

**An Intonational Analysis in American Movies:
A Phonological Study
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Abstract:

As per (Simpson 2004:6), phonology is the study of speech sounds that convey meaning; intonation and pitch communicate meaning in certain contextual situations. Intonation is the variety of pitch of voice during speech. Two movies have been selected to show intonation differently- Maleficent and Mrs. Doubtfire. In both movies pitch shows different meanings in different situations. Each movie has its own genre and type of suspense. Accordingly, intonation is measured using Praat software that describes pitch exactly in certain situations to reflect genres and certain understandings. Consequently, intonation appears in Praat graphs demonstrates certain concepts in movies in particular contexts and situations.

The Problem of the Study

Does intonation appear differently in the selected movies according to the situation and psychological state?

This study attempts to accomplish the following aims:

1. Analysing intonation in some extracts of the selected American movies.
2. Describing the intentions behind each rising and falling tones in the extracts.
3. Surveying phonological, discoursal and psychological traits implied in these tones.

To fulfill the aims above, the following hypotheses have been produced:

1. Different uses of intonation are employed by the movie makers to reflect certain contextual understandings. They also demonstrate the actors' certain psychological and discoursal variables related to situational elements.
2. Intonation is variably used in the selected movies to achieve phonological effects.
3. Various usages of intonation provide coherent information about the actors in the selected movies.

Procedures

Particular procedures have been considered of these hypotheses.

(i) Investigating the intonation using Praat software that facilitates describing phonological features.

(ii) Producing the terminology of intonation to produce definite discoursal, psychological and phonological influences in compliance with the analysis of few extracts from the movies mentioned above.

It is concluded that the above hypotheses are valid because the conclusion shows that intonation plays pivotal role in both movies to produce certain psychological states and meanings in certain contexts demonstrated by the mentioned intonations. Consequently, the intonations employed in both movies differ in terms of the genres, contexts, functions, aims and meanings.

Key terms

Intonation Pitch Praat Phonological Information Communicative Influence

تحليل تنغمي في أفلام أمريكية : دراسة صوتية

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الملخص

وفقال (سبمسون ٦: ٢٠٠٤) فان علم الأصوات هو دراسة أصوات الكلام التي تتقل نغمة المعنى وتوصيل المعنى في مواقف سياقية معينة فان التنغم هو التنوع في نبرة الصوت أثناء الكلام. تم اختيار الفيلمين ملفيسنت والسيدة داوتفاير لإظهار التنغم بشكل مختلف. تظهر النغمة في كلا الفيلمين معان مختلفة في مواقف مختلفة وكل فيلم له نوعه ونوع التشويق الخاص به لذلك يتم قياس التنغم باستخدام برنامج (برات) الذي يصف درجة الصوت بشكل دقيق في المواقف وبالتالي يظهر التنغم في نظام (برات) المعاني في الأفلام في سياقات ومواقف معينة.

يسعى هذا البحث الى تحقيق الأهداف التالية:

١. التحقق من التنغم في بعض المقطعات من الأفلام الأمريكية المختارة.

٢. يصف مقاصد كل نغمة صاعدة وهبوطية في المقطعات.

٣. إنتاج الصفات الصوتية والخطابية والنفسية المتضمنة في هذه النغمات.

لتحقيق الأهداف المذكورة أعلاه تم إنتاج الفرضيات التالية:

١. استخدام استراتيجيات صوتية مختلفة من قبل صانعي الأفلام لاستخدام التنغم.

٢. تشير الفرضيات المذكورة أعلاه الى المواقف النفسية التي يمر بها الممثل أثناء الكلام بما يتوافق مع تمثيلات المواقف.

الاجراءات

٢. تُستخدم الاستراتيجيات المذكورة أعلاه للإشارة إلى المواقف النفسية للممثلين المتوافقة مع التمثيلات الظرفية.

استخدمت الإجراءات التالية للفرضيات المذكورة أعلاه:

(١) اظهر التنغم باستخدام برنامج (برات) الذي يسهل وصف الميزات الصوتية.

(2) إنتاج مصطلحات التنغيم لبيان التأثيرات الخطابية والنفسية والصوتية المحددة وفقاً لتحليل مقتطفات قليلة من الأفلام المذكورة أعلاه.

