

Using Praat for EFL English Pronunciation Class: Defining the Errors of Question Tags Intonation

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Abstract

Expecting students to be able to speak English with proper pronunciation and intonation like native speakers is not an easy thing. So far, teaching English at the school level has focused on mastering grammar without focusing on language pronunciation (Silalahi, 2016, p. 163). Students in English Department, Faculty of Humanities, Universitas Dian Nuswantoro are required to take English Pronunciation course in their first semester. Based on the researchers' teaching experience, one of the most common pronunciation errors was found in the intonation for question tags. This research aims to investigate students' question tag pronunciation errors by using Praat software. It also tries to get the students' perspective on the use of Praat as a teaching and learning aid for English Pronunciation course. This research employed qualitative descriptive method and used Dehe and Bettina (2013) research on English question tags as the analytical framework. The results showed that errors commonly occur on the pronunciation of down tags, both in conversation and sentences (68% and 53%). Meanwhile, the up tags errors were relatively lower (43%). It is most probably because the students were influenced by the intonation of Bahasa Indonesia, where questions were pronounced with rising intonation. However, after the students were introduced to Praat, the errors decreased significantly i.e., 7% for down tag in conversation, 13% for down tag in sentences, and 3% for up tags. The questionnaire reveals that students gave positive evaluation on the use of Praat in the classroom as it helped them evaluate their own pronunciation.

Keywords: English Pronunciation, Intonation, Praat, Tag Question

INTRODUCTION

Indonesia is a multilingual country with 722 local languages and one language national language, Indonesian, as a lingua franca (ethnologue, 2020). Indonesian people commonly speak their local languages on daily basis, while the Indonesian language serves as the second language and is commonly taught at schools. While being able to speak at least two languages, many Indonesian people can also speak English. However, English is not as a second language, instead it functions as a foreign language. Therefore, students learning English in Indonesia is included in the category English as Foreign Language (EFL) students. For EFL students, English is not a language that is always used everyday, so the fluency in using English appear to be lower when compared to English as Second Language (ESL) students. This certainly becomes a challenge for English teachers in Indonesia.

In learning English, especially for EFL students, productive language skills such as speaking and writing are considered difficult to master compared to receptive skills, namely listening and reading. One of the reasons is because students need to integrate various skills in the process of using language. For example, when writing in English, students need to integrate other skills and knowledge such as grammar and vocabulary. In addition, students who read a lot tend to be able to produce better writing in terms of content and grammar. In other words, reading also has an influence when students have to write. Likewise, productive speaking skills involve almost all language skills from listening, grammar, vocabulary, sociolinguistics, pragmatics, discourse, and pronunciation (Chastain, 1998 in Hossain, 2015).

English pronunciation is one of the basic productive skills that need to be mastered. It also has a huge impact on students' speaking abilities. Improper pronunciation, both in terms of segmental features (individual sounds) and suprasegmental features such as intonation, emotion, and emphasis on words and sentences will affect the meaning of the utterances. Unfortunately, expecting students to be able to pronounce words or sentences with proper pronunciation and intonation like native speakers is certainly not an easy thing. So far,

teaching English at the school level has only focused on mastering grammar without focusing on language pronunciation (Silalahi, 2016, p. 163).

At the higher education level, students of the English Department are introduced to the English Pronunciation course. The teaching and learning process of the English Pronunciation course at the English Department of Universitas Dian Nuswantoro has been done by using books, audio, and video media. The teaching and learning activities are carried out in language laboratories with supporting facilities. Students are usually introduced first to the International Phonetics Alphabets, which are sound symbols to help pronounce sounds in English. Then, students were asked to imitate the pronunciation of the audio and video given repeatedly. When students make mistakes, the lecturer corrects the mistakes by giving examples of proper pronunciation. The teaching and learning system by emphasizing repeated practice is also known as the drill system. Even though students are given audio and video examples from native speakers for comparison, sometimes they still find it difficult to identify the differences in their own pronunciation and the native speakers' in the examples. This is because students still have difficulty in distinguishing the pronunciation of native speakers with their own pronunciation.

With the advance of technology, language teaching and learning can take advantage from the availability of various softwares. One of the tools to visualize language pronunciation is the Praat software. This software is free to download and is commonly used by linguists for phonetic analysis. Praat can provide speech visualization in the form of sound wave images that represent the pitch of the sound. Thus, students can clearly see the description of the intonation of the sound as well as the description of sounds such as consonants and vowels (Le & Brook, 2011: 2). So far, Praat has not been used as a learning aid in the English Pronunciation class at the English Department of Universitas Dian Nuswantoto.

