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Autistic prosody acquisition in Denpasar, Bali

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Abstract---Autism in Indonesia is growing fast. Based on the Vice healthy minister Republic of Indonesia's statement, Dr. Saksono Harbuwono, it's estimated that about 2-4 million Indonesian children have autism spectrum disorder. This condition influences the way how to interact and communicate with others. Autistic children have difficulty to understand face expression, pitch, length, intonation, and body language. World Health Organization (WHO) predicts that 1: 160 children in the world have autism spectrum disorder. Based on education in the province of Bali, 154 children are studying in a Special School (SLB) in Denpasar, Bali. Based on the data above, the writer has the intention to apply Phonology knowledge to make therapy for autism spectrum disorder. Autism Prosody acquisition in Denpasar, Bali. Prosody is from Greek, *Prosōidia*, meaning a song that is sung by music instrument (*ōidē* = song, ode pros = by/with). First of all, it is used to show features that are not transcribed in the utterance, such as *pitch*, *length*, *stress*, and *intonation* (Couper-Kuhlen, 1993). Phonetics is the study of sounds. Phonetics is divided into three parts, articulation phonetic that study about sounds that is related to the

listener, and acoustic phonetics. Linguistics differ in stress, tone, and intonation, which are reflected in differences of high pitch configuration, those are pitch, length, and loudness. Those three terms refer to the domain of auditory phonetics. Pitch (high pitch) is the term that refers to the auditory phenomenon (perception).

Keywords---phonology, prosody, length, pitch, stress, intonation, autistic, therapy

1. Introduction

Communication is a way to establish harmonious relationships between people, both in the realm of family, society, agencies, and government. In communicating, humans use tools, namely language. Before humans were able to speak, they had gone through a process to obtain fragments so that they could speak. This process is known as language acquisition, as stated by [Larsen-Freeman & Long \(2014\)](#). Humans can acquire language because in the human brain there are parts related to the control of hearing, speech, vision, and language ([Chaer, 2003](#)). [Dardjowidjojo \(2005\)](#) states that language acquisition is a process of language mastery carried out by children naturally when they learn their native language.

[Arifuddin \(2010\)](#) revealed that the acquisition of the first language or mother tongue in children around the world is the same. The similarity of the acquisition process is not only due to the similarity of biological elements and linguistic neurology, but also to the existence of a mentality aspect as proposed by Chomsky through the theory of mentality.

The term language acquisition is often associated with the first language, or mother tongue, because the acquisition is natural. Therefore, the terminology of first language acquisition (FLA) is different from second language acquisition (SLA). Second language acquisition emphasizes how learners learn another language after they acquire their native language ([Gebauer et al., 2014](#)).

[Dardjowidjoyo \(2009\)](#) states that the process by which children learn to master their mother tongue is called acquisition, while the process by which people learn in the classroom is called learning. The acquisition of a second language is distinguished from the term learning a second language. The acquisition of a second language refers to the process that occurs when a person acquires a second language through "natural" development, while second language learning refers to the process of a person acquiring a second language through "regulated" development ([Dharmowijono & Suparwa, 2009](#)).

Regarding the process of language acquisition, two terms need to be clarified, namely language acquisition and learning. Acquisition refers to the direct equivalent in a language situation. The process takes place in the child's brain when he acquires his mother tongue or first language. On the other hand, learning refers to conscious and programmatic learning activities, such as formal classes. It is still in line with [Arifuddin's \(2010\)](#) opinion that learning is generally related to the activity of mastering a second language and takes place after the first language is acquired. Furthermore, learning is carried out in a formal setting, such as learning in the classroom and taught by a teacher ([Dardjowidjojo, 2005](#)). Based on several definitions that have been proposed, it is known that acquisition is natural, while learning is artificial.

In mastering the language, children find it easier to master and understand their mother tongue compared to a second language. The first thing that children master in language is the grammatical component, words, and sentences, which are the process of language acquisition ([Chaer, 2003](#)). In addition to this, the children must also master the prosody.

The word prosody comes from the Greek, *Prosōidia*, which means a song sung for instrumental music (*ōidē* = song, *pros* = with). Initially, in Greece, the word was used to indicate the unwritten features of speech words, including pitch, length, and if the written sign was introduced to indicate those features, it was called a prosody. By the second century BC, the word prosody was already used to denote features of expressions in general that could not be expressed with vocal segments and consonants ([Couper-Kuhlen, 1993](#)).

