

## EXPLORING PROSODY OF STUTTERING DISORDER EXPRESSED ON MATICE AHNJAMINE VLOG

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### Abstract

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**Keywords:**

*Speech disorder,  
stuttering, prosody,  
intonation*

This study aims to identify the type of stuttering and analyze intonation that appears on Matice Ahnjamine in her YouTube vlog. Matice's videos contain her stuttering life. The stuttering disorder as the difficulty in speaking can be seen from its type and the intonation pattern used when making statement. The research data are in the form of words, phrases, and sentences from the selected videos. The data analysis employs Zebrowski's theory (2003) on the type of stuttering, also a combination of Gimson (1975) and Wells (2006) theories in analyzing intonation in Matice's declarative sentences. The findings show four types of stuttering made by Matice, namely repetition, silent pause, prolonged vowel, and interjection. In addition, the intonation used in her speech shows that in the final words and stuttering words have different intonations because when stuttering words appear sometimes the intonation is not clear. Based on the findings, the dominant type of stuttering type appears is repetition and the intonation which often used at the end of the final word is falling intonation.

**Kata Kunci:**

*Gangguan wicara,  
gagap, prosody,  
intonasi*

**Abstrak:**

Penelitian ini bertujuan untuk mengidentifikasi tipe gagap serta intonasi yang muncul pada Matice Ahnjamine di vlog YouTubenya. Video Matice berisi kehidupan gagapnya. Gangguan gagap sebagai bentuk kesulitan berbicara dapat dilihat dari jenisnya serta penggunaan intonasi saat mengekspresikan pernyataan. Data penelitian berupa kata, frasa, dan kalimat dari video yang telah dipilih. Analisis data menggunakan teori Zebrowski (2003) untuk tipe gagap, serta kombinasi dari teori Gimson (1975) dan Wells (2006) dalam menganalisa intonasi pada kalimat deklaratif Matice. Temuan penelitian menunjukkan empat tipe gagap yang diderita oleh Matice yaitu pengulangan, jeda, perpanjangan vokal, serta interjeksi, dan peneliti tidak menemukan tipe circumlocution. Selain itu, pada intonasi yang digunakan pada Matice menunjukkan bahwa pada

akhir kata dan kata gagap memiliki berbeda dikarenakan pada saat mengucapkan kata gagap terkadang intonasi kurang jelas. Berdasarkan keseluruhan temuan, dominan tipe gagap yang muncul adalah repetisi serta intonasi yang sering digunakan pada akhir final kata adalah intonasi menurun.

## **INTRODUCTION**

Stuttering is an inability to speak fluently. Genetic or developmental factors can cause stuttering. Generally, people with stuttering have difficulty initiating words, sounds, phrases, and sentences. Stuttering occurs when someone talks chaotically, stagnating, suddenly stopping, and repeating syllables in unfinished sentences until can complete the entire sentences (Indah, 2017). The addition of a word or sound known as an interjection with the suffix "yeah, well-um, like" indicates the first sign of stuttering. In addition, repeating words or phrases while speaking is another sign of stuttering. Sufferers also often suddenly change words or revisions. Stutterers also cannot complete sentences. Stuttering becomes an obstacle in the flow of speech during communication with others (Bloodstein et al., 2021). It makes stuttering considered as a form of inability to speak correctly when communicating.

Stuttering is one of the important issues in the study of speech disorders in the problem of fluency disorders. The problem of stuttering interferes with fluency in someone who often experiences repetition and prolongation of syllables, sounds, and phrases (Sleeper in Sari et al., 2020). It is the result of fluency disorders associated with the unclear production of words, phrases, and sounds. In addition, having speech disorder will make difficulties for people when starting several words especially occur in certain areas including respiration, vocalization, and articulation (Semana, 2018).

Stuttering is broadly divided into two patterns. The first type is between-word disfluency involving the use of interjections and repetition. The second type is when the utterances produced contain within-word disfluency covering

repetition of sounds or syllables, prolonged vowels, block pauses, and word replacements (Zebrowski, 2003).