Based on the researchers' experience and observation when teaching English Pronunciation course, one of the most common pronunciation errors is the pronunciation of intonation of the question tag (QT). QT is a form

of English question that has a tail (tag) such as "The girl is beautiful, isn't she?". Question tags or also known as tag questions are short questions that are added to a statement. The form of a QT is usually opposite in terms of the polarity of the statement. If the statement is an affirmative sentence, QT is negative, and vice versa (Celce-Murcia et al., 1999: 259; Dehe & Bettina, 2013).

The pronunciation of QT intonation is based to the context of the discourse and is divided into two intonations, namely rising and falling intonation. QT is spoken with a rising intonation if the speaker is not sure about something and really wants to ask a question. Meanwhile, falling intonation is used when the speaker just wants to make small talk, asks for approval, or maintains good relations with the interlocutor. For students, this becomes difficult if they do not understand the context of a conversation.

According to Celce-Murcia, et al (1999), based on the morphosyntax and based on its types, QT can take several forms as follows:

Placing QT at the end of the sentence. Declarative sentences are separated by QT using a comma. This kind of QT is the most commonly used type. The examples are:

Your uncle is visiting from Jakarta, isn't he?

Your uncle isn't visiting from Jakarta, is he?

Placing QT in the middle of the sentence. If the position of QT is in the middle of the sentence, QT is placed between two commas, the last clause of the sentence still uses a question mark as in the following example:

You don't know, do you, that she is the person behind this?

We've learned, haven't we, that books are all right but we still need help?

Idiosyncratic QT. There are also forms of QT that are idiosyncratic or uncommon. If the QT is usually the opposite form in terms of the polarity of the declarative sentence, especially regarding verbs and auxiliary verbs, this QT is different from the common one. The verb or auxiliary verb of the QT is not the same as an declarative sentence like the example below:

Let's go, shall we?

Open the door, won't you?

We ought to go, shouldn't we?

Unsystematic lexical-type QT. This type is QT which is not systematic in its formation and

is usually used for informal situations as in the following example:

She won't go, right?

She won't go, huh?

She is going, no?

She is going, O.K?

Marked QT. This type is the least used QT. While in general QT is contrasting in terms of polarity, namely affirmative-negative or negative-affirmative, the main clause and tag in this type of QT are non-polar or non-contranstive, so the pattern is affirmative-affirmative or negative-negative. An example of a marked QT is as follows:

You're a lecturer, are you?

So you can't, can't you?

In addition to its various structures, QT also has various meanings. The intonation of the QT will affect the meaning of the QT. Sentences that contain QT and are written exactly the same, if spoken using a different intonation it will have a different meaning. In terms of prosodic, in general the intonation of QT pronunciation is divided into 2, namely raising and falling intonation. As explained by Baker (2006) the use of these two intonations has different meanings:

Down tags or QT spoken with falling intonation. Down tags are the most common pronunciation of QT intonation. The meaning of this intonation is that the speaker expects a response in the form of approval from the interlocutor (seeking agreement).

Up tags or QT spoken with rising intonation. This means that the speaker is not sure of the truth of an information and asks the interlocutor to check its truth. Before the up tag, there is usually a pause during pronunciation.

Huang (1980, in Celce-Murcia & Larsen-Freeman, 1999, p. 262) explains in detail the meaning that can be interpreted from the two intonations. He states that the speakers' intonations indicate how strong their expectations about their assumptions (both positive and negative) will be confirmed by listeners. If speakers use a rising intonation, the expectation is low. On the other hand, if they use a falling intonation, the expectation is high.

From the explanation about QT, it can be concluded that grammatical knowledge alone is not enough to really understand the use of QT. Grammatical knowledge will help EFL students

to compose sentences with QT. However, knowledge of sociopragmatics and prosodic is also needed so that students can use QT appropriately in everyday conversation.

From the results obtained from the Mid-Semester Examination, it can be seen that the error in pronouncing tag questions is quite significant. Therefore, this research will focus on the intonation errors made by students of the English Department, Universitas Dian Nuswantoro in pronouncing tag questions.

