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The Interpersonal Function of Intonation in the Declarative Statements of the Spontaneous Speech of the Thamari Dialect of Yemeni Arabic: A Study Based on Halliday's Approach

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Abstract

The main aim of this paper is to investigate the function of tones in construing neutral declarative statements, elicited in neutral contexts in the Thamari Dialect of Yemeni Arabic (DDYA), and then to contrast it with the intonational patterns of declarative statements construing surprise, and reservation, elicited in different contexts. This study examines these intonational patterns in the spontaneous speech within the Systemic Functional Linguistics framework (SFL). The system of tones is acoustically analyzed in this study by means of the PRAAT software program. Our main concern in this intonation system is to answer the question whether variant contexts trigger variant intonational patterns in the declarative Mood aspect of DDYA. The main criteria adopted to identify the marked and unmarked intonation pattern is the frequency of occurrence ratio. The intonational contour patterns are analyzed acoustically by eliciting the F0 contour on PRAAT. The data then is analyzed at different levels i.e. the phonological realizations of the intonation patterns, and the meanings and the speech functions they construe in the semantic level. Finally, in the statistical analysis, the data is grouped into two categories: congruent and incongruent patterns. The data showcases that two intonational approaches have been used by DDYA speakers to convey attitudinal expressions. While a Mid-Fall pattern is used to express facts of neutral mode, a Rise-Fall and a Fall-Rise patterns are used to convey surprise and reservation keys respectively.

Keywords: Keywords: Declarative Sentences, Intonational Pattern, Phonological Realization, Neutral Declarative Sentence.

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وظيفة التنغيم التفاعلية في الجمل الخبرية للكلام العفوي في اللهجة الذمارية اليمنية: دراسة صوتية مبنيه على منهج هاليداي

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ملخص

يهدف هذا البحث إلى دراسة وظيفة التنغيم (Intonation)، في الجمل الخبرية المجردة (Neutral declarative statements)، التي تم استنباطها من سياقات مجردة في اللهجة الذمارية العامية اليمنية (DDYA)، ثم مقارنتها بنمطين دلاليين متغايرين وهما التحفظ والمفاجأة، اللذين تم استنباطهما من سياقات مختلفة. ويركز على أنماط التنغيم في الكلام التلقائي (Spontaneous speech) في ضوء إطار علم اللغة الوظيفي النظامي (Systemic Functional Linguistics). تم تحليل النظام النغمي الصوتي باستخدام برنامج الكمبيوتر PRAAT. فيما يتعلق بالنغمات Tones، أما المعيار الرئيسي المعتمد لتحديد نمط النغمات المنتظم وغير المنتظم هو نسبة حدوث التردد (ratio of frequency). ثم تم تحليل أنماط النغمات صوتيًا عن طريق استخراج الكونتور F0 على البرنامج الحاسوبي PRAAT. ومن ثم تم تحليل البيانات بشكل أكبر وفقًا لوجهة النظرة الثلاثية في التحليل اللغوي. وهذا يعني أن البيانات تم تحليلها من مستويات مختلفة، وهي: الإدراكات الصوتية لأنماط النغمات (phonological realizations)، والتحقيقات النحوية (grammatical realizations)، والمعاني والوظائف الكلامية التي تشكلها على المستوى الدلالي (Semantic construal). ومن ثم تم تصنيف النتائج إلى نمطين في التحليل الإحصائي: نمط متكرر ومنتظم (Congruent pattern) ونمط غير متكرر وغير منتظم (Incongruent pattern). وكشف البحث أن متحدثي اللهجة الذمارية قد استخدموا نمطين تنغيميين متغايرين للتعبير عن مشاعر ومواقف معينة. وأن النمط المتوسط للنغمة الهابطة (Mid-Fall pattern) قد تم استخدامه في الجمل الخبرية المجردة، بينما ارتبطت النغمة الصاعدة الهابطة (Rise-Fall) بالمفاجئة، والنغمة الهابطة الصاعدة (Fall-Rise) بالتحفظ.

الكلمات المفتاحية: الجملة الخبرية، النمط التنغيمي، المعنى الدلالي، الإدراك الصوتي، الجمل الخبرية المجردة.

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1. Introduction

Arabic is considered to be one of the major ancient languages which belong to a group of languages collectively known as the Semitic languages (Versteegh, 2022; Chejne, 1969). Arab and Western scholars have classified Arabic into three categories: Classical Arabic, Modern Standard Arabic and Colloquial Arabic (Versteegh,1997). The classical Arabic is the old variety which was "to a large degree derived from the language of the Quran and the pre-Islamic poems" (Versteegh, 1997, P. 39). Modern Standard Arabic (MSA) is the formal variety of Arabic which has been used by around three hundred million people in the Arabic-speaking countries (Journal of Arabic Sociolinguistics, 2023). The Arab speakers officially use this standardized variety of Arabic in different formal domains like academic sectors, news broadcasts, publications, documentations etc. Colloquial Arabic or the regional dialects of Arabic, on the other hand, are the varieties spoken on daily basis (Alhafni et al., 2024; Al-Ani, 1970). The dialect under investigation in this paper, i.e. Dhamari dialect of Yemeni Arabic (henceforth DDYA), is one of the regional dialects spoken in Yemen and has been barely examined. The only research on this dialect was an MA dissertation conducted years back by Abbas Assuswa in 1984. Assuswa has provided a fair amount of phonetic description on the sound system of the dialect, but the suprasegmental aspect of the dialect is sketchy and briefly discussed. Based on his own hearing, Assuswa points out that DDYA has three tones: fall, rise and rise-fall. Falling tone is used in declaratives and w-h interrogatives, and the falling tone occurs on the last lexical item in the sentence. The rising tone is used in yes-no questions and dependent clauses, and similarly the rising tone occurs on the last word in a sentence.

Most of the studies conducted on the intonation contour patterns of Yemeni Arabic dialects or any other regional dialects of the Arab speaking countries have been mainly exploring the mood aspects i.e. declarative, interrogative, imperative and the modulated interrogative, leaving the attitudinal function of intonation for further scope of research and therefore the attitudinal aspect of intonation receives less attention in this domain (Saeed, 2024; Rifaat, 2017; Hellmuth, 2014; Helmy, 2018). So, this paper is an attempt to explore the intonation contour pattern of the neutral declarative statements, elicited in neutral contexts and then contrast it with the intonational patterns of declarative statements construing surprise, and reservation, elicited in different situational contexts, in the spontaneous speech of DDYA. So, our research question here is: How do various situational contexts trigger various attitudinal meanings reflected in different contour patterns in spoken DDYA?

