TIP-OF-THE-TONGUE ANALYSIS IN INDONESIAN LANGUAGE SPEAKER: A CASE STUDY

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Abstract

The phenomenon of ToT is an interesting issue to be studied more and more, especially in the field of Linguistics, since prior research on ToT is only studied in the realm of Psychology. Later in 1966, Brown and MacNeill became pioneers in ToT research. In Indonesia itself, research related to ToT is rarely done. That is what prompted the birth of this simple study, whose hope could later be developed for more complex and complete studies in similar fields. This study aims to explain the possibility of ToT and at what level of Indonesian speakers can recall the target word in ToT condition. Participants of this study were 10 people with age range 25-59 years with the category of adults according to WHO (World Health Organization) with the number of 5 men and 5 women. The
theory used as the basis of the study is based on Brown and MacNeill (1966) ToT analysis. The results showed that when participants were indicated to have ToT conditions, they could recall similar letters, syllables and words that might be present in the given target word. Based on the above description we can conclude that participants with ToT conditions have access to their phonological knowledge, but not enough to activate the word as a whole and in ToT condition, the ability to recall the target word can be in word, syllable and letter level.

Keywords
Tip-of-the-Tongue (ToT), Indonesian Language Speaker, Case Study

1. Introduction

One of the symptoms in the production of language related to memory is the so-called ‘Tip of the Tongue,’ a condition where we know the word but we cannot pronounce it properly; we just remember only some part of the word such as its syllable or letters. Such symptoms sometimes occur when people do not fully remember a word that is rarely used, but he did not forget the word. Without us knowing, this phenomenon often happens even almost experienced by everyone.

‘According to Dardjowidjojo (2005), one of the approaches used to find out the process that occurs in word retouching is to explore the phenomenon called ‘Tip of the Tongue,’ usually called ToT.’ When experiencing TOT, a person knows what he or she wants to say, but is unable to say the word phonologically. The phenomenon occurs in many languages (Schwart, 1999), either in the elderly (Brown & Nix, 1996) or to younger people (Schwartz, 2006).

Tip-of-the-tongue is a phenomenon that can occur in every language speaker. In Schwartz's (2001) and Brown (1991), the theory of Tip of the Tongue is completely explained. There are several theories about the cause of tip-of-the-tongue: Blocking Theory, Transmission Deficit Hypothesis and Incomplete Activation. Blocking theory suggests that Tip-of-the-Tongue occurs because of other words related to the remembered word that appears blocking the access of the target word. Transmission Deficit Hypothesis predicts that tip-of-the-tongue occurs due to weak connections at conceptual, syntactic and phonological levels when we access lexical, Incomplete Activation hypothesis said that tip-of-the-tongue is caused by an incomplete activation of a concept.

Several studies suggest that tip-of-the-tongue is caused by weak connections between semantic, syntactic and phonological representations in a person's cognition. Yet in another study, it was found that tip-of-the-tongue is caused by the appearance of other words that are similar to words
to be remembered thus hindering the access of the target word. The research by Abrams and Rodriguez (2005) tries to explain two contradictory findings by testing the hypotheses of the Node Structure Theory and Transmission Deficit Model which predicts that a word's syntactic class has a role in determining the effect of phonologically similar words on a tip-of-the-resolution -tongue.

Researches related to 'Tip of the Tongue' are rarely explored in Indonesia, based on author searches on google and some searches on sites that can access journals, with the keyword ‘Tip of the Tongue’ or ‘Iupa-lupa ingat’ (Indonesian Language).’ Only one related study was found in Indonesia. Based on the above exposure the authors are interested to examine the phenomenon of TOT in Indonesia.

2. Aim of Research

The purpose of this study was to explain ToT and what level of ability to recall the target words in ToT conditions in Indonesian speakers.

3. Literature Review

3.1 Theoretical Framework

3.1.1 Tip of the Tongue (ToT)

The person who became the research pioneer on the Tip of the Tongue is Brown and MacNeill (1966). In their research, they asked participants to read the definition of a rarely used word and then respond in three ways: writing the defined word if they knew it, leave the blank paper if they did not know the target word, and if they forgot the word, Then they are asked to write down the tendency of words that refer to the definition of the word or provide information about the word referred. The results showed that when participants experiencing TOT, they can write down a few words referring to the target word, as well as information on the number of syllables and the location of the pressures on the target word. This suggests that participants with TOT have some phonological information, but not enough to activate the word in its entirety.

Research on TOT has been done by Brown and Macneil (1996) in Soenjono Dardjowidjojo where people are asked to name the objects which in daily life are not commonly used (i.e. sextant, sailing tools to measure the distance of the moon's altitude, sun and stars) it is found that in the forgotten-forget phrase, the word that emerged was not just any word. For the concept that he should be sextant form, people who experienced ToT condition, they said secant, there was sextet, and some
were sexton. There is no said sexaphone or repellent for example. About 75% of people who were experiencing ToT guess it's not too wrong.