The study of stuttering is also still related to intonation prosody which is vital to be discussed in the research. Stuttering and prosody are linked as several characteristics of disfluency such as prolonged vowels, interjections and repetitions that appear both in the middle and at the end of utterances can interfere with voice change. It may result in different intonation to common speakers. Intonation is a voice change from high to low or rise to fall to distinguish between statements, questions, commands, and requests (Zulfugarova, 2018). The reason intonation studies are important for stutterers that listeners often feel confused because the production of utterances spoken by stutterers is unclear. It takes precision in understanding the speech of a person who stutters. Prosody provides an intonation as the result of speech from the intensity of tone variations. Therefore, the intonation in speech also important to be studied to find out the stutterer's intent and meaning during conversation. Intonation in utterances refers to the melody of speech that functioning to mark phrases and sever the encoded speech (Prieto & Roseano, 2018). Prosody also provides the intonation intensity of a stutterer due to declarative utterances (Tzeng et al., 2018).

To understand how prosody patterns lead to stuttering experienced by adult speakers, monitoring of several speech events is required. For this reason, this research uses adult stutterer's video blogs which can be accessed through the YouTube channel. A YouTuber named Matice Ahnjamine who suffers from stuttering is the object of this research. She uploaded her story about stuttering in 2017 as the first vlog. Currently, her YouTube channel shows 29.2K subscribers with 67 videos mostly talk about stuttering. She created the channel to motivate stutterers to be enthusiastic and confident about their condition. Moreover, she wrote her first book entitled "The Outcome of My Selfishness: The Stutterer and the Story". Through her videos in YouTube, she already has a platform that spans six of the seven continents. Despite her stuttering disorder, she is confident in setting up vlogs to give hope that a person who stutters can make speeches watched by many people around the world.

Several previous studies concerned stuttering disorders and intonation prosody which mostly concern to child and adult males. For the category of children, there are three studies from various countries. Sari and Gokdag (2017) investigated the Turkish language difficulties experienced by children with stuttering in the classroom. The children showed difficulties in using verbal Turkish, especially when reading poetry or short sentences, as well as rhythm disturbances, speech delays, and other language difficulties. Second, Cantina (2020) conducted a study on a stuttering child named Samlia who showed that pupillary movements in communicating failed based on repetitive and hasty eye pupil movements when speaking. Finally, Elsherbeny, Baz, and Afsah (2022) conducted a study of stuttering in Arabic children to determine the acoustics of sound and speech through speech and sound samples from the categories of automatic speech and spontaneous speech which showed that most of the children uttered the long vowel /a/.

Then the studies on adult stutterers can be found in films and video blogs. First, Saputri (2018) researched the stuttering types of a stand-up comedian. Second, Hardianti and Indah (2020) investigated the stuttering type of Drew Lynch in his videos. Third, Sari, Arifin, and Setyowati (2020) researched stuttering based on the types and its consequences in social life that taken from the Rocket Science film. Fourth, Tuada and Damanhuri (2018) have investigated the stuttering of the main character in a movie that focuses on the communication and stuttering behavior.

In addition, several researchers have also examined the prosody of stuttering sufferers. First, Boutsen and Dvorak (2017) conducted the discussion of prosodic rhythm and intonation which presents reviews of motor speech disorders, especially in prosodic development. Second, Brugos, Breen, Veilleux, Barnes, and Hufnagel (2018) examined prosody of speech of the stutterers by investigating the duration, pitch, and quality of voices using the ToBi corpus on the American-British boundary-system for fluency analysis. Third, Franke, Hoole, Schreier, and Falk (2021) discussed prosody that focused on reading aloud performed by adult and child stutterers in to assess the reading accuracy and prosodic phrases.

The current research departs from the assumption of stutterers who have difficulties during speech. Instead, researchers use these objects to determine the type of stuttering and intonation prosody when speaking. The difference between the current research and several previous researches lies on the object, where this research used female subjects, while most previous studies used male subjects and adult categories (Saputri, 2018; Hardianti & Indah, 2020; Sari et al., 2020; Tuada & Damanhuri, 2020). In addition, several studies on prosody only concerns to the speeches of child and adult stutterers (Franke et al., 2021), prosody in terms of fluency analysis (Brugos et al., 2018) and prosody showing motor speech disorder (Boutsen & Dvorak, 2017). It still needs more exploration carefully examined by using voice pitcher application to portray the pattern of the intonation prosody of adult stuttering speech. The current study uses Zebrowski's (2003) theory to describe the types of stuttering based on between-word and within-word dysfluency categories. The researcher also uses Gimson's (1975) and Wells (2006) prosodic theory in the rise, rise-fall, fall, and fall-rise categories to investigate intonation when speaking through declarative utterances by Matice Ahnjamine.

