variety of additional turn signals. If this view is accepted, then it is worth asking; why doesn't rising tone or other tones, which mark the end of a question or any other sentence type, mark the end of a turn? Does every turn end with a falling tone?

According to the data presented by (Chafe, 1994), after a topic is arisen by one of the participants in a conversation, for example (going to Hawraman) in (1-A), this information becomes semiactive in the other participant's mind. Then their exchange might be developed in the form of question and answer. Hence, the second participant may ask a question like (3-A), and be answered as (3-B).

- (3) A: Be bê min / roştin? (did you go without me?)  
B: Axir to le malewe \ nabuyt. (but you weren't home)  
C: Belam ?ewa be mintan newt ke / ?eron! (but, you didn't tell me that you go)  
D: ?ey hefey pêşw pêman / newtit? (didn't we tell you last week?)

When the second participant asks the question (3-A), he uses a rising tone which is the unmarked intonation for polar interrogatives. Right after asking this question, he gives the floor to the other participant to answer. In this case, the end-of-the-turn marker is the rising tone. This conversation might then be enhanced further after the first participant's answer, sometimes using a falling tone when the turn ends with a statement, or a rising tone when it is a question. From time to time other intonation patterns may show up as a result of the flow of the exchange, yet these are unlikely to signal the end of a turn. For instance:

- (4) √Be rast | min nem √ zaniwe | | be kêtan \ ut?  
(Really! I didn't know that. Whom did you tell?)



The second participant shows his surprise by the falling-rising tone in the first two intonation groups, still, these tones do not give the other participant the impression that he wishes to stop speaking and give the turn. But when he comes to the last intonation group, which is an interrogative clause, he uses a falling tone to show his desire that he doesn't want to continue and is waiting for an answer from the other participant.

From this perspective and in the light of the discussions presented above, it can be argued that the end of a turn is not always marked by falling intonation, but also rising tone can equally play the same role in the conversation if it is accompanied by other paralinguistic and non-linguistic cues as well (e.g. pause and gesture). Duncan & Fiske (1979) claim that rising and falling (but not sustained) pitch at the end of a phonemic clause are two choices speakers have when they want to display their wish to yield the floor during a conversation. Similarly, Wells & Peppe (1996) report that in normal turn-takings, a rising or rising-falling tone can equally play the same role as a falling tone. For instance, in the case the second participant wants to show astonishment or ask for repetition as a reaction to (going to Hawraman), he may use a rising-falling tone as (5) in this case, it is the rising-falling tone as a turn-taking marker.

(5) ^ Ĉon?! (how)

Unfortunately, turn-taking may not always go smoothly, as one wishes, without violating the principles controlling it. Interruptions may also arise, often unexpectedly, during a conversation. The term interruption is used here to refer to attempting to speak before the present speaker has given up the floor (Wichmann, 2013). Most of the studies on intonation as a turn-taking cue think of interruptions as a special case or an exception to the regular turn-taking process illustrated above (Cutler & Pearson, 1985; Schaffer, 1983; Wichmann, 2013). According to (French & Local, 1986; Selting, 1996), competitive interruptions are markedly raised in pitch and loudness. For example, during a turn of the first participant talking about how their trip to Hawraman was, the second participant may interfere like this:

(6) A: Ke la jêr keprekeda / daniştbuyn.....kurêkman bini meley ?ekird.

B: ... be chand bu / kapreke?...

(when we were sitting under the pergola ..... We saw a boy swimming)

(..... how much was the price of the pergola?.....)

In this case, typically, the second participant uses a higher pitch and speaks louder at the beginning of his interruption than the first participant.

This is not the whole story, up to this point of the discussion the counter-arguments against the view that intonation is a useful cue to mark the turn-ceding haven't been mentioned at all. One of these opinions considers the discourse function of intonation as an extension of the grammatical function since it depends on markers of information structure and status to negotiate common ground in the communicative process and thus argues that it should be studied within the scope of grammatical function (House, 2006).

Another view goes further than just regarding the discourse function of intonation as part of the grammatical function to deny the role of tones as turn-taking markers. The results of a study by (Schaffer, 1983), show that neither rising nor falling function as the turn-taking cue in the same way other phonologists claim for. These two contours have little contribution to the turn-taking process in comparison with other linguistic and non-linguistic factors like the termination of a hand movement used during the turn, a number of stereotyped expressions such as ‘tê geštit’ and the ending of a grammatical clause.