نستنتج مما سبق أن الفرضيات المذكورة أعلاه صحيحة لأن هذا الاستنتاج يوضح أن التنغيم يلعب دوراً محورياً في كلا الفيلمين لإنتاج حالة نفسية معينة ومعان معينة في سياق معين يوضحه التنغيم المذكور وبذلك يختلف التنغيم المستخدم في كلا الفيلمين من حيث أنواع الافلام والسياقات والوظائف والأهداف والمعاني.

مصطلحات مفتاحية

التنغيم النغمة الاهتزازية برنامج (برات) الصوتي معلومات صوتية التأثير التواصلي

1. Introduction

In this study, intonation is discussed according to the way it is produced, and how speech is affected by intonation and the meaning behind as uttered in American movies. As phonology is the study of speech sounds that convey meaning (Simpson, 2004:6), intonation is one feature of phonology that supports speech understanding.

2. Literature Review

Roach (2009:130) states that intonation is an important part of prosody (supra-segmental). So, Supra-segmental is the concept that contains traits of pronunciation, which comprise stress, rhythm, connected speech and accent in addition to intonation. Therefore, intonation is about the way one says something and not what one says. So, intonation could be described as the speech music and no speech can be uttered without intonation. This means that providing intonation is providing the meaning of the speech. Therefore, intonation is deeply related to the pitch of voice to provide certain perspectives and understandings. Consequently, a pitch of voice has certain impacts on speech and can provide meaningful perspectives and attracts people to more communication. (Roach, 2009: 130-131). Furthermore, a pitch of voice is changing all the time; so, there is no normal speech is made without it. Pitch in speech means there is linguistic information, so, there is high or low pitch during the speech, therefore, speech can't be uttered randomly without pitch of voice because the linguistic influence may not exist. According to Roach (2009: 130–31), a pitch of voice has a significant influence on speaking since it enhances communication and adds interest. No natural speech can be produced without a pitch of voice that is typically shifting constantly. Whether a pitch is high or low, it is characterized in terms of both. It is important to note that people are not seeking every pitch attribute. The crucial type of pitch is the one that contains "linguistic information". For instance, if the speaker is riding a horse quickly, abrupt climbs and falls can be heard since they are the result of unstable motions. The speaker has no control over this situation, thus, language cannot be influenced by it.

However, as stated by Roach (2009:120), if the speaker chooses to speak with a pitch of voice that is higher than usual, this can have linguistic significance. Nevertheless, it is important to note that the auditory awareness of the listener is

what ultimately determines all these variations in voice pitch. The primary frequency of spoken sounds is thought to be the rate of vibration of the vocal folds. It relates to the speaker's voice and delivery. Because of such importance, it is recognized that the term "pitch" can be used casually to refer to the subjective sensation and to reflect fundamental frequency that can be measured. As a result, the pitch distinction is particularly notable, and the speaker must have complete control over it (Roach, 2009:120).

As a result, it is important to note that intonation occurs at word unit boundaries. A study by Roach (2009:141), "suprasegmental phonology", illustrates how humans divide their utterances into tone-units when speaking and can tell where one tone-unit begins and another finishes phonologically and phonetically.

Nevertheless, rhythm plays a pivotal role in intonation. According to Howard (2016:7:24) (YouTube video), rhythm is correlated deeply with intonation and it is part of it. Speakers, in different languages, have their own rhythm according to their language and fluency.

According to Roach (2009:118), rhythm calls for distinct incidence to occur at regular periods of time. Music, a flashing light, or a pulse can all serve as indicators of rhythm. According to Scollon (1981, cited in Oliveira, 1992:103), stressed or strong syllables are references to the same rhythm that is utilized, for instance, in music and poetry, rhythm symbolizes biological and ecological factors. He claims that the heart rate, which in turn is indicated by the context, is a good indicator of speech rhythm. In his conclusion, Scollon (ibid : 25, cited in Oliveira, ibid), suggests that "we may literally be speaking out of hearts."

According to linguists, the rhythm in English can be identified by ordered arrangement of stressed syllables. According to Kenneth (1945, cited in Bertrán 1999:103), whether unstressed syllables separate the stressed ones or not, stressed syllables appear at orderly intervals, and this does not exist in mechanical speech.