Literature Review

Intonation is the speakers' tool for conveying interpersonal meanings in their grammatical configurations as well as their attitudes, emotions and stances. Several studies have delved into the

multifaceted roles of intonation and a number of approaches like Systemic Functional Linguistics (Halliday & Greaves, 2008), Autosegmental-Metrical Phonology (Ladd, 2008) and Brazil's Discourse Intonation model (Brazil, 1997), have provided detailed accounts of the impact of social variables and certain prosodic features on the intonational patterns reflected in various contour patterns.

While there is a growing interest in the scope of intonation studies in the Arab-speaking countries, a less attention has been given to the attitudinal aspect. An empirical review of this domain shows that several studies have been conducted on the grammatical aspect of intonation leaving a literature gap in this area of research (Saeed, 2024; Rifaat, 2017; Hellmuth, 2014; Helmy, 2018, Mleiki, 2025). Saeed (2024), however, is a contribution to fill in this gap in Moslui Arabic. The researcher has investigated the function of intonation in construing variant attitudinal meanings like politeness, irritation and sarcasm. The utterances analyzed were spontaneous speeches and were acoustically analyzed by means of PRAAT. The key findings of the study show that the speakers use intonational contour patterns as well as other prosodic features like pitch range, loudness and speech rate to express attitudes, stances and emotions. A rising pitch approach is correlated with questions, uncertainty and politeness. A falling approach is associated with statements, certainty and assertiveness. Emphasis, contrast, sarcasm and reservation are conveyed through a rising-falling, and a falling-rising approach. El Zarka (2023) also investigates the intonation of Egyptian Arabic utilizing the autosegmental-metrical approach. The researcher recognized certain intonation contours associated with certain grammatical configurations. Other emotional meanings like surprise and annoyance are conveyed by certain prosodic features. Almbark et al. (2014) examined the intonational variation in the polar interrogative of various Syrian Arabic dialects. The researchers recognized that yes-no questions were characterized by a final rising approach which had regional linguistic variations. Alvarez et al. (2022) investigated the intonation patterns of emotional speech in Arabic. The researchers extracted various tonal patterns correlated with different emotions like sadness, happiness, anger and surprise. When compared with neutral utterances contour patterns, the emotional nuance contour patterns showed distinctive acoustic variations.

3. Methodology

The framework adopted in this study is the Systemic Functional Linguistics (SFL) model proposed by Halliday. The Systemic Functional Linguistics model is a "language theory" which views language as serving a function in human lives (Halliday & Matthiesen, 2014, P. 24). SFL starts at social context, and looks at how language both acts upon, and is constrained by, this social context (Singh, 2015). Intonation in the Hallydian approach is viewed as interplay between the language strata. It plays an important role in the process of making-meaning in a language. It is not only related to the phonological stratum, but also it contributes to all the strata above i.e., the lexicogrammar and the semantics strata. So this study investigates not only the

phonological aspect of the DDYA declarative mood system but also explores the semantics aspect by looking at the speech functions and the contexts which construe certain nuances and attitudinal meanings in the selected sequences of utterances in the data under investigation.

The corpus selected for investigation was online download materials. Care had been taken to ensure that all the utterances were noise free and spoken by male and female native speakers of the dialect under investigation. The total number of the utterances analyzed in this data was 54 sequences of utterances. These spontaneous speech utterances were extracted from YouTube videos. The online downloaded materials were of variant registers like different social and political issues. The data comprised seven TV interviews and several you tubers' mono speeches. The TV interviews were discussions on some social issues like arranged marriage, gat chewing, Yemeni Jews issues, revenge, and the war situation in the country. The mono speeches of the youtubers were mainly related to the political crises in the country.

The data was analyzed at the semantics and phonological levels. At the semantics level we looked at the speech function and the attitudinal meaning construal of the utterances while at the phonological level we looked at the phonological realizations of the neutral statements and these attitudinal meanings. The acoustic analysis of the data was carried out by means of PRAAT software. This software program is used as an instrumental tool to track the pitch (fundamental frequency) and thus helped us identify the pitch movement or the tones. It had also provided us with the cues to identify the tone group boundaries and the tonic syllables. The auditory perception was also used along with the PRAAT software to identify these cues. The findings then were phonologically grouped into marked and unmarked categories and were statistically finalized.

2. Data Analysis

In this section the analysis of the congruent and incongruent intonation contour patterns of the neutral declarative statements is presented and then, similarly, the analysis of the congruent and incongruent intonational patterns of the two different attitudes; surprise and reservation is presented in subsequent section.

3.1 Neutral Declarative Statements

3.1.1 Category 1: Congruent Pattern. (Mid to Mid-Low Fall)

(3.1) //F fi: əl ʔisbuːʕ ϑəlaϑə */jam//. (في الأسبوع ثلاثة أيام)

In the week three days.

'Three days a week'. (Male sp. Utterance 1: 50-250 Hz).

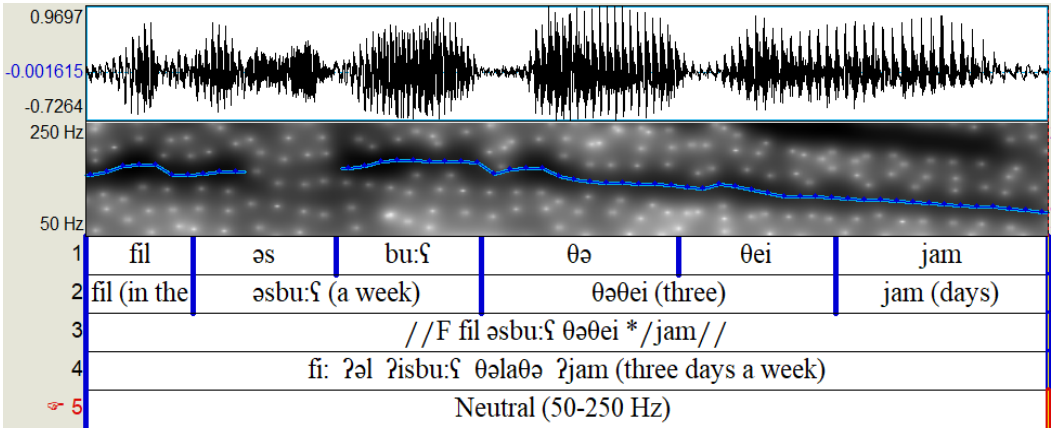

Figure 3.1. The waveform and pitch of the utterance //F fi: əl ʔisbu:ʕ θəlaθə */jam// 'three days a week'.

In figure 3.1, the utterance //F fi:l əsbu:ʕ θəlaθə */jam// 'three days a week' is a neutral declarative sentence extracted from a TV interview in which the interviewer asks the interviewee how often he chews gat*. The interviewee answers "three days a week".