From the research, it is concluded that in ToT condition, there seems to be certain patterns that people follow, that is:

- a. the number of syllable is always true
- b. The initial sound of the word is also true
- c. The end result of the error is similar to the actual word

That pattern is also apparently makes people do not choose sexaphone or repellent because among others the number of syllables is different.

Theory related to ToT is theory of lexical access which is introduced by Levelt et al. Levelt et al (1999) described how the lexicon is accessed when an utterance will be produced. He also suggested that the lexical access process in speech production consisting of several levels of conceptual preparation relating to the concept of the word to be accessed; level of lexicon selection, then the morphological and phonological coding of the word to the prosodic context and phonetic encoding of the word. In 2001, Levelt gives additional revision to his article that the lexical access process occurs sequentially starting from the preparation of the conceptual level to the phonetic form level of the word.

3.1.2 The Production Process

There are several models in the conceptualization stage to the articulation stage that illustrates how the conceptualization process to articulation is described by Roelos (2000) in Dardjowidjojo (2005) with the WAIVER ++ model (which stands for Word-form Encoding by Activation and Verification, which is more complete than ever, this model was created by WJm Levelt in 1989?)

In Carrol (2008), it is said that speech production can be analyzed by four steps: 1) conceptualizing the message conveyed; 2) formulating it into linguistic plan; 3) articulation (applying the plan); and 4) self-monitoring. In linguistic planning, there are several models of one of the Fromkin production mode models that divide the production process into six (6) phases namely: 1) identification of meaning; 2) choosing syntactic structure; 3) production of intonation forms; 4) inserts on the base; 5) affix formation and function word; 6) specification Phonetic segment.

3.2 Research Issues

Research on the Tip of the Tongue (ToT) has been done by Afrilia (2015) under the title Tip of the Tongue to Indonesian speakers: Implications for the Lexical Access Model. The study
examines the experience of Tip of the Tongue on Indonesian speakers and the influence of phonotactic complexity on ToT condition, as well as their implications for lexical access models. This research uses experimental research design by creating situations that trigger the appearance of ToT on respondents. This study identifies the lexical access model in Indonesian speakers through a study of language errors (speech error).

Related research is also the research of Partridge (2014) with the title Word-Finding Difficulties: Exploring Tip-of-the-Tongue States in Young and Old Adults. This study aims to test implicit learning processes that are performed under error full (20-second delay) or errorless (0-second delay) in the condition of ToT. Participants were 15 young people (20-30 years old) and 15 years old (65-88 years old) who were tested for 2 times a week for 4 weeks with the task of completing the definition (pair-task definition). The results showed that there was a difference between young people and parents.

Miozzo and Caramazza (1997) examine how one remembers syntax-lexical features in a tip-of-the-tongue condition in order to see and evaluate the representation of the grammatical-lexical information alerts in Italian language. They conducted research by giving stimuli printed on paper to 16 speakers of Italian so they mentioned the target word of the stimuli. The given stimulus may be an image or definition of the target word or both to be more specific. By viewing the lexical access of the study participants, they found that participants were able to access syntactic features and some phonological features under tip-of-the-tongue conditions. The study also found that selection of semantic-lexical representations does not guarantee access to its grammatical features.

Vigliocco, Martin and Garrett (1999) examine information about syntax-lexical feature information on tip-of-the-tongue condition, especially in counted and non-counted noun feature in English. The aim of the research is to assess the discovery of the prior art of syntactical information when experiencing tip-of-the-tongue occurrences in English languages. The study also looked at how the lexicon is accessed from a mental lexicon through a tip-of-the-tongue condition. The result of the study showed that the speaker is more accurately guessing the syntax of a word in a tip-of-the-tongue positive state than when it is in a tip-of-the-tongue negative condition.
4. Research Method

4.1 Participant

Participants involved in the study were active Indonesian speakers aged 25 - 59 years. The speakers of Indonesian Language were chosen because the participants have knowledge and access to the use of Indonesian language and terms. While the age range 25-59 was chosen because it is based on the WHO (World Health Organization) classification which says that the adult age are those aged 25 -59 years. The backgrounds of the participants are those students in Faculty of Humanities in University of Indonesia. Researchers use the age classification of adults because at this age the ability to remember is still better than the elderly, and tend to be more established than the age of teenagers or children. The researchers used 10 participants, five men and five women each with undergraduate educated backgrounds. Participants numbered ten people because this research is a case study at the same time become the basis for greater research in the future.