As people speak, Howard (2016:7:24) (YouTube video) demonstrates that they should consider whether they speak in a stressed- or syllable-timed pattern. English is stress-timed pattern language. However, several other languages use a syllable-timed pattern in which the amount of syllables in a phrase or speech determines how long it takes to express a concept.

The length of these syllables is the same, for example, "I want to go for a walk" has seven syllables. People can sense the rhythm of a syllable-timed language because the length of the syllables remains constant. Regarding the stressed syllables, it can be determined that middle words cannot be pronounced in the same emphasis. For example, the phrase "I want to go for a walk", this sentence contains two or three stressed syllables, in "I WANT to go for a WALK" and "I WANT to GO for a WALK", the first phrase takes shorter time than the second phrase, and both of them take less time than if it is spoken in a syllable-timed

language. British English and American English are, thus, examples of stress-timed language.

The number of stressed words or stressed syllables present in a phrase or utterance determine how long the speech will be. As a result, the first and second phrases above have different rhythms that are caused by stressed words. This proves that speech has rhythm. These two speech patterns can also be seen in other instances. Syllable timing is used in the first, and stressed timing is used in the second.

“What's the most important part of the training?”

“What's the most im.POR.tant part of the TRAIN.ing?”

“I'm going to the shops, do you want anything?”

“I'm GOing to the SHOPS, do you WANT anything?”

“I've never flown before – I'm quite nervous.”

“I've never FLOWN before – I'm quite NER.vous.”

“We all arrived on time, but Tom was three hours late!”

“We ALL arrived on TIME, but TOM was THREE HOURS LATE!”

According to Howard (YouTube video, 2016; 7:24), rising and falling intonation patterns are features of English intonation. Once more, pitch and rhythm are crucial to intonation. Every time, there is a feeling(what do you mean hear?it means understanding) of intonation and both qualities are conveyed in speech. Though meaning can be conveyed through language and phrase structures, meaning can also be understood through rhythm and voice tone. Source(mentioned above)

It is evident that people (be objective please) speak musically and control their (be objective please) voice in a similar way to how they (be objective please) would play an instrument. As a result, as an intonation increases, it causes a change in pitch and a rise in voice, followed by an upward glide in pitch. In inquiries and lists, people (be objective please) utilize rising intonation, such as ooo↗? The voice rises in pitch at this point. The following examples demonstrate upward pitch:

“Would you like to go for a walk?” ↗

“Would you like a cup of tea?” ↗

In the questions above, the voice rises and there is a kind of invitation that requires a response of ‘yes or no’ from the addressed person. Howard (2016,7:24) (YouTube video) contends that closed inquiries, such as "Are you from France? ↗" demand rising intonation, whereas open questions, which require more elaboration than a ‘yes or no’ should have downward intonation. Another instance of rising intonation when using lists. 'I'd like some coffee↗, some chocolate↗, some milk↗, some meat↗, and some bread↘. As a result, the downward intonation 'bread' indicates that the list is complete. As a result, rising intonation pattern is used for the majority of questions and lists.

With reference to falling intonation, it is clear that the pitch of voice goes downward and it happens in:

1. Statements Like in “most left-handed people are genius” ∨
2. Commands like “put that down” ∨
3. Exclamations like: “How beautiful girl she is!” ∨

These are three examples of downward intonation, and as previously said, downward intonation is used at the ending of a list to signify the list end. "Circumflex intonation" is another sort of intonation. It stands for rising, falling, and rising again. It is used in British English when a discourse is in the middle and has not yet concluded, and then, it is completed. A downward intonation is used to end the discourse. As a result, circumflex intonation sounds like ooo ↗, ooo ∨, ooo↗ and occurs when people speak without allowing others to interrupt them. "hey there↗, I haven't finished what I'm talking↗ about∨, don't interrupt me again↗, now I've finished and you can reply∨," for example.

2.1 Phonological Literature and Movies

Although there is no phonological impact in literary writing, Leech and Short (2007:105) assert that phonology in language must be taken into account because there is a need for phonological literature that could be read out loud to demonstrate sounds pronunciation in order to demonstrate the author's influential style. On the other hand, graphology is another source of phonological effects that depicts a character's speaking manner in a dialogue as long as the writing system is still employed in various ways to describe sound forms of speaking. The reader can read capital letters that indicate emphasis in speech aloud. For instance, the phrase "HOW DO YOU LIKE LONDON?" demonstrates phonological features like an unusual tone of voice, 'slow-motion' production, and syllable stress. These features are all "proverbial expressive assumptions" of English for people who are unable to speak their own language as their native tongue, such as deaf people or the mentally retarded or both.