## **METHOD**

This study aimed to determine the types of stuttering and the pattern intonation prosody in people with stuttering, namely Matice Ahnjamine, a female Youtuber. Therefore, a qualitative descriptive method was used to analyze speech during speaking. As explained by Creswell (2013), qualitative research is a method to find the significance of social problems in humans, according to the purpose of this study, namely to examine the social phenomenon of stuttering. Furthermore, the researcher used this method to analyze the various types of stuttering and the intonation used from the declarative utterances of Matice Ahnjamine's vlog on her YouTube channel. The researcher uses three types of theories, namely the stuttering type theory by Zebrowski (2003) also intonation prosody by Gimson (1975) and Wells (2006).

The research data were taken from several vlogs of Matice Ahnjamine from 2018 to 2021 as a stutterer who was selected based on the "Question and

Answer" video category. In these vlogs, she told of her condition during the Covid-19 pandemic with her condition also aimed to answer questions from citizens. The form of data is words, phrases, and sentences that show stuttering as a speech disorder and intonation prosody in declarative speech. There are three types of videos that are categorized into Question and Answer types as data sources, namely: (1.) Q&A: Do I stutter when I have se.. Uploaded on 3 August 2018 <https://youtu.be/tDtA3JaTTQM> (2.) Two Stutterers Talk About Dating! (Quarantine Edition). Uploaded on 22 May 2020 <https://youtu.be/0f9NUjOJh9I> (3.) Stuttering in a Pandemic and other Questions! Uploaded on January 29, 2021 <https://youtu.be/1ceaqN6uX1o>

To collect data, the researcher needs several stages to analyze data sources. This data is collected from watching, copying, selecting data, and presenting data from the speech of Maticce Ahnjamine's YouTube channel. First, watching Maticce Ahnjamine's YouTube videos as a good subject to do this research. Second, copying the stuttering utterances of Maticce Ahnjamine in the form of words, phrases, and sentences. Third, the researcher selected various utterances produced by Maticce based on the criteria of stuttering type and intonation prosody. Furthermore, the data that fit the categories were analyzed using three theories, namely the theory of stuttering by Zebrowski (2003) and intonation by Gimson (1975) and Wells (2006). The final step is concluding the results of Maticce Ahnjamine's speech analysis, which describes the type of stuttering and intonation prosody.

## **FINDING AND DISCUSSION**

### **The Types of Stuttering in Maticce Ahnjamine's speech**

The summary of the stuttering types that occur in Maticce Ahnjamine's speech is presented in figure 1.

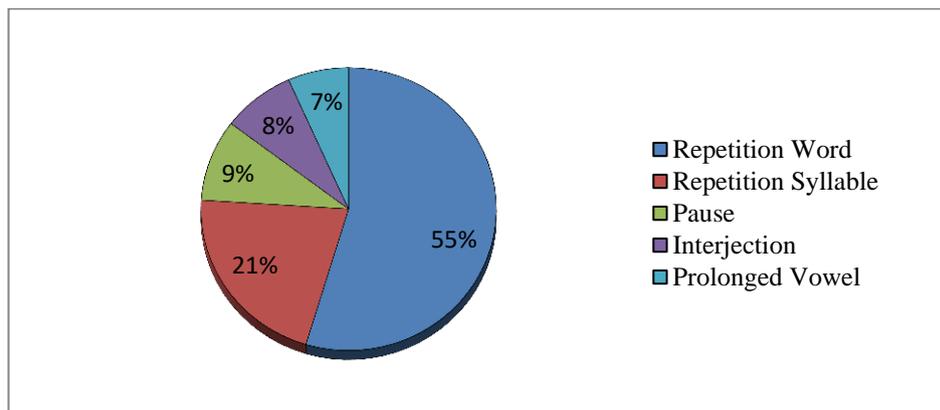


Figure 1. Types of stuttering

a. Repetition

The repetition type occurs at the beginning of the word until the stutterer is unable to complete a sentence in its entirety. Zebrowski (2003) explains that repetition can occur in words and phrases. In addition, it can also occur at the beginning of the sound and syllable in sentences. It causes people with stuttering to have difficulty speaking. Zebrowski divides the repetition type into words and syllables. In the data found, several utterances indicate the type of word repetition and repetition of syllables in Matice Ahnjamine's vlog.