Phonologically speaking, this declarative statement is realized with marked tonality as it corresponds to less than a clause. However, the placement of the tonic syllable in this utterance '*/jam' is realized with unmarked tonicity. The major pitch movement of this utterance is realized with a Mid Fall tone in its tonic segment. The tonic syllable 'jam' carries the falling pitch from 139 Hz (Mid) to 91Hz (Mid-Low).

3.1.2 Category 2: Incongruent Pattern (Mid to Low Fall)

(3.2) //F haðik */libni//. (هذك لإ بني)

That for my son.

'That is my son's picture'. (Female sp. Utterance 2: 70-350 Hz).

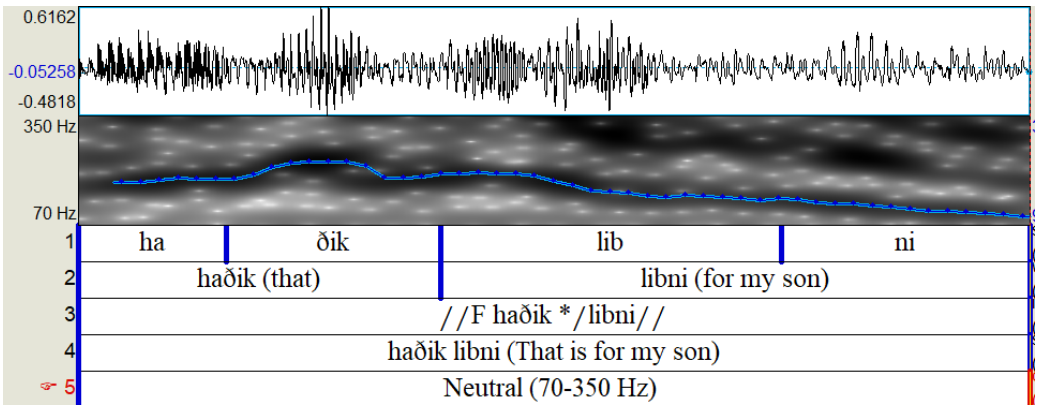

Figure 3.2. The waveform and pitch of the utterance //F haðik */libni/ 'That is my son's picture'.

Figure 3.2. : //F haðik */libni/ 'That is my son's picture', is elicited in a neutral context in which the host asks the singer whos picture is that and she replies: 'that is my son's'. this utterance construes a statement in the semantics stratum and is realized with a declarative clause in the lexicogrammar stratum. The pitch falls on the tonic syllable 'lib' from 205 Hz (Mid) to 94 Hz (Low).

3.1.3 Category 3: Incongruent Pattern (Mid-Low to Mid-Low Fall).

(3.3) //F ḥəg əl gat maj */sˤafutˤʃ//. (حق القات ما يصافطش)

Cost of the gat not a joke.

'That is not possible'. (Male sp. Utterance 3: 50-250 Hz).

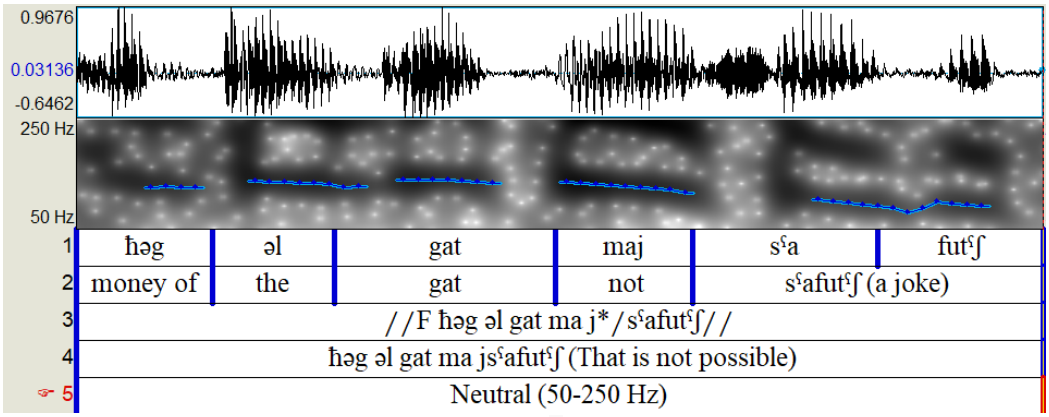

Figure 3.3. The waveform and pitch of the utterance //F ḥəg əl gat maj */sˤafutˤʃ// 'That is not possible'.

Figure 3.3; //F ḥəg əl gat maj */sˤafutˤʃ// 'That is not possible', is extracted from a TV interview in which the interviewer is asking the interviewee if he would give out his gat money for a needy. The interviewee says it is not possible because gat for him is like food.

This utterance is realized with a declarative clause in the lexicogrammatical stratum and construes a statement speech function in the semantics stratum. It is phonologically realized with a Mid-Low fall intonation contour in the tonic segment '*/sˤafutˤʃ'. The fall starts at 115 Hz (Mid-low) and terminates at 90 Hz (Mid-Low).

3.1.4 Discussion and Results

The section above examines the tone function in construing statements of neutral mode in spontaneous DDAY declarative sentences. The statistical analysis of the data shows that the majority of the speakers have used a Mid to Mid-Low falling contour to communicate facts and give information of neutral mode. This finding accords with several studies, conducted on variant dialects of Arabic, stating that

declaratives tend to have a falling final approach (Saeed, 2024; El Zarka, 2023; Al-Azzawi et al., 2023; Hellmuth, 2006; Norlin, 1989).

The data also shows that other variant contours are used as well by DDYA speakers. The table below presents these contour variations and the frequency occurrence of each contour.

Table 3. 1.

Tone Distribution in Neutral Spontaneous Speech Data (19 Statements).

Tone Distribution		Utterances	%
Category 1	Mid to Mid-Low Fall	10	53%
Category 2	Mid to Low Fall	4	21%
Category 3	Mid-Low to Mid-Low Fall	5	26%

Table 3.1 displays that category one i.e. Mid Fall is the most frequent pattern used by DDYA speakers by 53%. Halliday (1970), describes a medium fall in English as tone 1. Tone 1 is the neutral basic primary tone in which the tonic approach "falls and ends on a low pitch" (p.10). It starts at mid or mid-high to low. The medium fall in this category, however, does not show a fall to a low approach. It is rather a fall from mid to a mid-low approach and so the falling pitch here is not as prominent as it is in English.

Category two, shows that 4 utterances out of 19, i.e., 21% of the data have a Mid to Low falling tone. In category three, 26% of the data shows a Mid-Low to Mid-Low falling tone. Since category 1 considerably has the highest frequency of occurrence we can make the statement that Mid to Mid-Low falling tone is the neutral pattern that DDYA speakers utilize to convey emotions of neutral mode.

3.2 Declaratives with Surprise Key.

3.2.1 Category 1: Congruent Pattern (MH to M Rise-Fall).

(3.4) //RF mə gdərtu təʔəm*/mə nəuh//. (ما قدرتو تامنوه)

no could you secure it.