Additionally, the phonological impacts can also produce an adequate grasp of how a discussion between two people operates. It has also been stated that phonological effects have effectively satisfied each individual's interaction with one another in the modern world. Phonology contributes in the development of an intuitive method that leads to the creation of various characters, which in turn serves to provide enjoyment. The most significant aspect of this is that it addresses descriptive concerns while concentrating on constructing sentences in an amusing and appealing manner.

In this study two different movies have been selected to analyze; the first is Mrs. Doubtfire, and the second is Maleficent. Each one has different intonation according to its genre, characters, situations and scenarios.

As for Mrs. Doubtfire, its genre is family, drama and comedy and the movie is about a couple who are getting divorce. The father loves his children and needs to see them badly every day but he couldn't due to the divorce procedure and the low rules. Their mother is a businesswoman and needs a babysitter to look after the children. Therefore, the father disguises as an old lady with good experience in dealing with children. The mother accepts her (him) as her children's new babysitter. The father spends great time with the children as their kind-hearted babysitter. He cooks for them, makes them do their homework, washes for them besides other household works. Their mother is fully satisfied and grateful to this lady. At the end, she (the mother) discovers his identity and fired him. Nevertheless, finally, he makes an agreement with the mother to see the children and she accepts. The movie genre is drama and family. The whole of it talks about the lovely relationship between the father and his children and somehow there is a kind of a refusal to the unjust low of this issue.

Regarding Maleficent, the movie sheds light on a little powerful pure-hearted fairy called Maleficent. She is kind-hearted, loves and helps every creature in her kingdom of which is called the Moors. Creatures, in the Moors, live safely and happily every single day, but not always, everything goes right. Maleficent falls in love with a human called Stefan. However, he betrays her to take the throne he is promised with if he kills her. This act turns her into a fierce creature wants to have vengeance of humans. She starts a war against them and wins. What he makes her win is not her power but her pure heart. The Movie genre is fantasy and adventure that shows the dark side of some humans. The war starts between good and evil. But fortunately, good wins as it is the purpose of the story.

2.2 Samples of the Study

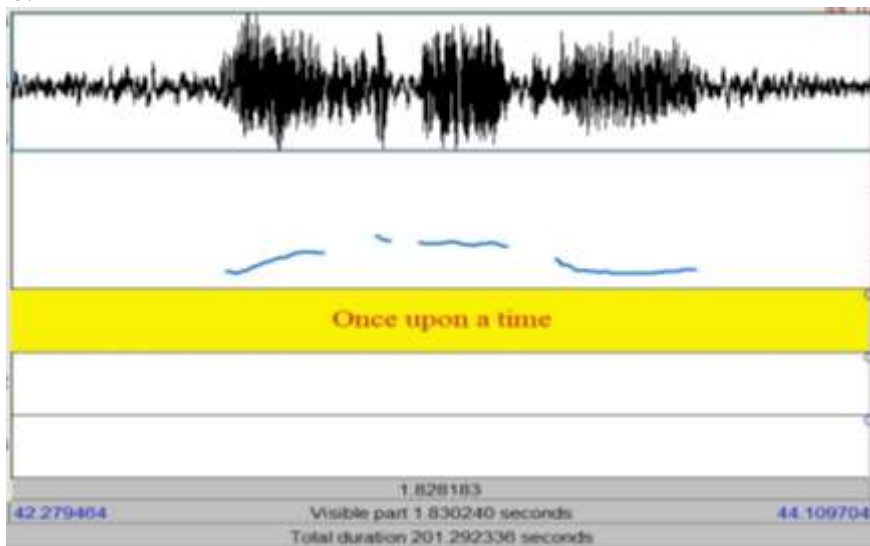
1. Hussein U. Abdullah (2022:17) states that language has altered dramatically in many ways during the last century or two. There are many factors that contribute to this transformation in today's life versus the past: The modernization of individuals' and communities' lives around the world, the invention of advanced technology in all fields of science, the awakening scientific discoveries, and the rapidity of life have all contributed to some coarse changes in languages, particularly the English language. The goal of this study is to determine whether or not the language's tone has evolved over the last few decades (this should be added to the problem of the study)(thank you Dr. but this is a sample of previous studies and it is far from the scope of mine). A few scenes from recent films have been used for this purpose. The data analysis has led the way for incredible results and outcomes in the attitudinal function of intonation in modern-day English, which have been displayed in both tabular and graphic form. This study conclusively answered the question of how intonation in the English language has changed over the last century.