The phonetic realm of prosody, such as stress, tone, and intonation, refers to linguistic concepts rather than direct physical phenomena. Stress, rising, and falling intonation are basic elements that have an important role in describing the language system, which is something that is well known to the speakers of the language, but it is not something that can be immediately researched by the air and received, especially the vibration of a person's vocal vibrations or sound waves that are transmitted through other listeners ([Deng, 1998](#)).

Phonetics is the science that studies the sounds of language. The fields of phonetics are divided into three: articulation/organic phonetics, which studies how the sounds are captured by the listener, and acoustic phonetics, which studies the components. Linguistics distinguishes stress, tone, and intonation, which are reflected in the difference in pitch configuration, namely pitch, length, and loudness. The three terms refer to the auditory phonetic domain. Pitch is a term that refers to the auditory phenomenon (perception) of sound waves that relate to the sounds being spoken. Linguistics distinguishes stress, tone, and intonation, which are reflected in the difference in pitch configuration, namely pitch, length, and loudness. The three terms

refer to the auditory phonetic domain. Pitch is a term that refers to auditory phenomena (perceptions).

Pitch is associated or associated in the articulatory field with the vibration value of the speech apparatus. The two (the felt pitch and vibration of the speech apparatus) are connected or fundamental. The vibration of the speech apparatus at a certain value produces a sound wave that has a certain basic frequency. The waves are received by the listener's ear and felt as sound with a certain amount of pitch.

There is a phenomenon in society that autistic children have communication and language disorders; in general, autistic children are not able to communicate well and fluently. However, the researcher has personal experience when guiding the Autistic Children competition throughout Bali, which was held at Lippo Plaza by one of the social organizations in Bali. Unexpectedly, one of the participants ran up to the stage and asked for a microphone that the researcher was holding, and he greeted the audience with a language style is less than perfect. It turns out that autistic children also have the ability and courage to speak. "How are you?" he greeted. The child speaks with expression and a flat (Eigsti et al., 2011).

Based on the facts and phenomena above, as well as the language skills of autistic children that are hampered and less than perfect. The speech style of autistic children with stress, pitch, length, and intonation has aroused the interest of researchers to find out how far the use of prosody in autistic children in the city of Denpasar, Bali.

According to the Deputy Minister of Health of the Republic of Indonesia, dr. Dante Saksono Harbuwono, around 2.4 million children in Indonesia have autism spectrum disorders. This condition affects the way a person interacts and communicates with others. Children with autism have difficulty understanding other people's facial expressions, tone of voice, or even body language.

The World Health Organization (WHO) estimates that 1 in 160 children in the world are people with autism, and in Indonesia, the Ministry of Women's Empowerment and Child Protection (Kemen PPPA) estimates that there are 2.4 million people on the autism spectrum.

According to the Bali Provincial Education Office in 2019/2020, there are 154 autistic children who have attended SLB in the city of Denpasar. This places Denpasar as the city with the most autistic children attending school. This is a significant challenge for Indonesia, requiring a complex and integrated approach to provide attention and support to children with autism and their families.

The increasing number of autistic children in Bali in particular and Indonesia in general, and even around the world. And curiosity about the extent to which a linguist

can play an active role and take part in helping speech therapy in autistic children. This is a very phenomenal case that has happened to society lately.

1.2 Problem Formulation

Based on the above background, several problems can be formulated, which are as follows:

1. The use of autistic children's prosody in the city of Denpasar, Bali?
2. What types of prosody errors are made by autistic children in the city of Denpasar, Bali?
3. How can prosody be used as the basis for speech-language therapy in autistic children

1.3 Research Objectives

The purpose of this research is divided into two types, namely general objectives and special objectives. The following are outlined in detail: two objectives

1.3.1 General Purpose

The general purpose of this study is to obtain facts about the ability of autistic children in the city of Denpasar, Bali, using a procedure that affects how autistic children pronounce sounds and sentences in English.

1.3.2 Special Purpose

Specifically, this research aims as follows:

1. Knowing the use of English prosody that has been used by autistic children in learning English.
2. Identify and classify the types of errors made in pronouncing phonetic features.
3. Knowing how prosody is used as the basis for speech therapy (speech–language therapy) in autistic children

1.4 Benefits of Research

There are two types of benefits in this study, namely theoretical benefits and practical benefits. The following outlines both benefits in detail

1.4.1 Theoretical Benefits

The results of this study are expected to be theoretically useful as follows:

- (1) The results of the study are expected to add to the treasure of the use of prosody in learning English for autistic children in the city of Denpasar, Bali. The results of this study are expected to add information about the types of errors in prosody features in autistic children in autistic institutions or foundations.
- (2) The results of the study are expected to add references regarding the use and pronunciation of prosody features in English language learning for autistic children in Autism Institutions or Foundations. This study is useful as a

comparative material for other research, especially those that focus on research on procedures and the types of mistakes made in autistic children in foundations or institutions for autistic children.