The following is the example of the repetition: “*I don` t know **how how** (pause) if at all so **no no no** even I love dogs but **no no** I started out*” (datum 1.3). This utterance is taken from the video Q and A Matice entitled “Q&A: Do I stutter when I have se...” Matice's answer is taken from two consecutive questions, “Would you ever get a service dog? Do you think one would help”. Matice shows the gesture with cupping hands and the movements down and sideways from her eyes. Matice's lips try to say something even it`s difficult. In this utterance, Matice experiences a mid-sentence stutter. She repeats the word “how” three times. In addition, she also experiences the type repetition of the word "no" five times. In addition, Matice also shows a kind of pause in her stuttering in the middle of a sentence for five seconds.

In the data on repetition, even in one sentence, there can be two repetitions of a word. This is following with the explanation of Hedge and Davis (2009 in Sari et al., 2020), that repetition of stuttering sufferers can be found in parts of

words or syllable, repetition of whole words, and repetition of phrases. The example of repetition of syllables is as the following *“I don` t know you could just t-t-tell me it was more like s-s-sometimes I was sick”* (datum 1.4). This utterance is taken from the citizen's question “How do you work with your stutterer?”. The stuttering occurs in the middle of Matice's answer as she explains her situation in the last job she had. The gesture is to move her hands and show eye movements to the side. Matice's lips also seemed to try to say something before the spoken word came out. Stuttering occurs in the word “sometimes”. Matice experiences a type of repetition at the beginning of the word "s". This type of stuttering also includes the repetition of syllables. It shows that Matice has difficulty in pronouncing the letter prefixes in a word in the letter "s" before the word “sometimes" is formed. She also has trouble pronouncing the letter "t" in "tell".

Matice Ahnjamine has a type of repetition and syllable stuttering. In the word repetition type, there are 12 data and the repetition of syllables is 9 data, so the total repetition type becomes 21 data. The repetition of word type uses the words "like" and "and" which are repeated several times. Meanwhile, in syllable repetition, Matice Ahnjamine has difficulty pronouncing consonants and vowels at the beginning of words.

b. Block/Silent Pause

Block or silent pause is a condition when the stutterer suddenly stops while speaking and has difficulty continuing the words that will be spoken after (Zebrowski, 2003). This condition often occurs in the middle of the speech. Blocks or silent pauses can occur for several seconds before the person who stutters can complete the sentence in its entirety.

In Matice Ahnjamine's utterances, several utterances were found that contained seven silent pauses. Based on the explanation of Prayascita et al. (2008 cited in Saragih, 2018) stutterers often have difficulty speaking due to a loss of ideas, so they cannot say what is on their minds. It can trigger the presence of a block in the middle of speech due to the loss of ideas to be spoken.

One of the data that shows the existence of this block is *“I think I let me see when I first started dating because of my parents like we are not really*

*incident (pause) any when I was younger”* (datum 3.1). This datum is taken from Matice's vlog with female stutterers who had a virtual discussion in a vlog entitled "Two stutterers Talk About Dating! (Quarantine Edition)" In this utterance, Matice shows her eyes moving up and down. This utterance contains only one type of stuttering. In this case, Matice experiences a silent pause type in the middle of the speech. The duration of the pause is about 5 seconds before Matice can finally continue the sentence she wants to say.

In short, based on the analyzed data, there were seven blocks in the middle of Matice Ahnjamine's speech. Datum shows that only one datum is blocked twice in just one speech. While the other datum shows one block in the middle of the speech.

### c. Interjection

Interjection type is a condition in adding words or sounds in the middle of spoken sentences (Zebrowski, 2003). Interjection shows that there is an insertion in the sentence before the stutterer says what she wants to say. Generally, the word interjection is present in the middle of speech as an addition to the word that is used to insert before what you want to say clearly.