'You could not protect the road'. (Male sp. Utterance 1: 70-450 Hz).

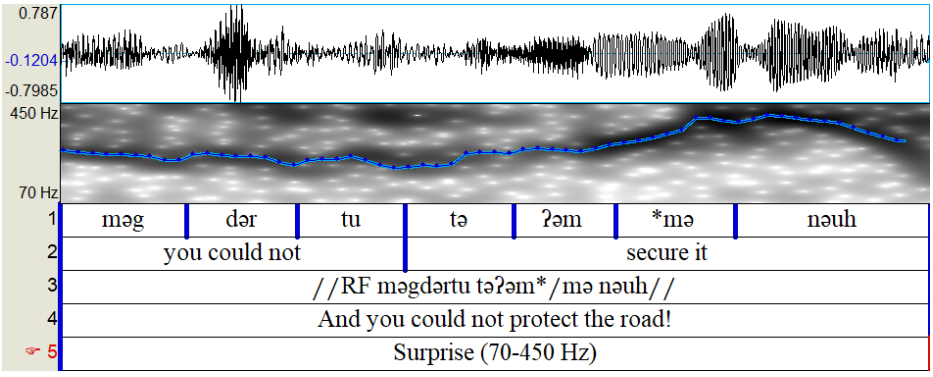

Figure 3.4. The waveform and pitch of the utterance //RF məgdərtu təʔəm*/mə nəuh// 'You could not protect the road'.

The utterance in figure 3.4; //RF məgdərtu təʔəm*/mə nəuh// 'You could not protect the road, is elicited from a Youtube video in which the speaker is appalled to know that Yemeni passengers from Saudi Arabia to Yemen get robbed on the road. The speaker is appallingly telling the Yemeni government that they have the whole army in that area and still they could not protect the road for the passengers.

Phonologically speaking, the example in figure 3.4: //RF məgdərtu təʔəm*/mə nəuh// 'You could not protect the road, is one tone group utterance in which the tonic segment 'mə nəuh' is realized with a Rise-Fall approach on the tonic syllable 'mə'. The rise pitch movement is initiated on the tonic syllable 'mə' at 295 Hz (Mid) then continues rising to 402 Hz (Mid-High) and then the pitch falls to 307 Hz (Mid).

3.2.2 Category 2: Incongruent Pattern (MH to Mid-Low Rise-Fall).

(3.5) //RF wə la rəʤəʕtu əl */jəmən// (ولا رجعتوا اليمن)

and no return you the Yemen.

'You have not retuned to Yemen'. (Male sp. Utterance 2: 70-400 Hz)

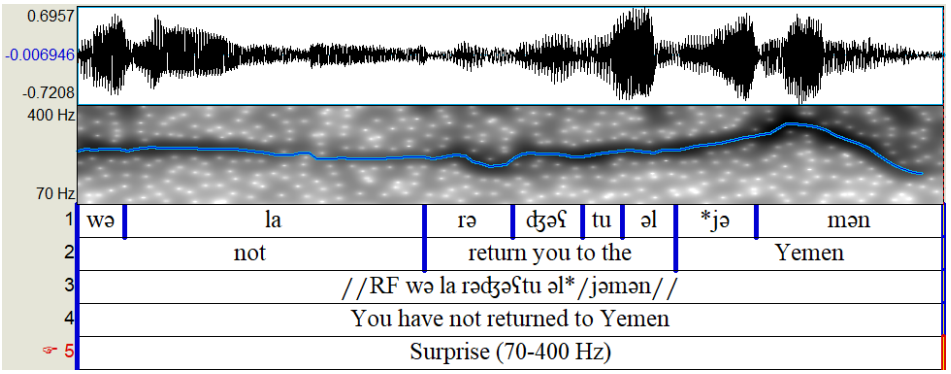

Figure 3.5. The waveform and pitch of the utterance //RF wə la rəʤəʕtu əl*/jəmən//, 'You have not returned to Yemen!'

The utterance above is declarative sentence construing a statement speech function in the semantics stratum and is realized with a Mid-High to Mid-Low Rise-Fall approach. It is elicited from a Youtube video in which the youtuber is expressing his state of disbelief at the passive stand the Yemeni politicians are taking towards the war in Yemen. He says that for four years they have been living in the hotels of Saudi Arabia doing nothing. This utterance corresponds to one tone group in which the pretonic segment is 'wə la rəʤəʕtu əl'. The tonic segment 'jəmən' carries the rise-fall tone of the utterance. The rise pitch movement is initiated on the tonic syllable 'jə' from 252 Hz (Mid) to 338 (Mid-High) then the pitch falls on the next syllable 'mən' to 172 Hz (Mid-Low).

3.2.3 Category 3: Incongruent Pattern (H to Mid-Low Rise-Fall)

(3.6) //RF gəd gətə*/leh// (قد قتلة)

has killed he him.

‘ He has killed him!’ (Male sp. Utterance 3: 70-400 Hz).

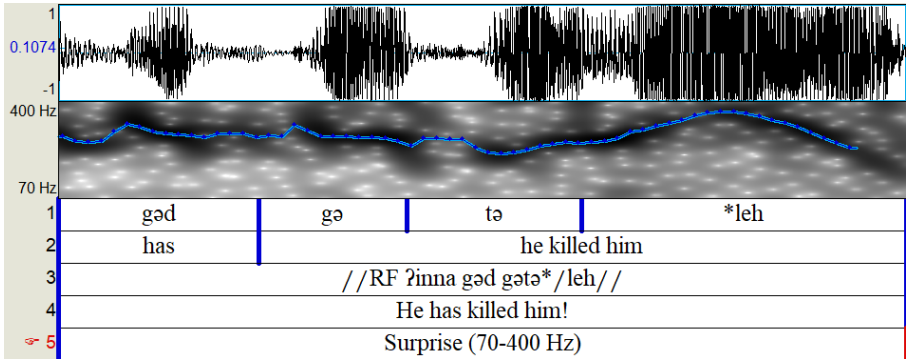

Figure 3.6. The waveform and pitch of the utterance //RF gəd gətə*/leh// ‘He has killed him’.

The utterance in figure 3.6, is a declarative sentence extracted from a TV show hosting a Dhamari guest whose brother got killed twenty years back. The guest is describing how the crime happened and how he reacted to his brother’s death. In this utterance the rise-fall tone occurs on the tonic syllable ‘leh’. The rise starts from 258 Hz (Mid) to 363 Hz (High) and then falls to 162 Hz (Mid-Low).

3.2.4 Category 4: Incongruent Pattern (Mid to Mid-Low Rise-Fall)

(3.7) //RF haða hu ʔə ʃərəf əl jə*məni://.(هذا هو الشرف اليمني)

this it the honor the Yemeni.