1.4.2 Practical benefit

This research is expected to be a source of information for researchers of English language programs on autistic children in institutions or foundations for autistic children in particular and language researchers in general. Furthermore, so that it can be used in education, English teaching, speech therapy tools for autistic children.

1.5 Scope of Research

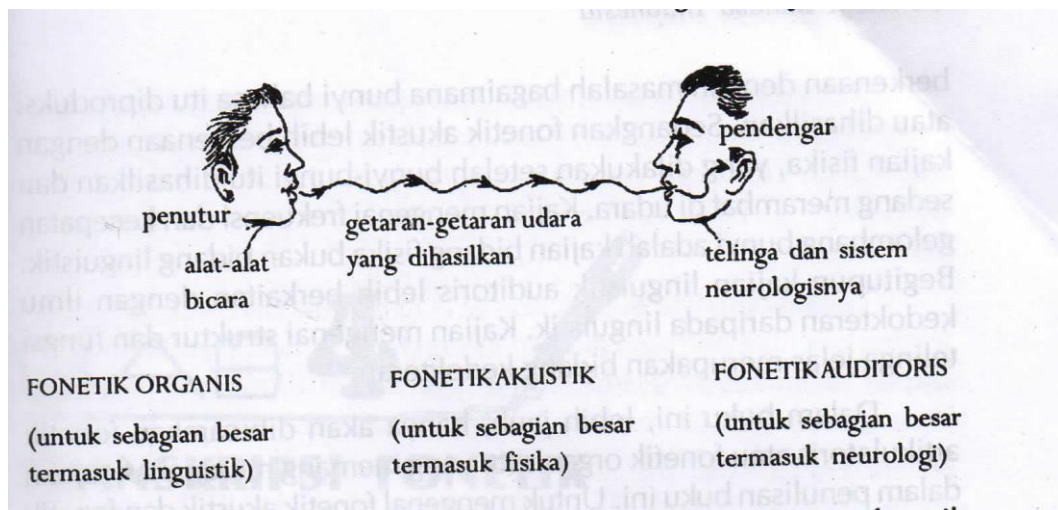
Research on the use of prosody in English learning can examine many things. However, this study is limited to examining only a few things. First, to find out the ability of autistic children in the use of English procedures and to find out first hand the ability of autistic children to pronounce the features of the procedure. Second, to find out the types of errors found in prosody pronunciation in English learning. Third, to find out how prosody is used as the basis for speech-language therapy in autistic children in the city of Denpasar

2.3 Theoretical Foundations

Phonetics is a branch of linguistic study that examines the sounds of language without looking at whether they can distinguish the meaning of words or not. This is different from phonemics, which examines the sounds of language by looking at the sound as a unit that can distinguish the meaning of words.

Then, based on where the language sounds are located when studied, there are three types of phonetics, namely articulatory phonetics, acoustic phonetics, and auditory phonetics. When the sound is in the process of being produced in the speaker's mouth, it becomes the object of organic phonetic study. When the sound of the language is or is propagating in the air towards the listener's ear, it becomes the object of acoustic phonetic study. Then, when the sound of the language reaches or is in the ear of the listener.

He became the object of study of acoustic phonetics. Then, when the sound of the language reaches or is in the listener's ear, it becomes the object of auditory phonetic study. For more details, see the following chart:



Articulatory phonetics, also called organic phonetics or physiological phonetics, examines how the sounds of a language are produced by the speech tools used in producing the sounds of the language; the airflow mechanism used in producing language sounds; how the sound of the language is made; Regarding the classification of the language sounds produced and what criteria are used; about syllables; and also on suprasegmental elements or characteristics, such as stress, pause, duration, and also about suprasegmental elements or characteristics, such as stress, pause, duration, and tone.

Acoustic phonetics, whose object is the sound of language when it travels through the air, talks about, among other things: sound waves along with their frequency and speed when traveling through the air, the spectrum, pressure, and intensity of sound, as well as the decibel scale, resonance, acoustics of sound production, and acoustic measurements. The study of acoustic phonetics is more towards the study of physics than the study of linguistics, although linguistics has an interest in it.