Teaching a pronunciation course by using drilling method in the language laboratory, as was previously done at the English Department, is certainly not possible during the current Covid-19 pandemic. When practice sessions are changed to online class, both students and lecturers are required to be more independent, including correcting their pronunciation errors. Therefore, lecturers need to innovate learning during the pandemic. This can also help students and lecturers overcome the obstacles faced in teaching and learning English pronunciation, especially the pronunciation of tag questions.

Regarding the importance of English pronunciation in an EFL class, this research will investigate the pronunciation errors of tag questions using the Praat software, as well as introducing Praat to students as one of the teaching medium for the English Pronunciation course. There are two things to be consider. First, the lecturer needs to identify the intonation errors in the pronunciation of Question Tags. Second, lecturers need to innovate to adapt the practical learning of English Pronunciation, especially during the current pandemic. Therefore, this research will describe the types of errors in pronouncing question tag intonation

The ~~nurses~~ were at work on Thursday,
weren't they?

The ~~nurses~~ were at work on Thursday, weren't they?

Other forms of visualization can be obtained with the help of software, one of which is Praat, which can be downloaded for free at the official website <https://www.fon.hum.uva.nl/praat/>. This software was created by Paul Boersma and David Weenink (2019) of the Institute of Phonetics Sciences at the University of

made by the students of the English Department of Universitas Dian Nuswantoro and will identify the causes of the errors. In addition, this research will look at how Praat may assist students' learning and practicing the correct pronunciation of tag questions in English.

Abdullah and Lulita (2018) have conducted a study at the English Education Department, Siliwangi University. They found that in terms of segmental features, the fricative consonant /ð/ as in the word "another" was the most frequently mispronounced sound. The sound /ð/ is often replaced with the sound /d/ so the word "another" is pronounced [ə'nʌdə(r)]. Meanwhile, the vowels and diphthongs that are often mispronounced are /ə/ and /əʊ/. This study also shows that from a suprasegmental perspective, students tend to mispronounce the rising and falling intonation. In addition, word stress tends to be mispronounced.

This previous research did not integrate Praat as a measuring tool, so that the decision of whether the students' pronunciations were correct or incorrect was based on the assumptions of the researchers. By integrating the Praat software, pronunciation errors can be measured more objectively.

Besides Abdullah and Lulita (2018), several researchers in Indonesia have used Praat as a tool, such as Silalahi (2016), Firdaus et al. (2020), Widagsa (2019), Nursyamsu and Munif (2013); So far, no one has specifically analyzed QT intonation. Therefore, this research is expected to fill the gap from previous studies.

Most reference books visualize QT with an ascending or descending line. Here is an example of a simple QT intonation visualization:

Amsterdam. Praat converts sound into a visualization of sound waves in the form of a spectrogram. With this spectrogram, the resulting sound waves can be visualized clearly and objectively. This software can also be used to analyze intonation contours through pitch. Here is what the Praat software looks like:

Figure 1: Pitch Visualization of a Sentence with Down Tag

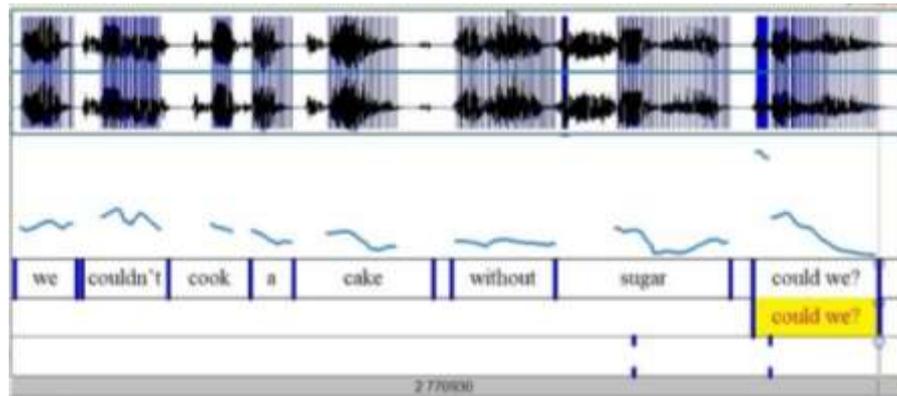
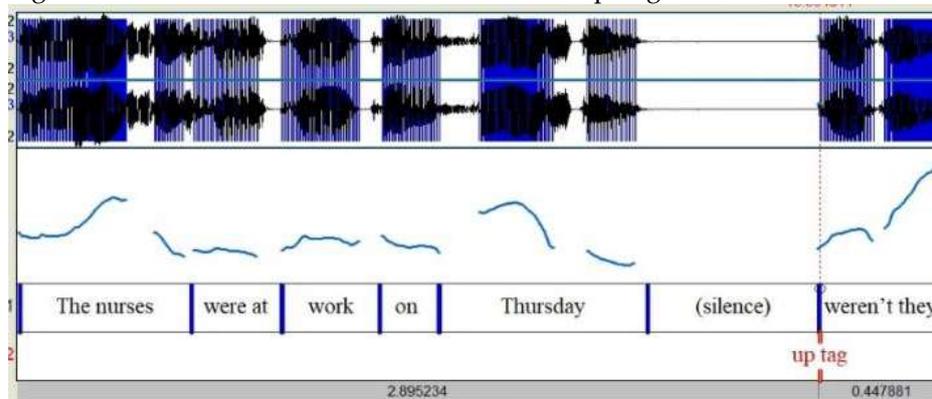