The type of interjection was found in some of the data that was shown by Matice Ahnjamine throughout her speech. The example of utterance showing this type is in the following. *“I-I-I-I um uh (pause) yeah one day one time with the guy I-I-I-I I am in a gas station”* (datum 3.5). Matice tells about her experience with the other men. The gesture shown is her eyes often look downwards then her right hand raised to explain even if only for a few seconds. This utterance contains three types of stuttering. The first type is the repetition of the word "I" at the beginning and middle of the speech four times. The second type is pause for nine seconds after the repetition. The third type is the interjection with the word "yeah" that occurs after the pause. In the three data, the word "yeah" indicates the type of interjection. The three utterances use the word "yeah" in the middle of the speech. The word "yeah" as an interjection here is meant before Matice Ahnjamine says what she wants to say.

d. Prolonged vowel

Prolonged vowel is a type of stuttering that indicates an extension of the sound at the beginning of a word or a syllable that also contains other words after it (Zebrowski, 2003). This type of stuttering occurs when a person who stutters has difficulty pronouncing vowels before other words. Generally, this happens because a stutterer has difficulty pronouncing vowels and nouns perfectly at the same time. The example of data indicating the type of prolonged vowel stuttering is as the following. *“I always wondered though like like like um depend up marrying a-a-a person who stutterers”* (datum 3.6). This context is about Maticè's opinion of marrying someone who stutters. Maticè's eyes looked sideways and down and closed for a few seconds as she thought about the words to say. In this speech, two types of stuttering appear, namely repetition of words and prolonged vowels. First, repetition of the word is indicated by the word "like" which is said three times. The next type is the prolonged vowel shown in the definite article “a” before the word person.

### **Prosody of Intonation in Maticè Ahnjamine's Declarative Utterances**

In analyzing the intonation, two combinations of theories are used, namely the theory of Gimson (1975) and Wells (2006). The theory discusses the division of intonation into falling, rising, falling-rising, and rising-falling. In identifying patterns that appear in speech using an application called Voice Pitcher. With the use of this application, it is easier to find out the intonation pattern used by Maticè in his speech. The main focus of this discussion is on declarative sentences that still contain stuttering Maticè Ahnjamine. The intonation pattern seen comes from the final word, and the word contains stuttering.

In Maticè Ahnjamine's speech, it was found the use of four intonation patterns in her vlog. From the 20 data that have been collected in the form of declarative sentences, some intonations are that are most often used throughout the speech and those that Maticè rarely uses. It is because declarative sentences that aim to convey facts often bring up intonation in the form of falling. In

addition, this is based on the answers from Matice Ahnjamine to questions that citizens have written through their social media.

The falling intonation that appears in Matice's speech shows that it is most often used, especially at the end of words, even words contain stuttering. Falling has a pattern that begins with a high note and then ends with a low (Gimson, 1975). This pattern shows that falling often occurs in sentences that contain statements or facts. It can be seen in the final words of the speech that are uttered. Falling intonation can also appear when someone says in a single syllable (Wells, 2006).

The falling intonation pattern is found in some of Matice Ahnjamine's speeches throughout her vlog for the Question and Answers session. In declarative sentences using a falling pattern when viewed from the end of the word with the example of the following. *“Probably if I’ve got t-t-t-to the end of our life that was laying like you know um um um taking my last a few breaths”* (datum 1.1). In this declarative sentence, Matice uses a falling intonation. It can be seen from the end of the word in the sentence which shows the decreased pronunciation of the word "breaths". The descending sound is indicated at the end of the word. The intonation in the stuttering word "to" also indicates a falling intonation shown in figure 2.