Auditory phonetics examines how the sounds of language are "received" by the ear, so that they are heard and understood. In this case, of course, the discussion about the structure and function of the hearing device, which is called the ear, works. How is the mechanism for receiving the sound of the language so that it can be understood? Therefore, the study of auditory phonetics is more related to medicine. In this field, researchers use acoustic phonetic theory. The important things that are the basis are the prosodic features, which are features that cannot be derived from the intrinsic features of vowels and consonants that form speech. In particular, the procedure spans a wider realm on a single segment. Examples: pressure, tone, and intonation. In the second century BC, the word *prosodi* was already used to indicate features of a general way of expression that could not be expressed in all sciences, including the study of neurology (Chaer, 2009).

In this field, researchers use acoustic phonetic theory. The important things that are the basis are the prosodic features, which are features that cannot be derived from the intrinsic features of vowels and consonants that can form a speech. In particular, the procedure spans a wider realm on a single segment. Examples: pressure, tone, and intonation. In the second century BC, the word *prosodi* was already used to indicate features of a general way of expression that could not be expressed by vocal segments and consonants (Couper-Kuhlen, 1986).

The term prosody, as it has been used, is more or less synonymous with the suprasegmental used as usual by linguists in the structural tradition of the American tradition. Couper-Kuhlen (1986) very carefully defines that prosody and suprasegmental are not absolutely the same. Using one of these terms carries a certain connotation and shows the extent of a linguist's loyalty. As already mentioned, the theory that also supports this research is the feature theory. The Feature theory describes the characteristics of each consonant and vowel. Supporting statements, namely the following:

"all vowels change place of articulation so that the original difference in formant frequency between F1 and F3 is reduced to half what it originally was, when the vowel appears before a consonant whose duration ranges from 100 to 135 ms (Odden, 2005)."

Suprasegmental has important features in its analysis. These suprasegmental features include four things. These four things are rhythm, pressure, intonation, and duration (Ladefoged, 2001; Cruttenden, 1997). Rhythm includes the quality of the voice, the gentleness and level of the voice (high – low), intonation is the tone in a sentence, namely up, down, or flat, while duration is the time needed to develop a syllable (relating to the shortening and lengthening of the voice) (Ladefoged, 2001; Cruttenden, 1997).

To answer the problem, the researcher uses the following theories of therapy: Applied Behaviour Analysis Therapy, or ABA, is often used to treat autistic children. This therapy is very representative of the management of children with autism symptoms. This is because it has a structured, directed, and systematic principle; also, a wide variety of skills are taught, so that it can improve communication, social, fine, and gross motor skills. ABA therapy is a method of behavior management.

ABA therapy is a behavior management method that has developed over decades, discovered by American psychologist Ivar O. Lovaas at the University of California, Los Angeles, United States (Handojo, 2003). Around 1970, he began experimenting by applying Skinner's B F theory. Operant Conditioning. In this theory, it is stated that a pattern of behavior is obtained by the perpetrator (negative reinforcement). While a certain behavior will disappear if the behavior is repeated continuously and experiencing something unpleasant (punishment) or the loss of things that are pleasing

to the perpetrator (deletion). Lovaas experimented, borrowing the theory of psychologist B. F. Skinner with some treatments for autistic children. The results of the experiment were published in the book *Behavioral Treatment and Normal Educational and Intellectual Functioning in Young Autistic Children* (1987)

Theory of Errors in Foreign Language Mastery, Titone and Danesi (1984) stated that the process of second language mastery is often associated with the characteristics of 'systematic' errors, i.e. deviations that can be described, either by the interference of the first language (interlinguistic errors) and the influence of elements of the second language (intralinguistic errors). The language developed by the learner in the context of learning a second language is related to the target language in the following stages:

In addition to Titone and Danesi, Richards (1974) also put forward a theory for the study of error type analysis. The theory by Richards emphasizes the classification of the types of mistakes that foreign language learners make. There are two types of errors, namely the interlingual error type and the intralingual error type. The type of interlingual error is an error caused by the interference of the mother tongue of the language learner, due to the very conscious mother tongue, while the type of intralingual error

3. Research Methods

Sugiyono (2009) argues that qualitative descriptive research has the main things, namely axioms, research processes, and research characteristics. The axiom of research is based on existing reality. The nature of reality means that it is based on the reality that happens in the field. In qualitative research, the researcher is directly a human instrument.

Supported by observation, interview, and recording methods. With this method, researchers can understand the source of data. and able to interpret the data obtained and describe what the findings are. Thus, this holistic nature accompanies the research process as a whole on the data, and is supported by inductive methods and deductive methods in terms of research characteristics.