2. Ribeiro,A.Raquel (2011:15) states that the study was able to demonstrate the importance of the affective function of intonation, and that movies are a valuable tool in the classroom when we try to demonstrate that for the EFL students, we confirmed with our results that there is a clear difference between the emotion in terms of prosodic factors, primarily pitch and intensity, as we could see. So, educating about it will assist EFL students improve their communication abilities. The study shows that intonation, which is connected to emotions and situations, can aid EFL student to know more about intonation as they learn English.

3. The Analysis of few Extracts of Maleficent Movie:

1. “Once upon a time”

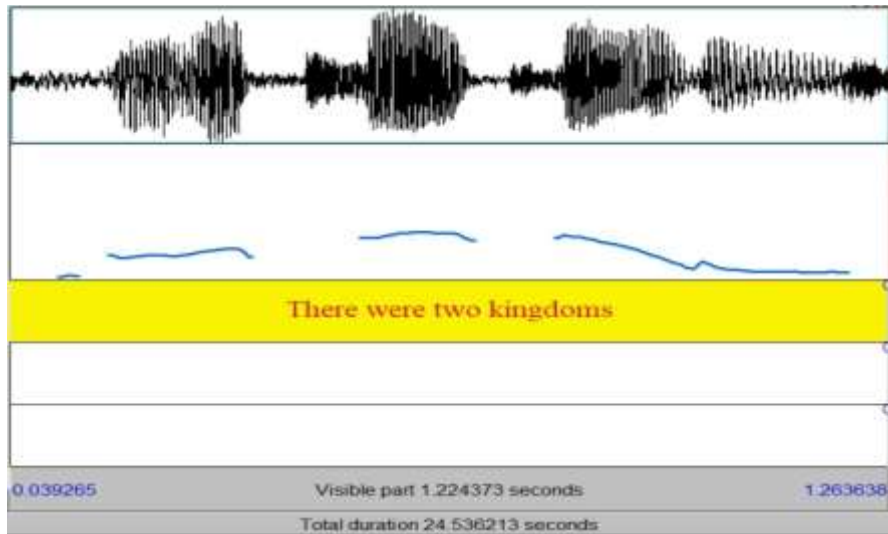
Graph no.1



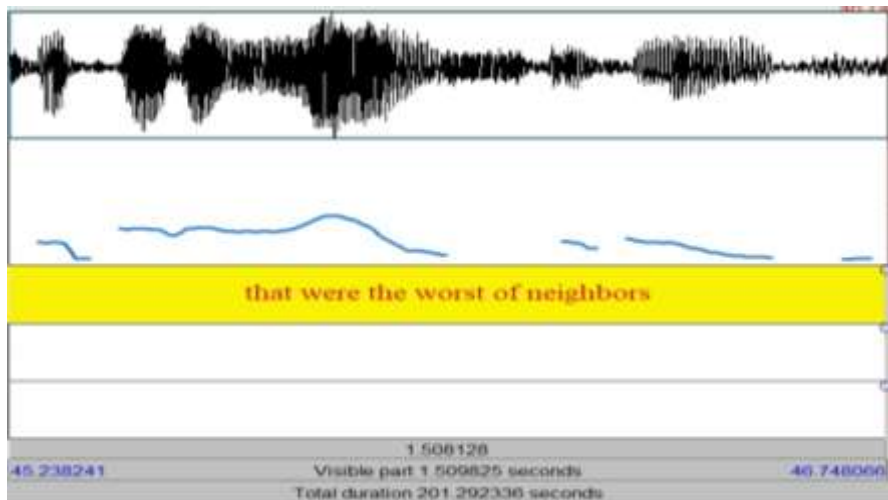
In this extract “**Once** upon a time” the rising intonation at the beginning and the falling one show excitement in telling the story that gives suspense element to the audience of what is coming next.

