Blocking Sound of English Utterances in an Indonesian Adult Stutter Speaker: A Case Study

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Abstrak

Melalui penelitian ini, gagap telah dianalisis dari segi bahasa dan telah ditemukan gaya khusus pada penderita gagap yang menjadi subjek dalam penelitian ini. Subjek dalam penelitian ini adalah seorang penderita gagap dewasa berkebangsaan Indonesia yang telah menderita penyakit ini sejak kecil. Subjek menunjukkan dominasi hambatan daripada perpanjangan dan pengulangan. Penelitian ini menggunakan metode deskripsi kualitatif dan wawancara beserta observasi sebagai teknik pengumpulan data. Subjek berbicara dalam dua bahasa, Bahasa Inggris dan Bahasa Indonesia. Ungkapan-ungkapan yang diutarakan subjek dalam dua bahasa tersebut memiliki hambatan bunyi yang serupa, seperti bunyi /p/, /m/,/b/, /d/, /s/, /w/, /k/, dan /h/. Dalam penelitian ini seluruh bunyi yang serupa tersebut telah diaalisa untuk menemukan karakteristik dari setiap bunyi. Penelitian ini menganalisa setiap bunyi dengan cara mentranskip bunyi, kemudian mendiskusikan kelompok konsonan, letak bunyi dalam kata, dan cara artikulasi pada bunyi. Kesamaan bunyi pada kedua bahasa disebabkan oleh organ yang memproduksi bunyi tersebut. Cara artikulasi bunyi yang termasuk dalam golongan stops, fricatives, dan glides dihasilkan dengan hambatan yang dilafalkan jauh lebih lama dari seharusnya. Organ bicara subjek menghambat laju udara pada golongan-golongan tersebut dan menghasilkan bunyi yang terhambat.

Kata Kunci: gagap, penderita gagap dewasa, hambatan bunyi.

Abstract

Through this study, stuttering has been analyzed from language point of view, and found the unique style of particular stutter speaker. Participant of this study is an Indonesian adult stutter speaker who suffers stuttering since his early childhood. Participant showed dominant blocking in his speech. It is many more than the repetition or prolongation. The case used qualitative method and the data collection used interview and observation to participant. Participant speaks two languages, Indonesian and English. Participant's utterances in both languages showed similarity of sounds, like /p/, /m/,/b/, /d/, /s/, /w/, /k/, /h/. On this study, those similar sounds had been analyzed to find the characteristic of each sound, pronounced by participant. This study analyzed each sound by transcribe its phonetic transcription, then discuss its cluster, placement of the sound, and its manner of articulation. The similarity of the sounds is caused by the problem on participant's organ of speech. Manner stops, fricatives, and glides are produced by longer duration of the obstruction. Participant's organ of speech block the airflow on these manners and produced blocking.

Keywords: stuttering, adult stutterer, blocking sound.

INTRODUCTION

Speaking is one way to communicate with other people. The ablity of organ of speech to produce the sound is connected into speech production. If along speech production there are no problems occur, the utterances will be perfectly produced by the speaker and clearly understand by the addressee. Unfortunately, the airflow that normally comes out fluently also may be

blocked and failed to utter. It can be late, or even nothing out from the organ of speech.

In normal people, this airflow will come out fluently to produce the sounds. If it be blocked, means that there is something wrong. This condition is known as blocking. Blocking is actually one of characteristic of stuttering. Stuttering is fluency disorder which contains repetition, prolongation, and block (Oyer et al.,1987). Blocking is a condition where the airflow get stuck in the throat and nothing comes out (Syder, 1992). From this point, this

study is interested in analyze stuttering, concerns on block. The participant of this study suffers more on blocking sound rather than repetition and prolongation. Besides, participant is speaking in two languages, Bahasa Indonesia and English as second language. His blocking happens on particular sounds on both languages, which mostly are similar.

From this condition, this study will analyze what sounds of language that participant get the block on his native language and also in English. Then this study will explore the factor that causes similar blocking sounds on both languages.