(7) ?ebêt hemu ?išekan dubare \ bkeytewe | tê / geštit?!

(You should redo all the work, do you understand?)

Not only does the tone at the end of (7) hint at the end of a turn but also the end of the grammatical clause and the expression which is normally used to indicate the completeness of an utterance help the hearer to become confident that the other participant’s turn has come to finish.

Apart from turn taking intonation is sometimes used to show interest, attention, agreement or some kind of interpersonal relationship or cooperativeness by the participants in a conversation. At the end or during a turn the listener may prosodically and rhythmically take part with that of the speaker which may mean supportiveness, cooperativeness, or association (Kousidis, Dorran, McDonnell, & Coyle, 2009). This integration may go together with conversation fillers like baše, ?ê, aha, hum,... and so on. What is striking is that in such cases the intonation of both speaker and listener are very similar in a way only the syntactic and lexical forms could be identified as distinct. Consider the following examples:

(8) A- Azad:- Sereta, ?ebêt štekan ?amade \ bkayt. (first, prepare the things.)

B- Ali:- \ Baše,... (ok)

C- Azad:- Dwatir, ?ebêt bibeyt bo \ kompanyake. (next, you should take them to the company)

D- Ali:- \ ?aha... (aha)

E- Azad:- ?inca çawêre bikeyt ta welamit \ edenewe. (then wait until they answer you.)

In exchange (8), Ali shows his interest and cooperativeness by replying with (8-B and 8-D) using the same tone as Azad used to give the instructions. This does not mean that Ali is going to do whatever has been told to, rather it shows the listener's willingness to show interest and appreciation.

## 2.2. Intonation as a topic and semi-topic initiation marker

Signalling the beginning of a new topic or sub-topic is thought to be one of the discourse functions of intonation. As noted by (Brazil, Coulthard, & Johns, 1980; Yule, 1980; Brown, Currie, & Kenworthy, 2015), a consequent marked rising after the first stressed word is the property of the intonation pattern at the beginning of new topics or sub-topics, while the end of a sub-topic or topic is marked by a lowering of stressed peaks and a slight lowering of the base-line. Likewise, Wichmann (2013) claims that in recent studies, it is observed that a high pitch at the beginning of new paragraphs is similar to how intonationally new topics are marked in spontaneous speech. This prosodic marking, especially at the end of the topic, is accompanied by lexical fade-aways on ready-made phrases like Herweha, šti lew core, min ?awa ?eybinim, ?itir ?awaye, heta dwayy, etc. or the repetition of lexical items already introduced as (unusual – belê, pêw waya ?ewe řaste). Then if there is a wish to introduce a new topic to the conversation the new start is signalled phonetically once more, this time by the speaker speaking loudly and in a high pitch range (Brown, Currie, & Kenworthy, 2015).

- (9) ˘ Pilekani germa roj be roj beriztir \ debinewe | | ʔeger awa / biřwat | wiřkesali / debêt | kem awy / ʔabêt | u xelk le tinwa / ʔexinkêt | | min ʔawa \ ʔeybinim.

(temperatures are getting higher and higher every day. If it goes up like this, there will be a drought, there will be less water, and people will die from thirst. That's how I see)

- (10) A- ˘ Jiyan zor zehmet \ bwe | | ʔebêt xami hemu \ ştêkit bêt | xemi / minal | xemi / dayk u bawk | xemi / xêzan | we \ hawreha.

(life has become harder. You should take care of everything children, parents, family and so on.)

B- \ Belê | pêw waya ʔewe \ raste. (yes, I think that's true)

In both (9&10), the speaker opens the topic with a high pitch at the beginning of the topic symbolised by ( ˘ ), this pitch lowers toward the end of the first clause since it is a declarative one, but still, it does not hint to the end of the topic until the last utterance of the speech where the presence of ready-made phrases (Herweha and min awa eybinim) together with a falling tone and an expected slowdown in tempo interact to make the addressee expect no more to be said on that topic. While in (10), the end of the topic is further emphasised when the hearer participates by saying Belê, pêw waya ewe raste again with a falling tone and slow amplitude.