‘This is the Yemenis’ sense of honor!’ (Male sp. Utterance 4: 70-400 Hz).

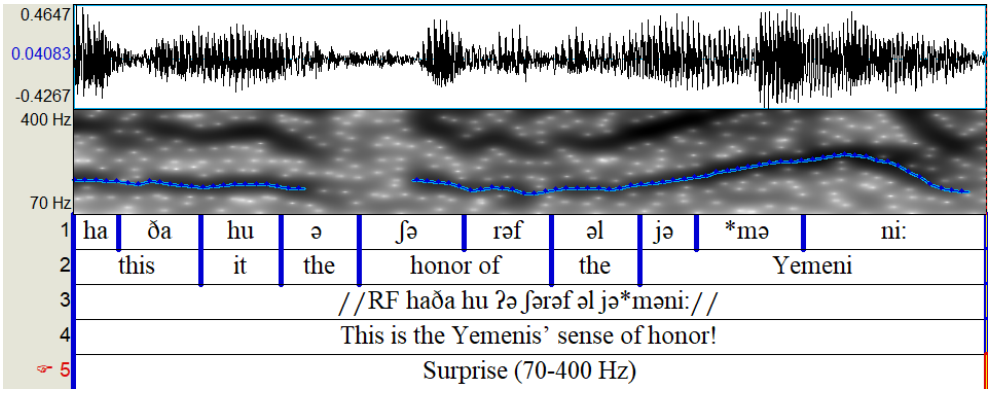

Figure 3.7. The waveform and pitch of the utterance //RF haða hu ʔə ʃərəf əl jə*məni:// ‘This is the Yemenis’ sense of honor’.

The utterance above is extracted from a Youtube video whereby the youtuber is surprised to see the ex-Yemeni president's son in one of the banquets held by the Emirati sheikhs. The youtuber is telling his audience that those Emirati sheikhs are involved in the murder of the ex-Yemeni president and on top of that they are humiliating the Yemenis.

This utterance corresponds to one tone group whereby 'haða hu ʔə ʃərəf əl jə' is the pretonic segment and 'məni:' is the tonic segment. The rise pitch movement is initiated on the tonic syllable 'mə'. There is a pitch jump up on the pretonic syllable 'jə' at 187 Hz (Mid-Low). Then the major rise pitch movement continues rising on the tonic syllable 'mə' to 257 Hz (Mid). The pitch then falls on the next syllable 'ni:' to 141 (Mid-Low).

3.2.5 Category 5: Incongruent Pattern (Mid to Mid-High Rise)

(3.8) //R səʕu*/dijəh//. (سعوديه)

'Saudi Arabia!' (Male sp. Utterance 5: 70-400 Hz).

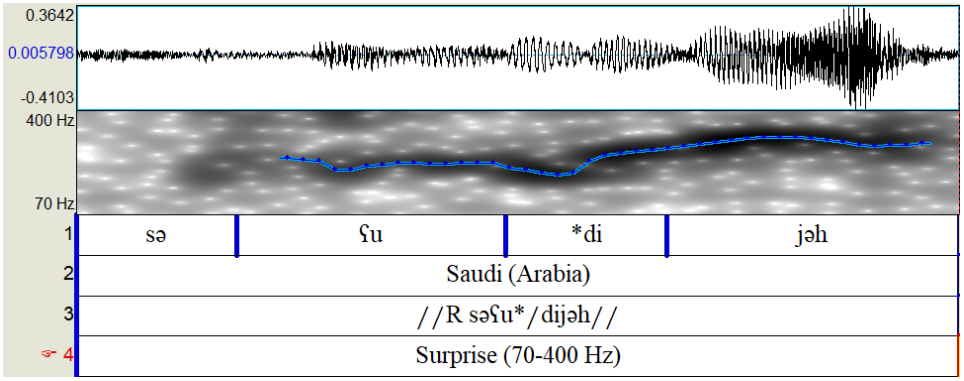

Figure 3.8 .The waveform and pitch of the utterance //R səʕu*/dijəh//. 'Saudi Arabia!'

The utterance above is a declarative noun phrase construing a statement with a surprise attitudinal meaning. It is realized with a Mid to Mid-High Rise tone pattern. This example is elicited from a Youtube video in which the youtuber is telling his audience about the countries he has visited. When one of his audience asks him if he is planning to visit Saudi Arabia, he appallingly replies "Saudia!" He says that he has secretly booked his next tip to Saudia because he wants it to be a surprise visit to his mother and he has never shared it with anyone. This utterance corresponds to one tone group in which 'səʕu' is the pretonic segment and is 'dijəh' the tonic segment. The rising pitch movement is initiated on the tonic syllable 'di' at 201 Hz (Mid) and continues rising to 291 Hz (Mid-High).

3.2.6 Results and Discussion

The section above investigates the tone function in construing statements of surprise emotional meanings in the spontaneous DDAY declarative sentences. The statistical analysis of the data shows that the

majority of the speakers have used a rise-fall contour to express their feeling of being surprised. This finding is also found in a cross-dialectal study conducted on Jordanian, Egyptian, Kuwaiti and Syrian Arabic. The study states that a rise-fall tonal pattern is used to signal surprise (Bani Younes, 2020). Unlike these findings, a study conducted on Moslui Arabic states that a rise approach is utilized by Moslui speakers to convey surprise (Saead, 2024).

The rise-fall pattern in this study, however, proves to be of variant intonational patterns that necessarily required to be synthesized and grouped into different categories. A rise pattern is also used by DDYA speakers to convey statements of a surprise emotional mode. The tables below present these variant contour patterns and the frequency occurrence of each contour type.

Table 3.2.

Tone Distribution in Spontaneous Speech Data. Surprise Key (20 utterances).

Tone Distribution		**Utterances**	**%**
Category 1	Mid- High to Mid Rise-Fall	4	20%
Category 2	Mid- High to Mid-Low Rise-Fall	6	30%
Category 3	High to Mid-Low Rise-Fall	2	10%
Category 4	Mid to Mid-Low Rise Fall	5	25%
Category 5	Mid to Mid-High Rise	3	15%

The table shows that in category 1, four utterances out of 20 (20%) have a Mid- High to Mid Rise-Fall while in category 2, six utterances out of 20 (30%) have a Mid- High to Mid-Low Rise-Fall contour. In category 3, two utterances out of 20 (10%) have High to Mid-Low Rise-Fall while in category 4, five utterances (25%) have a Mid to Mid-Low Rise Fall. In categorie 5 a rising approach is used to convey the state of being surprised. In this category, three utterances (15%) have a Mid to Mid-High Rise contour. Since category 2 i.e., Mid- High to Mid-Low Rise-Fall has the highest frequency of occurrences (30%) then we can take it as the unmarked pattern for DDYA statements with a surprise emotion mode. We can also presume that the other variant rise-fall patterns are triggered by some contextual factors.