4.2 Research Design

The researchers gave 10 definitions of the Indonesian term that are rarely used. Participants are given papers to fill the answer with three responses: 1) write the defined word if they know it, 2) leave the answered blank and 3) if they forget to remember the target word, then they were asked to write tendency words that refer to the definition of the word or provide information about the word referred. The terms are given based on KBBI (Big Indonesian Dictionary) as well as websites about some terms in certain fields.

5. Discussion

Based on the results of the study, four (four) words of ToT are diktator, antioksidan, absorpsi, impromptu and analogi and ToT that occur as much as eight (eight) times in the form of words, syllables and letters. Here's the table:

<table>
<thead>
<tr>
<th>No</th>
<th>Target Word</th>
<th>Recall of Target Word</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Word</td>
</tr>
<tr>
<td>1.</td>
<td>Adaptasi</td>
<td>-</td>
</tr>
<tr>
<td>2.</td>
<td>Ekosistem</td>
<td>-</td>
</tr>
<tr>
<td>3.</td>
<td>Anomali</td>
<td>-</td>
</tr>
<tr>
<td>4.</td>
<td>Diktator</td>
<td>-</td>
</tr>
<tr>
<td>5.</td>
<td>Hipotesa</td>
<td>-</td>
</tr>
<tr>
<td>6.</td>
<td>Saksofon</td>
<td>-</td>
</tr>
</tbody>
</table>
In this study, researchers did not count the number of words that were written correctly or incorrectly or words that were not written from the definitions already given. Researchers only analyze the words that experienced the ToT condition. Here are the details of TOT analysis based on the results of participants’ ability to recall the target word:

1. Word

ToT process that occurs at the word level is the word *antioksidan* to *oksitosin* and *impromptu* word to *imptovisasi*. Here we see the similarity between the *oksi* syllable on *oksitosin* and *antioksidan*, and the *impromptu* word with *imptovisasi*. Although the participants write the wrong word but we can see there is an equation between the word written with the target word, i.e. the equation on the *oksi* syllable. It shows that participants try to rethink the words that they remember by connecting the memories in their memories with the target word.

2. Syllable

ToT processes that occur at the syllable level are ‘dictator’ to ‘or’, *Absorpsi* becomes 'si', *antioksidan* becomes *dan*, and *antologi* becomes *log* and *logi*. The production of syllables in ToT condition here is most prevalent. This suggests that participants tend to remember the syllables at the end compared to those at the beginning or in the middle. This is consistent with Brown and Mackneill's findings that when ToT occurs it is often difficult to access the first letter of the target word.

3. Letter

ToT process that occurs at the level of the letter that is *diktator* become *o*. And *antologi* becomes *o*. This indicates that the process of retrieving target word also involves the letter as the smallest component in the language. From the above results we see there is a tendency that the letters to be remembered tend to be the letters that form the main word, for example in the *antologi* where the letter 'o' is more than the other letters.

Based on Allan, S. Brown (1991) review of the findings from R. Brown and McNeill (1966) that:

a. ToT is a universal phenomenon
b. Occurs once a week
c. Growing with age  
d. It is often difficult to access the first letter of the target word  
e. A word that appears similar to the target word  
f. Often appear/mentioned with a proper noun.  

Referring to what Brown said, then we see there are two tendencies that occur from the results of this research is on points d and e that is difficult to access the first word on the word target and words that appear similar to the word target. If we look at the result table, the ToT happens at the syllable and letter level, none of the participants will answer/remember the first letter of the target word. Likewise with point e, here we see no resemblance between oksitosin with antiooksidan that is found in the syllable 'oki' and impromptu with imptovization experiencing similarity in the beginning of the syllable 'impto.'

6. Conclusion

The scope of the study in terms of participants used only ten people since this is a case study with range age 25-59 years old. Moreover, this study only examines ToT in level of ability people recall the target words. The results showed that when participants were indicated to have ToT conditions, they could recall similar letters, syllables and words that might be present in the given target word. Here are the examples; ToT process that occurs at the level of the letter that is diktator become o. And antologi becomes o. ToT processes that occur at the syllable level are 'dictator' to 'or', Absorpsi becomes 'si', antioksidan becomes dan, and antologi becomes log and logi. Here is the example; ToT process that occurs at the word level, the word antioksidan to oksitosin and impromptu word to imptovisasi. Here we see the similarity between the oksi syllable on oksitosin and antioksidan, and the impromptu word with imptovisasi. Based on the above description we can conclude that participants with ToT conditions have access to their phonological knowledge, but not enough to activate the word as a whole. And in ToT condition, the ability to recall the target word can be in word, syllable and letter level. For future research, this study is expected to broaden the scope of the study especially participants. It is also expected that future research will examine the representation of the grammatical-lexical information memorial in ToT condition as much as the solution of ToT itself.
References