3.1 Data Source

Research on mastery of procedures was carried out in the city of Denpasar. This study took data on autistic children from several institutions & foundations in the city of Denpasar: (1) Yayasan Madania Center. Address: Jl. Satelit 56 Denpasar. Number of informants: 1 autistic child named Rizqi Alfiansyah Puji Darmawan, age 15 years, Grade 3 equivalent to Senior High School (2) Denpasar City Autism Service Center. Number of informants: 10 autistic children. (3) Number of informants: 1 autistic child named Rizqi Alfiansyah Puji Darmawan, age 15 years, Grade 3 equivalent to Senior High School (2) Denpasar City Autism Service Center. Number of informants: 10 autistic children. (3) Pradnyagama Foundation. Address: Jl. Tukad Yeh Aya No.183 Renon, Denpasar. Number of informants: 2 autistic children. The recordings obtained from the informant, namely the informant who can speak English well. Recordings

that are selected based on criteria, namely recorded well, intonation can be, the intonation can be read well on the speech analyzer.

3.2. Research Instruments

The research is qualitative, with importance to data quality. The data must have validity and reliability. To obtain the data, it is related to methods and techniques for data collection (Sugiyono, 2005). The research instruments used are recording tools and researchers. Researchers as instruments, both interviewers and observer participants, conduct prosody research on autistic children with an acoustic phonetic theory approach.

3.3. Data Collection Methods and Techniques

In collecting research data, two methods were used, namely the listening method and the cakap method. The method of viewing is to listen to the mastery of the procedure. Here, the informant speaks words or sounds. When pronouncing the sound that has been provided, recording techniques and recording techniques are used (Sudaryanto, 1993). From the results of this recording, it is listened to, both by direct hearing.

3.4 Methods and Techniques for Presenting Data Analysis Results

In the presentation of the results of data analysis, informal and formal methods are used. The informal method is a formulation using ordinary words. The formal method is a formulation with signs and symbols. The sign in question, such as the sign [] pressure, (:) for long sounds, (/) for ascending tones, () for descending tones (Sudaryanto, 1993). The techniques used in the presentation of data analysis are deductive techniques and inductive techniques. In the mindset of knowledge is general, it becomes specialized knowledge. This technique serves to align theories with facts in the field. It is different with inductive techniques that use a mindset departing from specific facts, concrete events, and then generalize into general things. This technique serves to find universal things from simple facts found during research (Hadi, 2004).

Uniques. deductive technique, which is assuming a mindset. In the mindset of knowledge in general, it becomes specialized knowledge. This technique serves to align theories with facts in the field. It is different with inductive techniques that use a mindset departing from specific facts, concrete events, and then generalize into general things. This technique serves to find universal things from simple facts found during research (Hadi, 2004).

4. Discussion

Linguistics distinguishes stress, pitch, and intonation which are reflected in the difference in pitch configurations, namely pitch, length, and loudness. The three terms refer to the auditory phonetic domain. Pitch is a term that refers to auditory

phenomena/perceptions. The vibration of the speech apparatus at a certain value produces a sound wave that has a certain basic frequency. The waves are received by the listener's ears and felt as a sound with a certain tone.

Suprasegmental features are explained and elaborated. In particular, suprasegmental features relate to the phonetic system, especially vowels, without ruling out the influence of consonants in each syllable that makes up a sentence. Every feature launched on each syllable is not always the same, but there are times when those features differ according to the surrounding environment.

The vocal features that may be realized in each sentence can be described as follows.