3.3. Declaratives with Reservation Key

3.3.1 Category 1: Congruent pattern (Fall-Rise).

(3.9) //FR ʔənə kunt sˁəh ʔəddi əl */fulu:s// //F lakin hu: */ʕəmər// (أنا كنت صح أدي الفلوس لكن هو عمر)

I was true give I the money but he built.

'It was true that I was the one giving the money but he was the one looking after the construction'. (Female Sp. Utterance 1: 70-350 Hz).

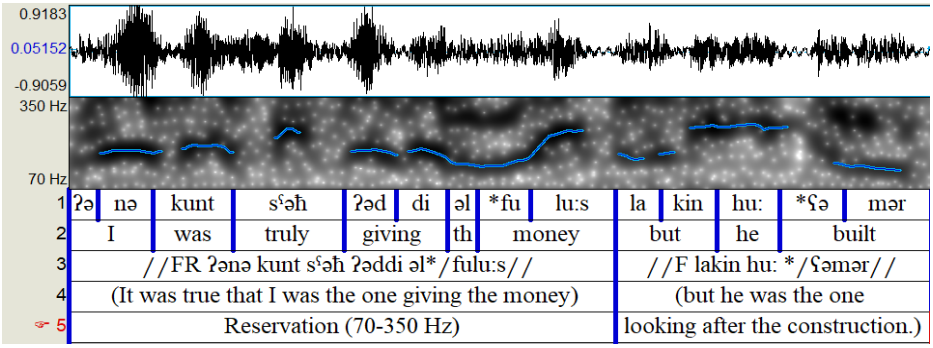

Figure 3.9. The waveform and pitch of the utterance //FR ʔənə kunt sˁəħ ʔəddi əl */fulu:s// //F lakin hu: */ʕəmər// 'It was true that I was the one giving the money but he was the one looking after the construction'.

The utterances above are declarative clauses construing statements in the semantics stratum and are realized with a Falling-Rising tone in the first tone group and a Falling tone in the second tone group. These statement sentences construe a reservation attitudinal meaning.

This utterance is elicited from a TV show in which a host is interviewing a Yemeni woman singer. The host asks the singer "Is it true that this house is yours and not your husband's? The singer replies "That is absolutely not true. This house is our property. It is true that I was the one giving him the money, but he was the one looking after the construction of the house."

Phonologically speaking, this utterance corresponds to two tone groups. Each tone group has a melodic contour with a major pitch movement which carries the intonation pattern of the utterance. The first tone group; //FR ʔənə kunt sˁəħ ʔəddi əl*/fulu:s// has an undivided Fall-Rise approach. The major falling pitch movement is perceived on the tonic syllable 'fu'. The fall is initiated at 193 Hz and continues falling to 141 Hz. The rising pitch movement then starts on the next syllable 'lu:s' from 141 Hz. to 249 Hz.

3.3.2 Category 2: Incongruent pattern (Fall)

(3.10) //F fikrəh bəsˁi:*/tˁəh// //F la*/kin// //F ba təʁəijir ʔa*/laf//(فكرة بسيطة لكن بتغير آلاف)

Idea simple but will change thousands.

'Though it is simple idea, it will have a profound effect on people'. (Male sp. Utterance 2: 70-400 Hz).

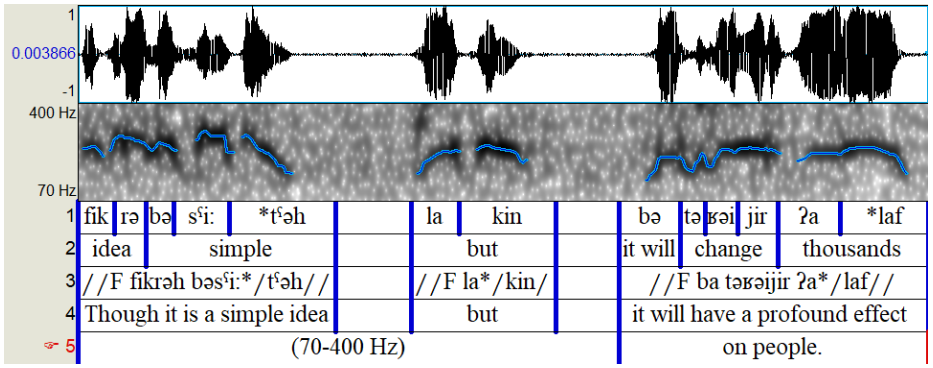

Figure 3.10. The waveform and pitch of the utterance //F fikrəh bəsˤi:*/tˤəh// //F la*/kin// //F ba təʁəijir ʔa*/laf// 'Though it is simple idea, it will have a profound effect on people'.

This utterance is extracted from a Youtube video in which the youtuber is asking his viewers to contribute little amount of money to the poor. The youtuber explains that such contribution is a simple thing but it will have a profound effect on poor people.

This utterance is chunked into three melodic contours. Each chunk corresponds to a tone group with a major falling pitch movement. Pause is also demarcating one tone group from the other. . In the first tone group; //F fikrəh bəsˤi:*/tˤəh// 'simple idea', the falling pitch occurs on the tonic syllable 'tˤəh'. The fall starts from 292 Hz and descends to 166 Hz. The second tone group; //F la*/kin// is a one-word utterance in which the tonic syllable 'kin' receives the falling tone from 257 Hz to 231 Hz. In the third tone group; //F ba təʁəijir ʔa*/laf// 'it will have a profound effect on people', the pitch movement falls on the tonic syllable 'laf' from 252 Hz to 212 Hz.

3.3.3 Category 3: Incongruent pattern (Rise)

(3.11) //R sˤəh ʔinnu ʁuɬutˤ ʕəli ʕəbtˤəɬɬa */sˤaɬəh//,(صح انو غلط علي عبدالله صالح)

True that made a mistake Ali Abduulla Saleh,

//F bəs fin nəhajəh hu gam mʕa */ʃəʕbih//.(بس في النهاية هو قام مع شعبه)

But in end he stood with his people.

'It is true that Ali Abdulla Saleh has made a mistake, but after all he supported his people'.

(Female sp. Utterance 3: 100-500 Hz).