To support this study, there are some theories that have been used. Fromkin et al. consonant and vowel classification is used to analyze participant's English utterances and find out the blocking sounds on it. To analyze the blocking sounds in Bahasa Indonesia, this study use Alwi et al. consonant and vowel classification. After all the sounds have been found, the factor that causes similar blocking sounds in both languages is analyzed by using Fromkin et al. theory about labels of phoneme.

METHOD

This study apply case study where the researcher herself is used as the tool in seeking the answer for research question. The case study is done by seeking the participant that suffered by stuttering, doing interviews of his medical history, and analyze the recording to figure out the answer for research questions.

This study uses descriptive qualitative method. This approach is chosen to figure out the blocking sound that produced by the participant who speaks two languages, Bahasa Indonesia and English. It gives more advantages for a study to be explored and widely observed.

By using descriptive qualitative method, it will be easy to find the similar blocking sound in Bahasa Indonesia and English produced by participant. The analysis will explain the connection among the blocking sounds, the similarity of blocking sounds in both languages, and organ of speech.

Subject of this study is an Indonesian male adult stutter speaker who suffered stuttering from childhood. He got his worst stuttering on high school period, and getting better now. He is a worker of Japanese IT corporation in Jakarta. He uses Bahasa Indonesia to communicate with his society, but using much English to communicate in working place. The language which has analyzed on this study are both languages participant spoke.

His stuttering comes up for particular sounds in Bahasa and in English. It appears as blocking sound. The participant does blocking sounds dominantly than repetition or prolongation. That is why, this study concerns to choose this participant. His stuttering is unique, because he often got blocking and its blocking has same sound for languages he speak.

Even though he is stuttering, the subject looks like normal people who speaks fluently. It is part of his effort to look normal unlike a stutterer. But if the his interlocutor pays more attention to his speech, researcher can find his stuttering easily.

The techniques that is used on this study is observation, interview, and transcribing. Observation and interview are used to collect the data. After collecting it, the Data are transcribed into a transcription. From this transcription, participant's utterances are analyzed.

RESULT

Blocking Sounds in English Utterances

Participant stutters in repetition, prolongation, and block. Because this study focuses on blocking sound, repetition and prolongation will not be discussed. For English utterances, blocking sounds that appear are all consonants. The vowels are represent on repetition and prolongation of participant's stuttering. All consonants will be elaborated by using these sequences: consonant cluster, placement of the sounds, and consonant by manner.

This sequences are taken from Jakielski's Index of Phonetic Complexity (IPC) which is usually used to identify stutterer's disfluency. The IPC consists of consonant by place, consonant by manner, singleton consonant by place, rhotic vowels, word shape, three or more syllables, contigous consonants, and cluster by place. This study only takes three parts because participant shows more blocking in these parts. The blocking sounds and its analysis represent on the table below.

Table 1. Blocking Sounds in English						
Sounds	Consonant Cluster		Placement of Sound			
	Cluster	Non- Cluster	Onset	Coda	Manner	
/p/	V		v		Stop	
/m/		V	v		Nasal	
/b/		V	V		Stop	
/d/		V	v		Stop	
/s/	v		v	v	Fricative	
/w/		v	V		Glide	
/k/		V		V	Stop	
/h/		V	V		Fricative	
/r/		V	V		Liquid	

The table shows that the consonants mostly block on non-consonant cluster and onset. Besides, manner stops are majoring the case.

Blocking Sounds in Bahasa Indonesia

Different from English utterances, blocking sound possible appear as a vowel in Bahasa Indonesia. However, the consonants are mostly similar. It is possible to appear often than English utterances because this is the first language that participant use.

Table 2. Blocking Sounds in Bahasa Indonesia						
Sounds	Consonant Cluster		Placement of Sound		Manner	
	Cluster	Non- Cluster	Onset	Coda	Maillei	
/p/		v	v		Stop	
/m/	V	V	v	V	Nasal	
/b/		v	v		Stop	
/d/		V	v		Stop	
/s/		V	v	v	Fricative	
/w/		V	V		Glide	
/k/		V	v	V	Stop	
/h/		V	V		Fricative	
/g/		V	V		Liquid	
/ŋ/	V		V		Nasal	
/a/	-	-	-	-	Low front semi- closed	

Table 2 shows that there are similar sounds in both languages. This similarity indeed has factor. The explanation is on the next sub section.