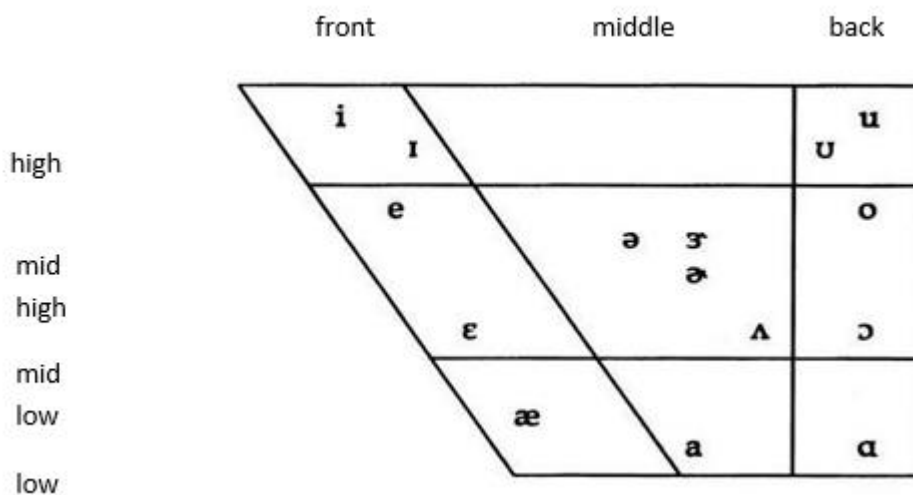


Chart 4.1. Vowel Sound Features in English (downloaded from <http://www.mnsu.edu/comdis/phonetics/phonetics.html>)

The place and way of articulation of consonants are shown in the following figure.

Table 4.1. Consonant Features in English (Downloaded from the

http://englishwell.biz/uploads/taginator/Sep-2013/table_of_english_sounds.jpg

Manner of Articulation:	Place of Articulation:						
	Bilabial	Labiodental	Interdental	Alveolar	Palatal	Velar	Glottal
Stop							
voiceless	p			t		k	
voiced	b			d		g	
Nasal	m			n		ŋ	
Fricative							
voiceless		f	θ	s	ʃ		h
voiced		v	ð	z	ʒ		
Affricate							
voiceless					c		
voiced					ʤ		
Glide							
voiceless	ɹ					ɰ	h
voiced	w				j	w	
Liquid				l r			

The use of autism prosody includes stress, duration, pitch, and intonation. The use of this prosody can be seen from the pronunciation of sentences such as: (a) news sentences; (b) question sentences; (c) a disclaimer; and (d) command/exclamation sentences. The following is an explanation of the procedure for autistic children in the city of Denpasar, Bali.

4.1 Stress

Stress or accent on a concept that has been clearly outlined and is useful for providing simple markers between words or parts of a sentence in a single sentence. The markers given to parts of the sentence or sentences as a whole are different from the pressure that appears on individual words. According to Ladefoged (1993: 118), in a sentence, it tends to be avoided that there is too close. In fact, there is only one pressure on the part of the sentence (phrases and clauses) or sentences. However, it is still possible that there is more than one pressure on each part of the sentence in the use of the prosody of autistic children. Therefore, the analysis of pressure in the use of prosody for autistic children is not based on the analysis of pressure for each word, but is analyzed from phrases, clauses, and sentences. Based on this, the symbol used is (+) to mark the syllable that gets the guesser's attention on a word consisting of syllables.

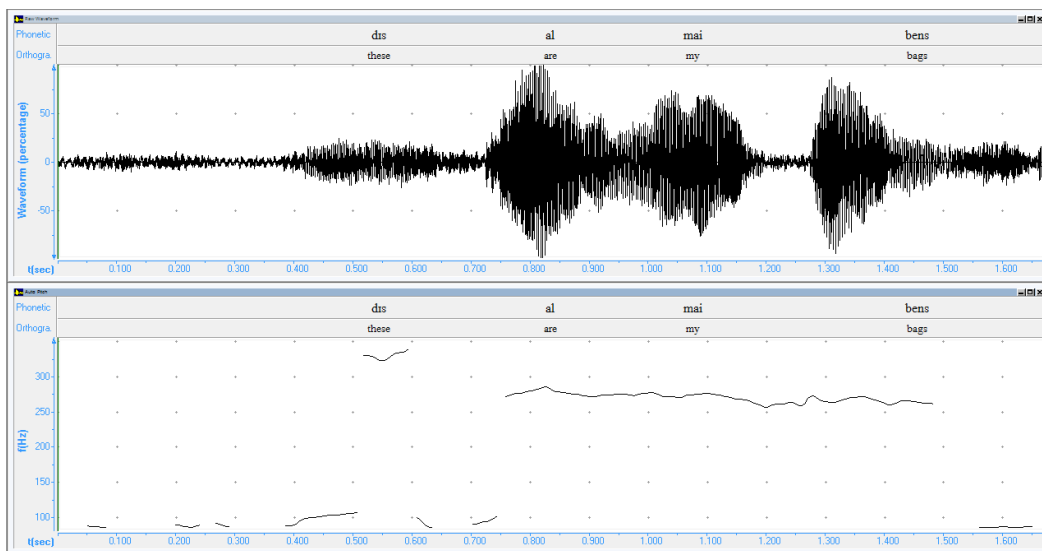
4.1.1 Stress in Positive Sentence

According to Gorys Keraf (1984: 86), a sentence is a part of speech that is preceded and followed by silence, while the intonation shows a lower intonation in a news sentence. The pressure analysis in this news sentence is carried out by providing the symbols that have been described above. The further explanation is as follows.