Figure 2: Pitch Visualization of a Sentence with Up Tag



Based on Picture 1 and Picture 2, it can be seen that the intonation of QT pronunciation is clearly described through the sound wave spectrogram and the pitch tone graph. Thus, evaluating students' pronunciation can be carried out objectively compared to only recording intonation with rising or falling signs.

METHODOLOGY

This research is descriptive qualitative research as it tries to answer the questions "...that stress how social experience is created and given meaning" (Norman K. and Lincoln, 2005).

The primary data used in this research are the audio recording of students taking English Pronunciation course in English Department, Faculty of Humanities, Universitas Dian Nuswantoro. The recordings consist of two parts. The first one are the audio recordings of students' mid-semester exam, while the second are the recordings after the students were introduced to Praat. In both of the recordings, the students were asked to read the same conversations and sentences containing tag questions with clear contexts. These contexts were expected to give the students clues on how

to pronounce the tags, whether they are down tags or up tags.

There were 3 groups of English Pronunciation class, each consists of twenty five students. For the purpose of this research, the researchers randomly choose five students' recordings from each group. There were fifteen recordings used as the data.

The data were analyzed based on English phonetics and phonology theory by using Praat as the helping tool. The analytical framework used in this research is Dehe's and Bettina's (2013) previous research on prosodic features of English question tags. It aims to find out the errors on student's pronunciation of tag questions intonation. The first recordings and the second recordings were then compared to see how the students improve their pronunciation after they were introduced to Praat.

In addition, to get the data about the students' perception on the use of Praat in the class room, a questionnaire was administered through google form.

RESULT AND DISCUSSION

The results of the analysis are presented in three sections. The first section shows the results of data analysis of down tag intonation in dialogue and sentences, the second section displays the analysis of up tag intonation in sentences, while the last section discusses the students' perceptions on the use of Praat software in English Pronunciation class.

Each table presented the number of required accurate or ideal pronunciation and pauses as well as the real realization of the students' pronunciation. They also presented the results before and after the students were introduced to Praat.

Pronunciation of Down Tags in Conversation and Sentences

This section discusses the results of down tag pronunciation analysis. The data consist of 15 pronunciation recordings of down tag in a conversation and sentences. Each recording includes 1 question tag in conversation and 5

question tags in sentences. Therefore, the total of required accurate pronunciation for down tag in conversation is 15, while the total of required pronunciation of down tag in sentences is 75 (5 accurate pronunciation from 15 students).

Down tag pronunciation in conversation

Table 1 shows the data analysis of the question tag in the dialogue. The dialogue contains one question tag "It's on Saturday, isn't it?" that, based on the context, has to be pronounced with falling intonation (down tag). The required number of accurate pronunciations for this section is 15 (one accurate pronunciation for each 15 students).

However, the realization of accurate pronunciation before the students were introduced to Praat was only 7 out of 15 or only 47% of the data. After the students were introduced to Praat, the number of accurate intonation was increased significantly into 13 or up to 87%.

Table 1. Down Tag in Conversation

		Down Tag Intonation before Praat		Down Tag Intonation after Praat		
		Ac	I	Acc	I	
		c	nac		nac	
*Acc:	Required	15	0	15	0	Accurate
*Inac:	Realization	7	8	13	2	
	Percentage of realization	47	5	87%	1	
		%	3%		3%	

Inaccurate

*Pa: Pauses

Down tag pronunciation in sentences

Similar to the results displayed in table 1, the results of down tag analysis in the sentences also shows a high number of inaccurate realizations of pronunciation before the students were introduced to PRAAT. In this part of the test, the students were required to read 5 sentences with the instruction asking them to read the sentences with falling intonation. The total number of

required accurate intonation is 75 (5 accurate intonation for 15 students). However, the realization of accurate pronunciation before the students were introduced to PRAAT was only 24 out of 75 or 32% of all the data. In addition, there were 45 pauses before the tag while there was only 0 pause required for correct intonation. The length of the pauses varied from 0.4 to 1.1 second. This can be seen in Table 2.