2. “There were two kingdoms”

Graph no.2



3. “↗there were the worst of neighbors ↘” Graph no.3



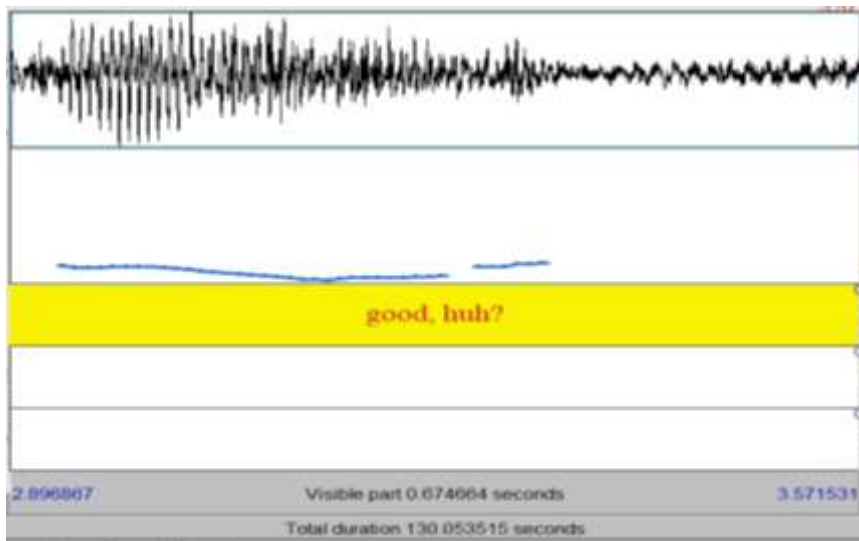
In both extracts “↗there were two kingdoms ↘” and “↗that were the worst of neighbors ↘”

The rising-falling pitch provides communicative influence. A pitch of voice means there is linguistic phonological information, which provides certain understanding of the extracts. In the above extracts, there is beautiful melody in telling the story. In addition, the pitch is deeply connected to the genre, which is fantasy and adventure, and suits the scenario and the way of narration.

The Analysis of two Extracts of Mrs. Doubtfire Movie

4. "good, huh?"

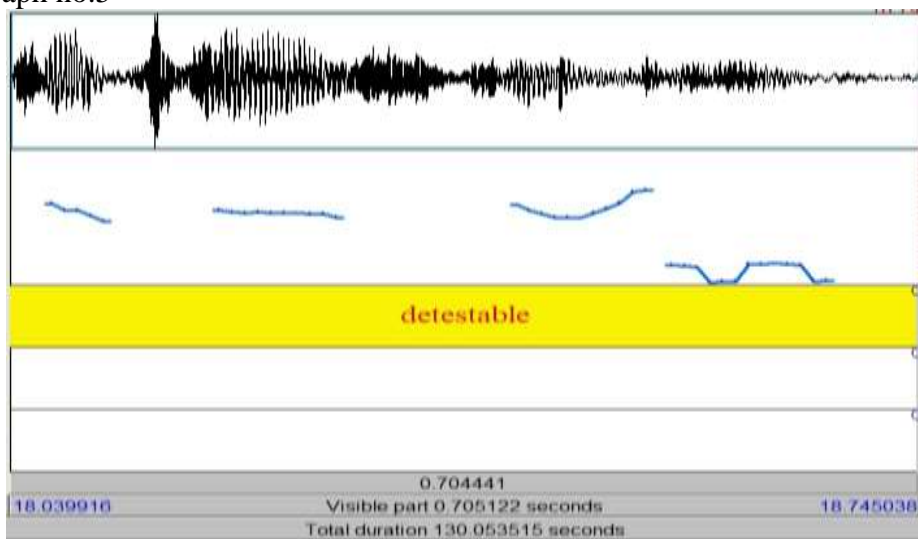
Graph no.4



As mentioned above, Mrs. Doubtfire movie genre is family, drama and comedy. In addition, it is about a father who disguises as a babysitter to see his children every day. Now, he is about to have divorce and he sees his children once a week. In this scene, he and the children have dinner and ask them, if it tastes good. As it is a yes/no question, the intonation is a rising one.