The Factor which Causes Similar Blocking Sounds in First Language and Second Language

In phonology, articulatory system especially consonant classification is basically the same between participant's first language and second language (Fromkin et al., 2011 and Alwi et al., 2003. It is simply because all languages are cut from the same mold (Fernandez and Cairns, 2011). It means that the languages spoken by participant are basically same. In addition, the phonology rules in both languages are also same

As Fromkin et al. and Alwi et al. which elaborate the articulatory system in English and Bahasa Indonesia, the blocking sounds above is identified specifically in the table below.

Table 3. Blocking Sounds Labels of Phoneme					
Sounds	Labels of Phoneme				
	English	Indonesian			
/p/	Bilabial stop	Bilabial stop			
/m/	Bilabial nasal	Bilabial nasal			
/b/	Bilabial stop	Bilabial stop			
,,	I I I I I I I I I I I I I I I I I I I				
/d/	Alveolar stop	Alveolar stop			
/s/	Alveolar fricative	Alveolar fricative			
/w/	Bilabial glide	Bilabial semi- vowel			
/k/	Velar stop	Velar stop			
/h/	Glottal fricative	Glottal fricative			
I	l	l			

English and Bahasa Indonesia have similar characteristics in labels of phoneme. Table 3 shows that even though the words are different, the labels of each phoneme are similar. As in organ of speech figure on page 19, it is true that the organ which contribute to produce phoneme are same for all languages, including paticipant's languages.

In details, this study will elaborate one by one for each organ of speech that have problem and resulting a blocking in particular sounds. From Table 3, place of articulation that contribute in blocking are bilabial, alveolar, velar and glottal; while manner of articulation which contribute are stop, nasal, fricative and glide.

Concerning on place of articulation, participant of this study succeed in forming the phoneme. For example, phoneme /p/, /m/, /b/, and /w/ which are all bilabial. Bilabial involves both lips and bringing it together. In participant's condition, he succeed to bring his lips together in producing those phonemes. However, when the airflow will come out from his lips, it failed. This causes blocking.

Similar condition happens on alveolar. Alveolar involves the raising of tongue to alveolar ridge. By looking carefully at participant's tongue which made various ways in raising his tongue, this study found that participant is success in forming phoneme /d/ and /s/. Unfortunately, the airflow is stuck right on his alveolar ridge and the sounds failed to pronounce.

This study did not use special tools to analyze the inside of organ of speech. It makes the analysis of velar and glottal cannot be seen with the same treatment like bilabial and alveolar. Velar produced by raising the back of the tongue to velum, and glottal involves glottis and

the airflow. However, it can be seen by the effort of participant to produce phoneme in velar and glottal.

Participant produced the velar sounds, /d/ and /s/, hardly before finally he totally got the blocking. It showed from his jaw which move as if he tried to pronounce the sounds. When participant pronounce the word *director*, he showed his effort to open his upper and lower teeth which close and block the airflow from back tongue and velum.

In glottal, participant showed that his glottis has already opened, but the airflow cannot pass the tongue and lips. It makes the blocking of /h/ sound happened.

From all condition in place of articulation, it is found that participant succeeded in forming phoneme based on place of articulation, but the airflow unsuccesfull to come out and produce the sounds. Airflow relates to manner of articulation. For manner of articulation, participant has problem in stop, nasal, fricative and glide.

Participant of this study got blocking in almost all stop phonemes. Fromkin et al. (2011) classify /m/ as stop also. From Table 3, stop phonemes that appeared in both languages are /p/, /b/, /m/, /d/, and /k/. In Table 2, participant even got blocking on /ŋ/ and /g/ which are also stop phoneme, on his first language. However, /t/ sound that also classify as stop sound did not appear on both languages.

Stops are consonants in which the airstream is completely blocked in the oral cavity for short period (Fromkin et al., 2011). The natural condition of stops consonants that will block on particular period affects participant stuttering alot. Blocking sound is condition where the airflow stuck in the throat and nothing comes out (Syder, 1992). When stops consonants involves the blocking of airstream for short period, the fluency disorder makes the airstream blocked for longer period. It causes the blocking sounds.