Table 2. Down Tag in Sentences

Down Tag Intonation before Praat			Down Tag Intonation after Praat		
Acc	Inac	Pa	Acc	Inac	Pa

Required	75	0	0	75	0	0
Realization	24	51	45	70	5	5
Percentage of realization	32%	68%	-	93%	7%	-

* Acc : Accurate
 Inac : Inaccurate
 Pa : Pauses

As seen in Table 2, the accurate down tag pronunciation in sentences before the students were introduced to Praat was only 32%. There were also 45 pauses before the tag. The number of accurate intonation raised significantly after they were introduced to Praat. The accurate pronunciation risen up to 93% while the number of pauses decreased into 5.

Up Tag Pronunciation in Sentences

Contrary to the result of down tag analysis, the results of up tag analysis indicates that the students' accurate pronunciation tend to be higher than that of down tag, even before they were introduced to Praat. More than a half of the pronunciation were accurate as it reached 57% of all the data. After the students used Praat, the number of accurate pronunciations raised up to 97%. All of them also used pauses before the tag. These can be seen in Table 3 bellow.

Table 3. Up Tags in Sentences

	Up Tag Intonation before Praat			Up Tag Intonation after Praat		
	Ac c	I nac	Pa	Ac c	Ina c	Pa
Required	75	0	75	75	0	75
Realization	43	32	61	73	3	75
Percentage of realization	57%	43%	81%	97%	3%	100%

From the results of both down tag and up tag analysis, we can see the pattern

that the students faced more difficulties in pronouncing down tags rather than up tags. It might be linked to 'habit interference', the situation where the speakers' habit of using their native language may interfere the way they perform foreign language. In this case, students were most likely influenced by the way questions in Bahasa Indonesia are pronounced. Moeliono, et. al., 1993 (in Pandean 2018) explained that in Bahasa Indonesia, questions are marked with interrogative sign (?) in written form and with rising intonation in spoken form, especially if there is no question words in the sentence. It is also in line with Ramlan's (1986) statement which

explain that Bahasa Indonesia uses rising intonation for questions. In addition, the last

syllable of the question is slightly higher compared to statements. Thus, the nature of rising intonation for questions in Bahasa Indonesia explains why the students perform better in English up tags rather than down tags as they are more familiar with the intonation.

Interestingly, some students who were good at pronunciation (have relatively high accuracy when pronouncing most of the English words and high level of fluency), still have some difficulties in terms of pronouncing intonation correctly, especially in differentiating the up and down tags.

The results of all the analysis also confirm that the mistakes in pronunciation of both up tags and down tags were significantly reduced after the students were introduced to Praat. In the second recording, the students tend to pronounce the tags accurately and use pauses correctly.

Students' Perception on Praat

To further understand the students' perception on Praat, we set a questionnaire on

google form and asked all the students to respond. There were 72 students from 3 classes responded to the questionnaire. Some of the most important questions include whether the students agree that Praat is useful for English Pronunciation Class and whether it helped them to evaluate their own pronunciation. The following figures depict the students' perception on Praat.

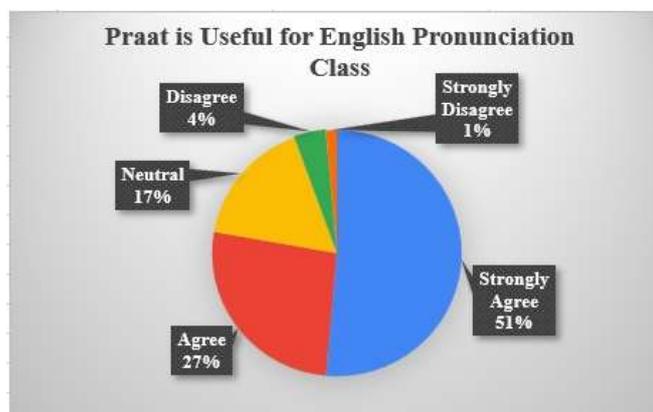


Figure 3. Students' Perception on the Use of Praat in Class

Figure 3 displays students' responses on whether they think that Praat is useful for English Pronunciation Class. From 72 participants, most of the students agree that the software is useful and should be used in the class (51% and 27% of all the participants), while 17% of them cannot decide. There were three students disagree and one student strongly disagree (4% and 1%) with the statement that Praat is useful for English pronunciation class.