On the other hand, in his explanation of how a topic is intonationally developed from the beginning to the end by the participants in the discourse, Chafe (1994) claims that high pitch at the beginning of the topic will be developed gradually by the involved participants with the inclusion of many more several different intonation patterns as the conversation goes on alongside the careful choice of words and syntactic patterns and whereby many more subtopics may rise or fade away until it arrives at the 'climax' point, from there onward to the end the pitch starts dropping down, with diminishing the amplitude and leaving a long pause at the end. Thus, in both (9) and (10) the pause which occurs at the end is longer than the one which appears between the clauses said about the same topic.

This suggests that it is somehow unproblematic to identify where a topic ends and a new one starts since most phonologists agree on the way this phenomenon is shaped intonationally. However, one fundamental problem with this explanation is that it fails to provide a satisfactory answer to the question of how high is high? The difficulty starts from the fact that to start a topic each speaker uses a different high which may be higher or lower than what is commonly considered 'high' (Wichmann, 2013). For this reason, limiting highness within a certain range seems to provide little linguistic information. Consequently, several solutions have been proposed by phonologists to account for what high it is meant.

One viewpoint suggests that the height of a pitch can be measured by comparing it to the surrounding pitches in the same utterance, or by comparing it to some more stable point such as the speaker's habitual baseline (ibid). Following this explanation, if figure (1) represents the pitch pattern of a sentence like hatmewe bo malewe, then the only pitch which is considered high is the pitch on *bo* since in comparison to its surrounding words it is the closest to the higher line of the pitch span.



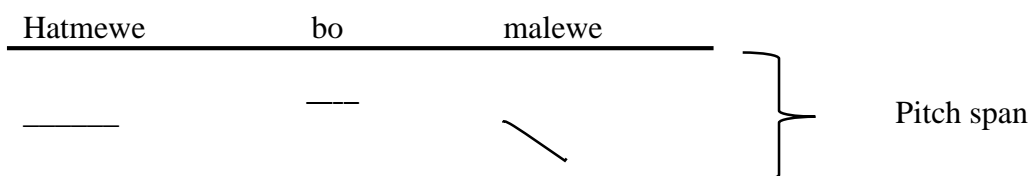


Figure -1-

Another viewpoint is that listeners have a natural sense of a speaker's voice range and hence can determine the height of a syllable not just in relation to surrounding syllables but also with respect to the speaker's voice. Even though it is not clear how listeners do that, one possible explanation is that it might be due to voice quality, which fluctuates with the pitch to some extent. This claim is supported by the results of a study which presents some evidence for a dependency of pitch height on voice quality (Swerts & Veldhuis, 1997). Yet what remains vague is which aspect exactly of voice quality changes dependably with the pitch.

In discussing the theoretical issues encompassing these two different perspectives, (Ladd, 2008) supports a 'normalising' perspective of pitch range (that is, characterising range in terms of the speaker's voice) by providing experimental evidence for its applicability. This means that for any speaker there are at least two favoured pitches from which s/he selects an utterance onset pitch; one is 'default', as shown in (figure -2-A), which is around the middle of the speaker's overall range and is used mostly at the beginning of topics in medial position in the discourse or a paragraph. The other one is 'high', as shown in (figure 2-B), which is, roughly, twice higher than the default range and used for starting topics in the initial position.

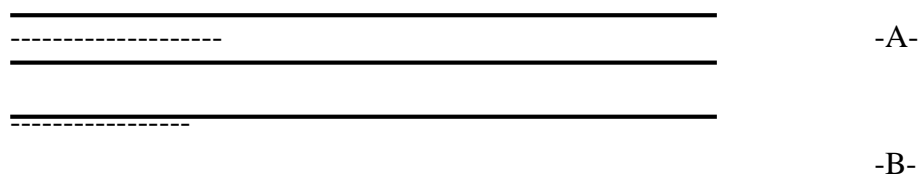


Figure -2- the explanation of what high is high.