Fricatives are continuants. Although the airstream is obstructed as it passes through the oral cavity, it is not completely stopped (Fromkin et al., 2011). This condition also influences participant's blocking. When participant got blocking sounds in fricative, the fluency disorder affects the obstruction of fricatives phonemes and makes it totally stop. Then, this condition makes participant got blocking sounds.

Glides are produced with little obstruction of the airstream. Usually, it is followed by vowel. The tongue glides quickly into place for pronouncing the next vowel (Fromkin et al., 2011). On participant's condition, the airstream obstructs more than it should be. It makes the airstream got blocked and the sound failed to pronounce.

From all categories of manner of articulation, it is clear that participant's block happened in condition where manner of articulation involves an obstruction of airflow. The problem is actually not in place of articulation, but in manner of articulation. Stops, fricatives, and glides consonants can be formed by particular period of obstruction. However, stuttering makes the obstruction happened in longer period and produced blocking sounds.

To sum up, participant of this study will get blocking sounds in manner which involves obstruction. When participant speaks in any language, the problem will always occur. That is why, in English and Bahasa Indonesia, the sounds that got block are similar. This study believe that if participant speaks other languages, the problem will still on the same things.

DISCUSSION

Stuttering comes genetically on person who stutter. The case of stuttering rarely comes in direct relationship like parents to children. Usually, it is given by great great great grandfather or grandmother to children. However, in some cases parent who stutter also gives stuttering to children. Stuttering can go by after a child becomes adult, but in many cases stuttering stays. It calls developmental stuttering (Conture, 2007).

Participant of this study is one of developmental stutterers who has suffered stuttering from early childhood. In his early age, his stuttering is very hard and his speaking mostly blocked. On this age, participant still gets blocking when he speaks. Stuttering changes over time in ways generally similar for everyone who stutters, while still exhibiting significant degrees of variability in its expression across individuals who stutter (Conture, 2007). An interesting case is when he learns to speak an additional language, English. For working business, this participant uses English to communicate beside using Bahasa Indonesia as his first language.

As learner, participant adapts his first language style to English as his second languages. Even though his pronounciation is good, sometimes he still uses Indonesian's style of speaking in pronouncing English words. Related to second language theories which are stated by some linguists (see 2.1.3), first language affects second language by transferred some knowledge (Brown and Attardo, 2003) and interferencing second language (Roberts and Shenker in Conture and Curlee, 2003). This study found that participant's first language affects his second language. As an English learner, participant showed an effect of Bahasa Indonesia to his English. It is his English pronounciation which pronounced as Indonesian style.

According to participant languages, this study has been explored the blocking sounds of his first and second language and find the factor which makes some blocking sounds are similar in both languages. From all the Data that have been analyzed on previous sub Chapter, similar sounds occurs on both languages. Through analysis of consonant cluster, placement of sound and consonant by manner, this study interprets that there are some problems occur in participant's blocking.

Participant of this study succesfully formed the sound, but cannot push the airflow to pronounce as well as it should be. It may say that the problems of participant is not on the place of articulation, but in manner of articulation. Participant can move his organ of speech well to form the sound. Unfortunately, the airflow cannot appear well and stuck in the middle of its way come out from the mouth.

The blocking sounds happened in particular manners. Some manner of articulation involves obstruction for particular period. They are stops, fricatives, and glides. These three manners are the problem where blocking sounds appeared. The obstruction that occurs in these three manners are only for short period. However, stuttering makes participant obstructed in longer period than it should be. This condition produces blocking sounds when participant speaks.

On this analysis, the problem relies on participant's organ of speech. Means that, if participant speaks in any kind of language, he will get blocking on same sounds. That is why in participant's first and second language, the sounds that got blocked are similar. The causes is participant's organ of speech, especially his manner of articulation.

From this condition, it is true that every stutter speaker is unique and has their own stuttering style. In Darmadie's thesis (2012) about stuttering, the participant stutter in all characteristics of stuttering, like prolongation, repetition, and blocking. Arnold et al. (2005) findings in nine children who stutter and Anderson findings in 15 children who stutter showed similarity of result which indicated that their words containing part-word repetitions and sound prolongations which were lower in word and neighborhood frequency than words containing single-syllable word repetitions. Participant of this study and participant of related study have their own characteristics in stuttering.