The reasons underlying their disagreement were mostly because they faced difficulties in operating Praat. Here is one example of their comments:

"Jujur bagi saya perangkat ini susah digunakan, aplikasi ini membantu penggunaan intonasi, namun saya tidak terlalu memahami pengaplikasiannya secara detail untuk pembelajaran sehingga saya kurang setuju untuk menggunakan perangkat lunak ini di kelas."

"Honestly, for me this software is difficult to operate, this software helps (me) to use (correct) intonation, but I do not really understand how to apply it for class, therefore I disagree with the use of this software in class".

However, more students were agree on the idea of using Praat in the class. They feel that Praat is useful and it is exciting to learn about it. Some of their comments are as follow:

"It's a new thing for me to discover and Praat can be helpful also informative for us, students to use. I'm really thankful that you teach us how to use Praat, Ma'am."

"Thank you ma'am for teaching us, and it's very helpful."

"Super helpful for learning."

"Aplikasi Praat sangat berguna untuk proses pembelajaran di kelas English Pronunciation. saya jadi bisa mengetahui salah dan benarnya hasil rekaman saya sebelumnya."

"Praat software is very useful for teaching and learning in English Pronunciation class. I can check whether my pronunciation in the previous recording was correct or incorrect."

Similar results can be seen in Figure 4 where the students mostly agree with the

statement that Praat helps them evaluate their pronunciation.

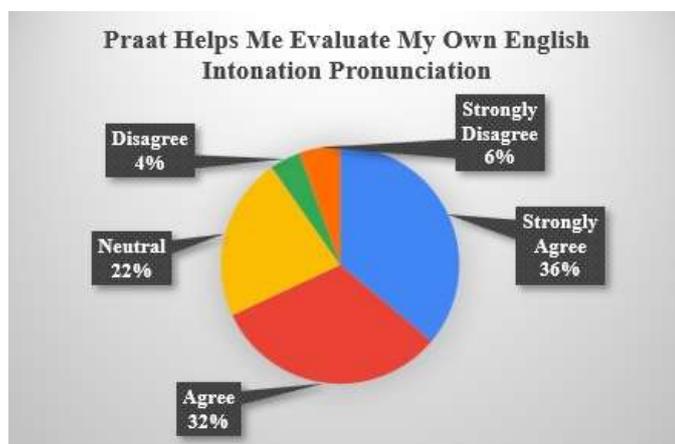


Figure 4. Students Perception on How Praat Helps Them Evaluate Their Pronunciation

The diagram illustrates that the students find Praat helpful, especially in evaluating their own intonation. More than a half or 68% of the participants (36% strongly agree and 32% agree) give positive review on Praat. It also explains the findings in Table 1, Table 2, and Table 3 which describe that the second recordings after the students were introduced to Praat tend to have higher number of accurate pronunciations. Some of their comments are as follow:

“Software ini membantu dalam proses pembelajaran terutama untuk mengecek intonasi.”

“This software helps the learning process, especially for checking the intonation.”

“Perangkat lunak PRAAT bermanfaat bagi saya karena dapat mengevaluasi intonasi bahasa Inggris yang saya ucapkan.”

“Software Praat is useful for me as I can evaluate my the English intonation.”

“Setelah saya mendownload PRAAT yang direkomendasikan oleh dosen, saya sangat terbantu dalam mengevaluasi intonasi bicara bahasa Inggris saya yang masih salah, PRAAT”

“After downloading Praat recommended by my lecturer, I feel that it helped me evaluating my incorrect English intonation.”

Students’ responses on the questionnaire depicts their attitude towards the software. Most

of them gave positive comments and agreed that Praat should be used in the classroom.

CONCLUSION

The results of the analysis clearly explicate that Praat can help the students evaluating their own pronunciation as it increases the accurate pronunciation of intonation for both the up tags and down tags. The students also gave positive review on the use of Praat in the English Pronunciation Class. Praat did not only help the students during the process of self-study and self-evaluating, but also help the lecturer to evaluate students’ pronunciation more objectively.

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