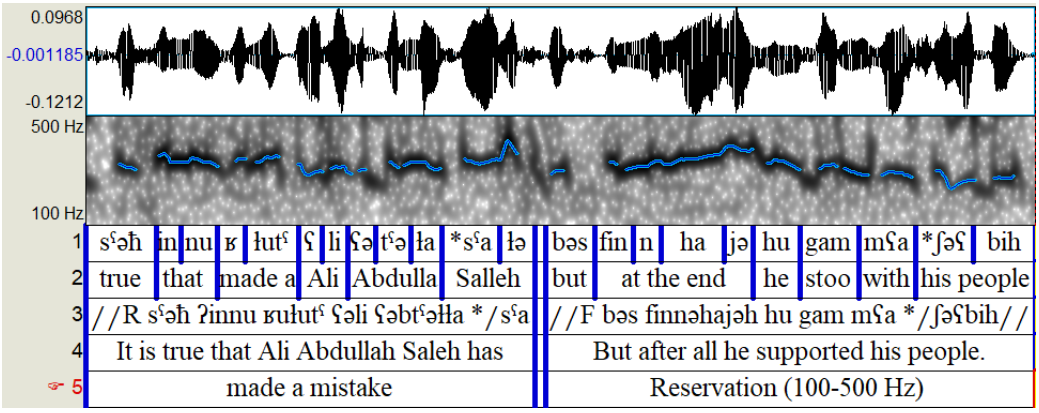

Figure 3.11 . The waveform and pitch of the utterance //R sˤəh ʔinnu ʁuɬutˤ ʕəli ʕəbtˤəɬɬa */sˤaɬəh// //F bəs finnəhajəh hu gam mʕa */ʃəʕbih// 'It is true that Ali Abdulla Saleh has made a mistake, but after all he supported his people'.

The utterance above is extracted from a TV show whereby the interviewer is asking a woman interviewee if she approves of the current country president's decision to support Iraq's war against the Gulf countries. The woman replies "our president is an intelligent man. It is true that he made a mistake by supporting the Iraqi invasion of Kuwait but after all he was supporting his people."

Phonologically speaking, the utterance above corresponds to two tone groups. The first tone group; //R sˤəh ʔinnu ʁuɬutˤ ʕəli ʕəbtˤəɬɬa */sˤaɬəh// 'It is true that Ali Abdulla Salleh has made a mistake', shows a rising pitch contour on the tonic syllable 'sˤa' from 295 Hz to 410 Hz.

In the second tone group; //F bəs finnəhajəh hu gam mʕa */ʃəʕbih// 'but after all he supported his people' the pitch falls on the tonic syllable 'ʃəʕ' from 390 Hz to 273 Hz.

3.3.4 Category 4: Incongruent pattern (Rise-Fall)

(3.12) //RF ʔəħmil ʤəwəz zəl ʔəm*/riki// //F lakin ʔəħmil hawijəh jamәni*/jəh//. (أحمل جواز أمريكي لكن أحمل هوية يمنية)

I carry passport American but I carry identity Yemeni.

'I do have an American citizenship but my identity is Yemeni.' (Male sp. 70-400 Hz).

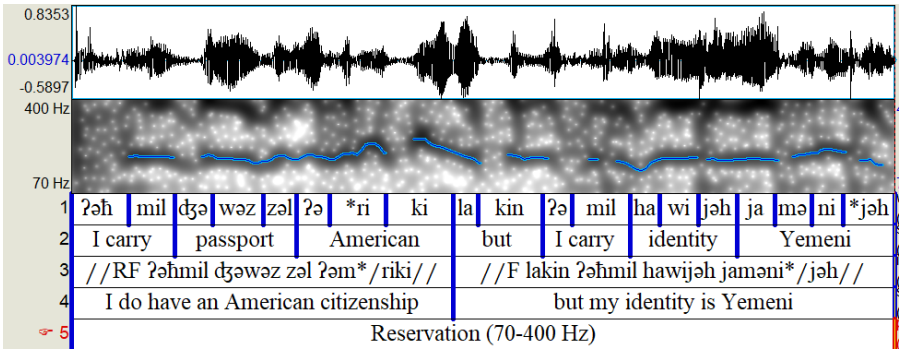

Figure 3.12 .The waveform and pitch of the utterance //RF ʔəħmil ʤəwəz zəl ʔəm*/riki// //F lakin ʔəħmil hawijəh jamәni*/jəh// 'I do have an American citizenship but my identity is Yemeni.'

The utterance above is a declarative sentence construing a statement with reservation meaning and is realized with a Rise-Fall tone in the first one group followed by a Fall tone in the second tone group. The utterance is extracted from a Youtube video in which the youtuber, who is an American citizen from Yemeni origin, is telling his viewers that he has been receiving a lot of criticism for posting videos attacking the Yemeni government's practices towards the Yemeni people. The youtuber says it is true that he is an American national but his identity is Yemeni.

The figure above shows two melodic contours with two pitch movements in each contour. In the first melodic contour; //RF ʔəħmil ʤəwəz zəl ʔəm*/riki// 'I do have an American citizenship', the pitch rises

on the tonic syllable 'ri' from 190 Hz to 261 Hz. Then the pitch falls on the next syllable 'ki' to 210 Hz. The second tone group; //F lakin ʔəħmil hawijəh jamәni*/jəh// 'but my identity is Yemeni' has a major falling contour on the syllable on the syllable 'jəh'. The pitch falls from 217 Hz to 169 Hz.

3.3.5 Results and Discussions

The section above examines the tone function in construing statements of reservation attitudinal meanings in the spontaneous speech of DDAY declarative statements. The statistical analysis of the data shows that the majority of the speakers have used a Fall-Rise contour to express their reservation about the statements. Similar finding is reported by Saead (2024) in Moslui Arabic, indicating that a fall-rise tone signals reserved statements.

A Rise pattern and a Fall pattern are also used by DDYA speakers to convey statements of reservation attitude. The table below presents these variant contour patterns and the frequency occurrence of each contour.

Table 3.3.

Tone Distribution in Spontaneous Speech Data. Reservation Key (15 utterances).

Tone Distribution		**Utterances**	**%**
Category 1	Fall-Rise	8	54%
Category 2	Rise	3	20%
Category 3	Fall	3	20%
Category 4	Rise-Fall	1	6%

The data shows that four intonational patterns are used by DDYA speakers to express reservation about statements. In category 1, eight utterances out of 15 (54%) have a Fall-Rise tone. In category 2, three utterances out of 15 (20%) have a Rise tone. In category 3, three utterances out of 15 (20%) have a Fall tone. In category 4, one utterance out of 15 has a Rise-Fall tone. The data views the fact that the Fall-Rise approach is the unmarked pattern as it considerably has the highest frequency of occurrences.

3. Conclusion

This section sums up the findings of this study which is a representative sample of the phonological declarative Mood aspect of DDYA. We have investigated the intonation pattern of neutral declarative statements in the spontaneous speech of DDYA and contrasted it with the intonational patterns of declarative statements construing two different attitudes: surprise and reservation. The data has provided empirical evidence that intonation plays a major function in construing different attitudinal meanings in DDYA. The main criteria adopted to identify the marked and unmarked intonation pattern is the frequency of occurrence ratio.