### 2.3. Cohesion and intonation

Cohesion as a way of information arrangement to show the correlation among discourse components can be achieved in variable ways, one of those many ways is thought to be intonation (Wennerstrom, 1998). The importance of intonation as a cohesive tool comes from the fact that the intonational patterns indicating cohesion can direct the listener to predict the completeness or incompleteness of units in progress (Couper-Kuhlen & Selting, 1996). According to (Halliday & Greaves, 2008), when the grammatical and lexical cohesion is conveyed via an eligible intonation, faultless and maximum cohesion could be achieved.

The intonational patterns used with cohesive resources, designed by (Halliday & Hasan, 1976), play the main role in this intonation-cohesion relationship. For this reason, it is essential to present how these cohesive devices, as defined by (Martin, 2001), correspond to the intonational patterns. The intonational patterns for each cohesive device are taken from (Wennerstrom, 1998).

a) *Reference*:- refers to resources that may be used to refer to a participant or contextual factor whose identity can be recovered. These include *demonstratives* (*?eme, ?ewa, ?ewane, ?emane*), *pronouns* (*?ew,*

*ṛewan, ṛêma, ...etc*), and *adverbs* (*ṛêra, ṛewê, ṛêsta, ṛewkate.*). The intonational pattern of references is a rising tone.

(11) / *ṛewan* | *hemuy \ bibe.* (take all of these)

(12) / *ṛêma ṛetwanin \ bibeynewe.* (we can win)

(13) / *ṛêsta bom / bene | dwatir \ namewê.* (bring it to me now. I do not want it later.)

b) *Ellipsis*:- refers to resources for omitting a clause, or a part of a sentence, or a group, in situations where it is expected. This kind of cohesion resource has zero tones because the unit which bears the tone is already omitted.

(14) A: *Malekem \ pakkirdewa.* (I cleaned the house)

B: *\ Minish.* (me too)

c) *Substitution*:- a set of placeholders for indicating omission – *herweha, dane, yek, kirdin, kird, ṛekem ...etc.* The intonational pattern of substitution is a falling tone.

(15) A: *Ênd sêwt \ ṛewêt?* (how many apples do you want?)

B: *\ daneyek.*

(16) A: *Min gulekan ṛaw \ dedem.* (I water the flowers)

B: *Minîş \ herweha.* (so do I)

(17) A: *Xêra nameke \ binêre.* (send the message quickly)

B: *wa \ dekem.* (I will)

d) *Conjunction*:- refers to a set of words which link clauses and higher units in discourse. The intonational pattern of conjunction is either high level (  $\bar{\quad}$  ) (phrase level), low level (  $\underline{\quad}$  ) (sentence level) or paratone (topic level).

(18) *Min  $\bar{\quad}$  u Miran deṛoyn.* (Miran and I will go)

(19) *were / jurewe |  $\underline{\quad}$  u | dest pê \ bke.* (come in and start)

e) *Lexical cohesion*:- refers to cases where the repetition of lexical items, synonymy or near-synonymy (including hyponymy), and collocation are included. The intonational pattern of lexical cohesion is a rising tone.

(20) *Hiwa berhemi \ zore | | / Zoriney destkewtekany le bwari \ zanistdaye.*

(Hiwa has many accomplishments. Most of his achievements are scientific.)

It is worth mentioning that the present study does not claim that the rules have been presented above as exceptionless and fixed. Nevertheless, these rules should be taken as a preliminary outline of how intonation affects Kurdish discourse. It should also be taken into consideration that these rules need to be empirically studied further to test their validity and applicability in CK and other dialects of Kurdish as well.

### 3. Conclusions

The possible conclusions which can be derived from the above discussions can be summarised in the following points:

1. CK, like any spoken language, uses pitch variation to perform several conversational purposes.
2. In CK, intonational patterns are used to shape conversations regarding the turn-taking process, topic or semi-topic initiation and achieving cohesion and coherence.
3. Two tones namely rising and falling mostly occur at the end and the beginning of a turn, whereas other tones may only exceptionally appear at the end or beginning of a turn in CK.
4. Rising is the unmarked and mostly used tone when introducing a new topic. While falling and reduction of stressed peaks and a modest lowering of the baseline signal the end of a topic in CK.
5. Cohesive devices in CK have their own intonation patterns, either rising, falling, level or zero tones depending on the type of cohesive device used.
6. To perform its discursual functions in CK, intonation interacts with other linguistic para-linguistic and/or non-linguistic factors such as syntactic structures, body language, gesture and pause.

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