Another problems that may occur is on classification analysis. This study has been analyzed the blocking sounds by looking at its consonant cluster, placement of sound, and manner of articulation. The table below states the data in consonant cluster and placement of the sound.

Table 4. Blocking Sounds Cassification							
	Blocking sounds happen on						
Sounds	Cluster	Non Cluster		Onset		Coda	
/p/	V	V		v	V		
/m/	V	v	V	v	V	V	
/b/		v	V	v	V		
/d/		v	V	v	V		
/s/	V	V		v	V	V	
/w/		V	V	v	V		
/k/		V	V	V		v	V
/h/		V	V	v	V		
English Indonesia							

From the table, it shows that in both languages participant blocking appear mostly on non-consonant cluster and onset. Onset is one of difficult problem to pronounce for adult stutterer (Dworynzki and Howell, 2004). Onset is one or more syllable-initial consonant (Fromkin et al., 2011). There are four characteristics that usually adults consistently stuttered, such as: Initial consonant; longer words; words at the beginning of sentence; and nouns, verbs, adjectives, and adverbs (Brown, 1937; in Ratner, 1981).

Brown (1937) theory showed that initial consonants or onset is one of consistent problem occurs on adult who stutter. Participant's condition is a proof of this theory. Besides, content words like nouns and verbs also appear as the word which got blocked on this study. Thus, from Table 4 the words contains more non-consonant cluster. The condition of blocking in non-consonant cluster is a specific term that participant has. Means that it is a unique type of his stuttering.

To conclude, this study found that participant's problems are in manner of articulation and specific classification on his stuttering characteristic..

CONCLUSION AND SUGGESTION CONCLUSION

This study includes in case study, means, there is only one participant used for observation. From all Data, analysis, and discussion, there are some conclusions.

First, when participant speaking in English, he got blocking sound of /p/, /m/,/b/, /d/, /s/, /w/, /k/, /h/and /r/. According to manner of articulation, most of sounds are stop. Second, if participant use his first language, he got blocking on /p/, /m/,/b/, /d/, /s/, /w/, /k/, /h/, /g/,/ŋ/,/n/, and one vowel, /a/.

From both languages, there are similar blocking sounds, such as /p/, /m/,/b/, /d/, /s/, /w/, /k/, /h/. This similarity indeed has cause. The cause represents on third conclusion.

Third conclusion that there is factor that causes similarity of blocking sound in both languages. It is because participant of this study has problem on his manners of articulation which involve obstruction like stop, fricative, and glide. The obstruction which actually only need very short period, obstruct longer than it should be. This condition makes participant will always block in the same sounds, which means that any language he spoke will got the same blocking sound.

SUGGESTION

Every thing in this world has weaknesses. Indeed, this study also has its own weaknesses. This study only observed one participant. Next study may take more than one participant and classify it as field research. If it is still impossible, then next study may take different participant and develop same analysis, to make this study develop.

The technique of collecting Data in this study is by interview and observation. Unfortunately, because of

limited time and long distance living between participant and researcher, this study does not conduct all of daily conversation of the participant. Future researcher may develop this technique by having longer time to analyze the participant, so that the Data may be more various and researcher may find wider possibilities of blocking sound in participant's utterances.

Participant of this study mostly have problems with onset and manner of articulation in consonant. This study does not use any kind of special devices for speech disorders. If it is possible, future study may use VOT, or Voice Onset Time to look into details of period of the stuttering, or another technology which may be used for develop the research.

Future research may combine all fields of knowledge that relate to stuttering, such as speech pathologists, medical perspective, brain and speech production field, etc to have same research and help in healing stuttering for the participant.

Last but not least, participant of this study comes from a closed community of stutter speaker. He may be one of brave stutter speakers who agree to be a participant of a study. But much number of similar person like him, deny to have close relationship with other people, even for being participant of a study. This research may be one of way to open the 'locked door' of these people. Future researcher may open it more and help these people to be brave facing the world.

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