In the neutral declarative statements the statistical analysis of the data shows that 53% of the data follow a Mid Fall approach to communicate facts of neutral mode. Since the Mid Fall tone here has the highest frequency of occurrence, based on the findings of the data, we can make the statement that a neutral declarative statement in DDYA is realized with a Mid Fall tonal approach.

As for the declarative statements construing surprise attitude, it is observed that a Rise-Fall approach has the highest frequency of occurrences in the data. The Rise-Fall pattern, however, proves to be of variant contour patterns. Yet, Mid- High to Mid-Low Rise-Fall shows the highest ratio of frequency of occurrences in the data by 30%. The statement that can be made here is that DDYA speakers use a Mid-High to Mid-Low Rise-Fall contour pattern to construe declarative statements of surprise attitudes.

In reservation attitude, empirical evidence from the data shows that a Fall-Rise contour pattern has the highest frequency of occurrences by 54% and therefore is the unmarked pattern.

Like any study this study has some limitations. Due to lack of space and time it was not possible to include the interrogative and the imperative mood aspects of the dialect under investigation. Finding more attitudes like dejection, sarcasm, excitement etc. was quite a challenge in the spontaneous speech as only a few number of DDYA you tubers are using the social media. Many utterances were excluded from the data as they had background sound interference, and most of the speakers tend to have incomplete or interrupted utterances.

References

Al-Ani, S. H. (1970). *Arabic phonology: An acoustical and physiological investigation*. Walter De Gruyter Inc.

Al-Azzawi, M. B., Khalid, A. O., Mohammed, A. A., & Kanaan, A. R. (2023). Intonation in English and Arabic. In *2nd Students Conference (Department of English – Al-Noor University College)*. Al-Noor University College.

Alhafni, B., Mubarak, H., Chowdhury, S. A., & Darwish, K. (2024). Exploiting dialect identification in automatic dialectal text normalization. *arXiv*. https://arxiv.org/abs/2401.12345

Alharbi, L. M. (1991). *Formal analysis of intonation: The case of the Kuwaiti dialect of Arabic* [Unpublished doctoral dissertation]. Heriot-Watt University.

Ali, N. A. (2000). *A contrastive study of segmental and suprasegmental features of Arabic and English spoken in Yemen* [Unpublished doctoral dissertation]. Central Institute of English and Foreign Languages, Hyderabad.

Alkhairy, M. A. (2005). *Acoustic characteristics of Arabic fricatives* [Unpublished doctoral dissertation]. Florida.

Alssuswa, A. (1984). *لهجة ذمار: دراسة صوتية وصفية [Dhamari Dialect: A Descriptive Phonological Study]* [Unpublished master's dissertation]. Cairo University, Egypt.

Arronte Álvarez, A., Issa, E. S. A., & Alshakhori, M. (2022). Computational modeling of intonation patterns in Arabic emotional speech. In *Proceedings of Speech Prosody. Prosody*, 615-619.

Bani Younes, M. (2020). *The role of phonology in the disambiguation of disjunctive questions* (Doctoral dissertation, University of York). University of York Research Database. https://etheses.whiterose.ac.uk/27824/

Boersma, P., & Weenink, D. (2009). *Praat: Doing phonetics by computer* (Version 5.1.05) [Computer software]. Retrieved May 1, 2009.

Brazil, D. (1997). *The communicative value of intonation in English*. Cambridge University Press.

Cambridge Advanced Learner's Dictionary. (2008). (3rd ed.). Cambridge University Press.

Chejne, A. G. (1969). *The Arabic language: Its role in history*. University of Minnesota Press.

Eggins, S. (1994). *An introduction to systemic functional linguistics*. Pinter Publishers.

El Zarka, D. (2023). A configurational model of Egyptian Arabic intonation. *Grazer Linguistische Studien,* 94, 9-44. Https://doi.org/10.25364/04.49:2023.94.1

Halliday, M. A. (1970). *A course in spoken English: Intonation*. Oxford University Press.

Halliday, M. A. K., & Greaves, W. S. (2008). *Intonation in the grammar of English*. London: Equinox.

Halliday, M. A. K., & Matthiessen, C. M. (2004). *An introduction to functional grammar* (3rd ed.). Arnold.

Halliday, M., Matthiessen, C. M., & Matthiessen, C. (2014). *An introduction to functional grammar* (4th ed.). Routledge.

Hellmuth, S. (2006). *Intonational pitch accent distribution in Egyptian Arabic* (Doctoral dissertation, School of Oriental and African Studies, University of London). SOAS University of London. https://doi.org/10.25501/SOAS.00028680

Hellmuth, S. (2014). Investigating variation in Arabic intonation: An analysis of two Egyptian Arabic dialects. In J. Schaub & C. R. C. Clahsen (Eds.), *Variation in language: In honour of Professor Lesley Milroy* (pp. 129–150). John Benjamins Publishing Company.

Helmy, S. (2018). *An intonational study of Egyptian Colloquial Arabic* (Doctoral dissertation, University of Salford). Salford University Research Explorer. https://usir.salford.ac.uk/id/eprint/48731/

Journal of Arabic Sociolinguistics. (2023). Arab linguistics, Arabic linguistics, and language ideology. *Journal of Arabic Sociolinguistics. 1*(1). 98-122. https://doi.org/10.3366/arabic.2023.0007

Kitchen, A., Ehret, C., Assefa, S., & Mulligan, C. J. (2009). Bayesian phylogenetic analysis of Semitic languages identifies an Early Bronze Age origin of Semitic in the Near East. *Proceedings of the Royal Society B: Biological Sciences, 276*(1665), 2703–2710. https://doi.org/10.1098/rspb.2009.0408

Ladd, D. R. (2008). *Intonational phonology* (2nd ed.). Cambridge University Press.

Mleiki, A. K. (2025). Investigating Cohesive Devices in The Lucy Poems Using the Hallidayan Model. *Arts for Linguistic & Literary Studies, 7*(2), 644–664. https://doi.org/10.53286/arts.v7i2.2524

Norlin, K. (1989). A preliminary description of Cairo Arabic intonation of statements and questions. *Quarterly Progress and Status Report of the Speech Transmission Laboratory, 30*(1), 47–49.

Rifaat, K. (ca. 2017). The intonation of Arabic. In Y. Suleiman (Ed.), *The Cambridge handbook of Arabic linguistics* (pp. [insert page range if known]). Cambridge University Press.

Saeed, I. N. (2024). The attitudinal functions of intonation in Moslui Arabic. *Journal of Mosul Studies, 7*(4), 88–105.

Singh, G. (2015). Systemic Functional Linguistics—The methodology of meaning. *Research Journal of English Language and Literature, 3*(4), 361.

Versteegh, K. (1997). *The Arabic language*. Columbia University Press.

Versteegh, K. (2022). *Arabic as a Semitic language*. Cambridge University Press.