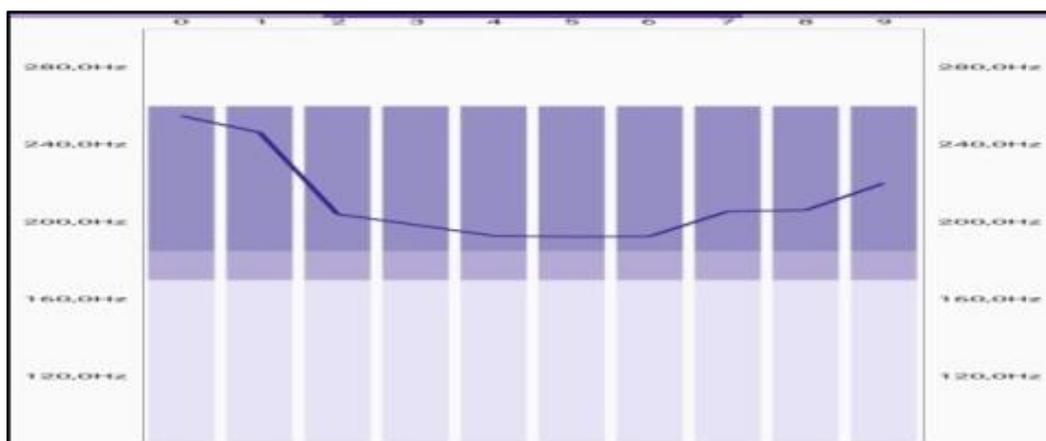


Figure 2. Falling intonation in the final one syllable word

Not only in one syllable word, the falling intonation also occurs the declarative sentence ending with two syllable word as the following example. “*I know how to talk it just takes me a little longer and ends **and and and and** us and so that um require like no patience*” (datum 2.2). The intonation in Matice's utterance is falling intonation. The final word comes from "patience". There is a low contour in the final word in this declarative utterance. In the repetition words in “it” and “and”, the intonation that occurs is also falling intonation as shown in figure 3.

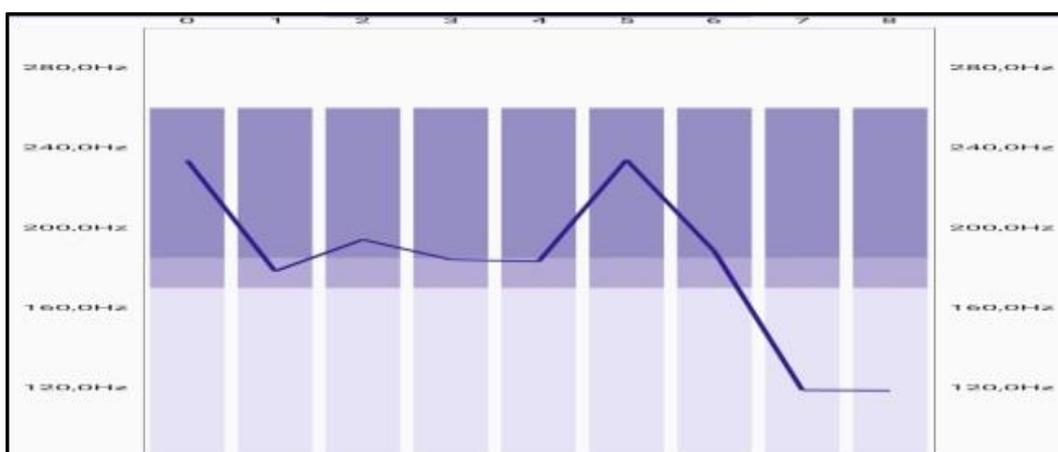


Figure 3. Falling intonation pattern in the final two syllable word

In other data, the use of the final word also uses a rising pattern. The example of the data that show the existence of this pattern is the following. “*I am learning uh um **how how uh h-h-how** um um um um to code **I I I** want to switch uh careers*” (datum 2.4). The intonation that appears in Matice's utterance is rising intonation. It is shown through the word "careers". In this declarative expression, it can be seen that Matice's utterance shows an ascending contour in the final word. The intonation used in the repetition of the word “how” shows low contour and the word “I” is the high contour. The syllable repetition uses the "h" intonation on “how” showing a rising intonation as shown in figure 4.