Table 4.1. Stress in a positive sentence, *These are my bags*

Criteria	<i>These are my bags</i>			
	These	Are	my	bags
Sress	-	+	-	+

Based on the table above, it can be seen that the pressure appears in the second word is (hereinafter called the second syllable), because in one word there is one syllable. This syllable lasts for 0.2236 seconds, with its highest frequency being at a range of about 285 Hz. Pressure also occurs at the last word or syllable bags, which lasts for about 0.4017 seconds or a duration of 401.68 milliseconds, and with its highest frequency in the range of 272 Hz, as seen in the graph below.

Chart 4.2. Figure Tone and Pitch Track on positive sentence, *These are my bags* (Risqi, 50)

4.1.2 Stress in Question Sentence

Based on the great Indonesian dictionary, a question sentence is a sentence that uses punctuation (?) at the end of a sentence. Sentences that need answers. The pressure analysis in this question sentence is also carried out by providing the symbols that have been explained. Further explanation is as follows.

Table 4.2. Tekanan pada Kalimat Tanya, *Are you Bill Jones?*

Kriteria	<i>Are you Bill Jones?</i>			
	Are	You	Bill	Jones

Tekanan	+	+	-	+
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Based on the table above, pressure on question sentences occurs more frequently. Even in the syllable or the first word, there is already pressure. Silabel has a time span of about 0.1919 seconds with a highest frequency of about 309 Hz. Next, pressure occurs on the word or syllable of both of you. This word or syllable has a time span of about 0.4576 seconds with the highest frequency of about 281 Hz. Meanwhile, the last word or syllable occurs in the word Jones, which has a time span of 0.4855 seconds with the highest frequency in the range of 335 Hz. Here is an overview of the graph.

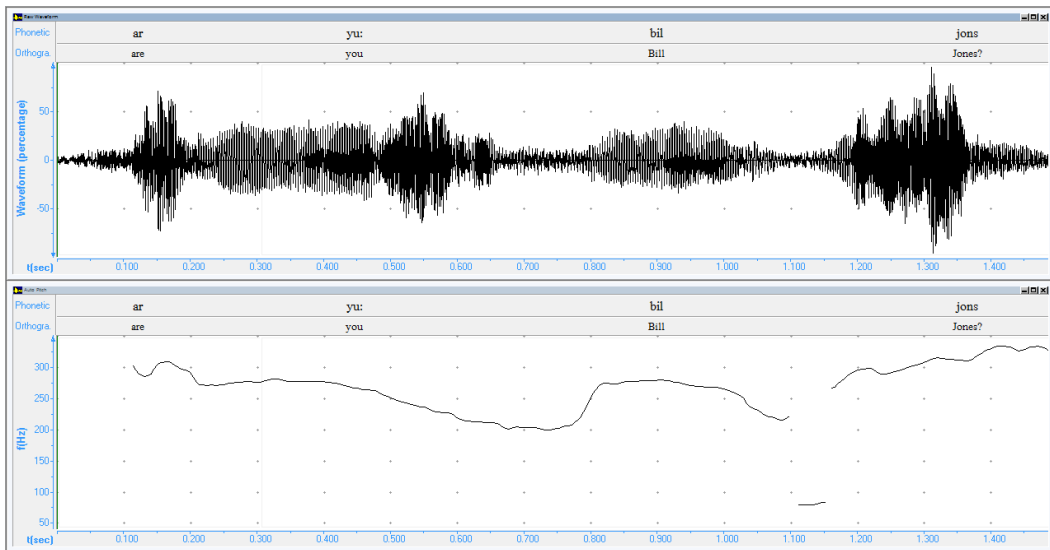


Chart 4.2. Fig Tone and *Pitch Track* dalam question sentence, *are you Bill Jones?* (Risqi, 4)