5. “detestable”

Graph no.5



“detestable” is the answer of his daughter about the food. She feels upset of the way she sees her father with. The food is terrible and the same with his place. She

needs to see her father normally, and in a proper place, and not only once a week. Therefore, there is a rise-fall intonation that shows her psychological status.

The extracts intonations of Mrs. Doubtfire movie are related to family relations, so, they are bound by family situations with its own type of suspense. These extracts are totally different from Maleficent movie, which are connected to adventurous situations that lead to another type suspense element.

4. Conclusion

Intonation is the pitch variation used to refer to emotions and attitudes that are subject to certain situations. Therefore, Crystal (2008:252) states:

Intonation, a term used in the study of suprasegmentally phonology, referring to the distinctive use of patterns of pitch, or melody. The study of intonation is sometimes called intonology. Several ways of analysing intonation have been suggested: in some approaches, the pitch patterns are described as contours and analysed in terms of levels of pitch as pitch phonemes and morphemes; in others, the patterns are described as tone units or tone groups, analysed further as contrasts of nuclear tone, tonicity, etc. The three variables of pitch range, height and direction are generally distinguished. Some approaches, especially within pragmatics, operate with a much broader notion than that of the tone unit: intonational phrasing is a structured hierarchy of the intonational constituents in conversation. A formal category of intonational phrase is also sometimes recognized: an utterance span dominated by boundary tones.

So, intonation is used to convey meaning in a language, also, pitch is the demonstration of highness and lowness of intonation. Pitch is produced, in certain contexts, to reflect the intended meaning and to produce phonological influence. Consequently, in both movies, representations of intonation in different situational contexts can be seen ; one is connected to adventure to communicate suspense using certain type of pitch, and the other to family that provides dramatic concept. Each one has its own meaning reflected by intonations. Therefore, the hypotheses are proved to be true because intonation is uttered differently in both movies representing certain psychological status and meaning in certain context. Also , intonation provides detailed information about the actors according to situations and psychological states. The outcome is phonological effects provided by intonation that is employed in certain discursual reflections.

الخاتمة

التنغيم هو اختلاف طبقة الصوت المستخدمة للإشارة إلى العواطف والمواقف التي تخضع لمواقف معينة. لذلك كما يقول (كريستال) (2008:252):

التنغيم هو مصطلح يستخدم في دراسة علم الأصوات فوق القطعية ويشير إلى الاستخدام المميز لأنماط النغمة أو اللحن. تسمى دراسة التنغيم أحياناً علم النغمات وتم اقتراح عدة طرق لتحليل التنغيم: يتم وصف أنماط النغمة في بعض الحالات على أنها حدود ويتم تحليلها من حيث مستويات النغمة كنغمة صوتية و أصغر وحدة صرفية في حالات أخرى ويتم وصف الأنماط على أنها وحدات نغمة أو مجموع نغمات ويتم تحليلها بشكل أكبر على أنها تباين في النغمة الذرية والتوترية وما إلى ذلك. تعمل بعض المناهج خاصة البراغماية بمفهوم أوسع بكثير من مفهوم وحدة النغمة حيث ان الصياغة اللغوية هي تسلسل هرمي منظم للمكونات اللغوية في المحادثة. ويتم التعرف في بعض الأحيان على فئة رسمية من العبارة نغماتية وهي امتداد الكلام الذي تهيم عليه نغمات الحدود.

لذلك يتم استخدام التنغيم لنقل المعنى في اللغة كما أن النغمة هي إظهار للارتفاع والانخفاض في التنغيم ويتم إنتاج النغمة في سياقات معينة لعكس المعنى المقصود وإحداث تأثير صوتي. لذلك نرى في كلا الفيلمين

تمثيلات للتنعيم في سياقات ظرفية مختلفة. أحدهما مرتبط بالمغامرة لتوصيل التشويق باستخدام نوع معين من النغمة والآخر للعائلة حيث يبين مفهومًا دراميًا له. كل له معناه الخاص الذي ينعكس من خلال التنعيم. لذلك ثبت أن كلا الفرضيتين صحيحتان لأن التنعيم ينطق بشكل مختلف في كلا الفيلمين ويمثلان حالة نفسية ومعنى معين في سياق معين.

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