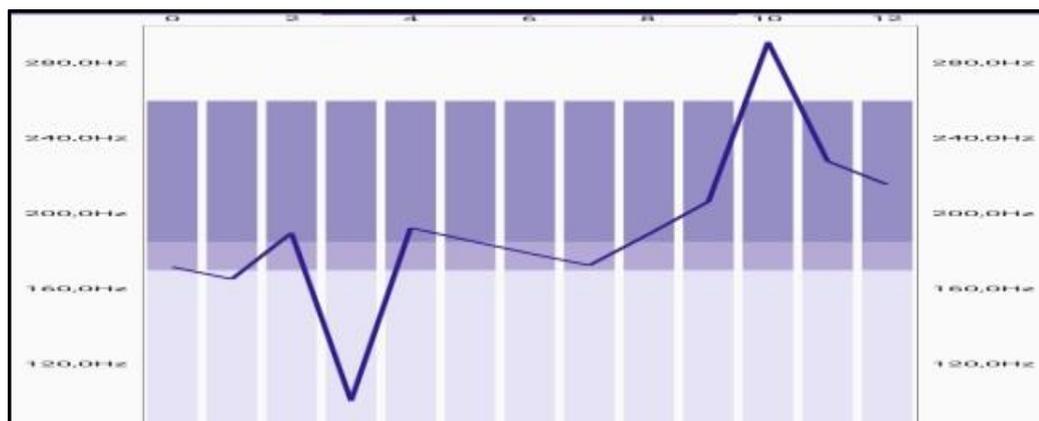


Figure 4. Rising-falling pattern in the final two syllable word

There is only one datum that shows a falling-rising pattern in the final word, namely datum 3.8 in the word "anyways" Based on Wells's (2005) explanation, rising occurs from the middle to the high notes. The utterance is as follow. "I think because (*pause*) I'm kind of uh uh uh uh (*pause*) a kind of dork anyways" (datum 3.8). The intonation that appears in this utterance is falling-rising. This intonation occurs when Matice says the word "anyways". The word contains two types of intonation at the same time. The intonation that appears is the down intonation followed by the rising intonation in one word. During the pause, no intonation was detected because Matice was completely silent. The prosody is as seen in figure 5.

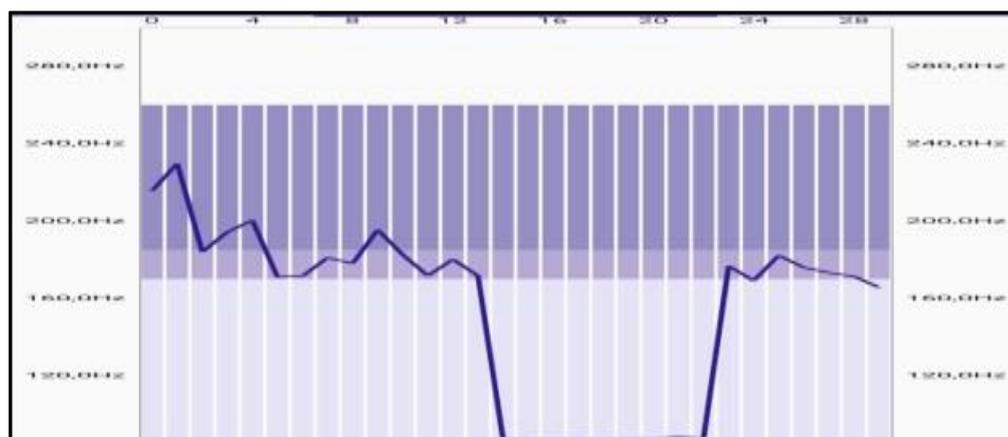


Figure 5. Falling-rising pattern in the final two syllable word

## CONCLUSION

The type of stuttering of Matice Ahnjaminr which often appears is repetition, both repetition of words and repetition of syllables. This type often appears in the middle of the speech, not infrequently also appears at the beginning of speech. There is also block/silent pause often appears in the middle of speech even more than once in a sentence. Furthermore, there are also interjection types and prolonged vowels. On the intonation prosody which is analyzed in Matice Ahnjamine's declarative sentence, there are three intonation type found. They are falling intonation in the final syllable word, rising-falling intonation int the final two syllable word, and falling-rising intonation in the final two syllable word. At the end of words or final utterances, Matice often uses falling intonation as is indeed used in statement sentences. In addition, Matice also uses a rising intonation pattern. The researcher also only found falling intonation patterns in three data.

This research finding is expected to contribute to the field of speech disorders, especially stuttering. Further research on stuttering can be taken with data from real-life around to get a new understanding of stuttering in adults or even children. In addition, follow up studies can also see objects based on gender and age in people with stuttering so that they can explore other information.

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