4.1.3 Stress on Negative Sentence

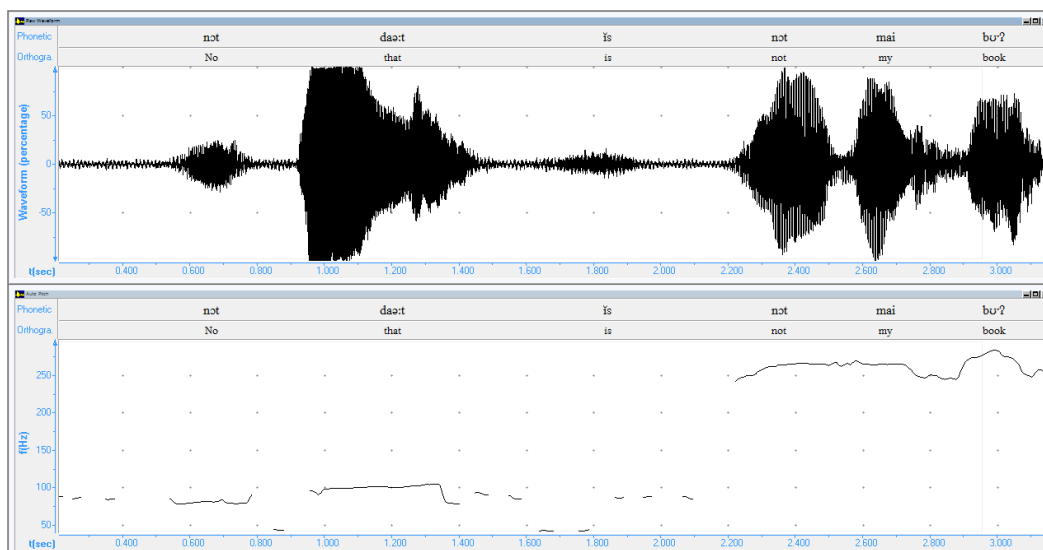
A negative sentence is a negative sentence in English. Analyze the pressure in this sentence by giving the symbols that have been described above. Further explanation is as follows.

Table 4.3. Stress on Negative sentence, *No, that is not my book*

Criteria	<i>No, that is not my book</i>					
	<i>No</i>	<i>that</i>	<i>Is</i>	<i>not</i>	<i>my</i>	<i>book</i>
Stress	-	+	-	+	+	+

The table above illustrates that the pressure is found on the second word or syllable, i.e., on the word that occurs in a time range of about 0.6005 seconds or 600.54 milliseconds, with the highest frequency in the range of 105.3 Hz. Then, there is a decrease in the third syllable, while in the fourth syllable there is pressure again,

namely in the word *note* with a duration of 340.50 milliseconds, while the highest frequency is in the range of 267 Hz. Still in the pressure position on the fifth syllable “*My*” with “*a*” duration of 294.47 milliseconds, the pressure on this syllable experienced an increase in frequency in the highest range, which is 269 Hz. In the last syllable, a pressure was found with a time span of 0.3151 seconds or a duration of 315.15 milliseconds, and the highest frequency in the range of 283 Hz. The graphic description is as follows.



Graph 4.3. An Overview of Sound Waves and Pitch Track in a Sentence Denial, No, that is not my book (Risqi, 34)

4.2 Intonation

Ladefoged, in his book entitled *Vowels and Consonants: An Introduction to the Sound of Language*, states that intonation is important in marking clauses that are in the process of becoming sentences. We can use sound pitch to form grammatical differences that separate clauses that will be marked by pronunciation in written language (Ladefoged, 2001: 14).

Intonation is analyzed in two ways; the first is analyzed by giving direct intonation on each word in each sentence. Second, intonation is broken down based on syllables. For this reason, several symbols are needed in the analysis. The symbols used include the symbol (–) for flat intonation, the (/) symbol for up intonation, and the () symbol for down intonation. Each analysis is adjusted to each word contained in each sentence and presented in table form

4.2.1 Intonation in a positive sentence

Table 4.4. Intonation in a positive sentence, *these are my bag*

Intonasi	 <i>These are my bags</i>
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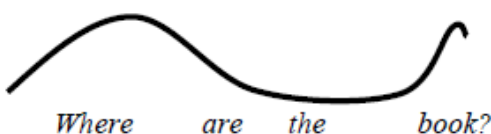
4.2.2 Intonation in Question sentence

Question sentence by yes /No Question: Are you Bill Jones?

Table 4.5. Intonation in yes /no question

Intonasi	 <i>Are you Bill Jones?</i>
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Table 4.6 Intonation in Wh-question Where are you?

Intonasi	 <i>Where are the book?</i>
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5. Conclusion

Based on the explanation above, it can be concluded that autistic prosody acquisition in Denpasar, Bali, has high and low intonation. As we know, generally, autistic intonation is Flat. Stress acquisition is almost normal. It is not flat anymore. It is because they are trained continuously by using Speech Analyzer. It is used for Therapy an Autistic spectrum.

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