# Readability and Simplicity of Arabic Political Discourse

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#### **Abstract**

This main aim of tis study is to investigate two speeches that Mubarak of Egypt delivered during the notion of Arab Spring in terms of simplicity and readability. The two speeches are the ones aired live on the national TV of Egypt on the 28th of January 2011 and the second one, which was given just one day before Mubarak left the presidency, was aired on the 10th February 2011. This study is one of the first studies that applied readability and simplicity formulas on Arabic texts. In accordance to three different readability and simplicity formulas the two chosen speeches of Mubarak were judged to be simple and not hard to read by the expected audience of Mubarak. It is suggested that Mubarak did not succeed in reaching his goal and his audience regardless of his attempts. The protesters besieged Mubarak's palace and did not leave until the resignation of Mubarak was aired on TV.

Keywords: Arab spring, political speech, Mubarak, Egypt, discourse analysis, readability and simplicity

#### 1. Introduction

This study aims to investigate two speeches that were delivered during the notion of Arab Spring in terms of simplicity and readability. The two speeches are the ones aired live on the national TV of Egypt on the 28th of January 2011 and the second one, which was given just one day before Mubarak left the presidency, was aired on the 10th February 2011. The language that was used by all parties that were involved in the Arab Spring received great attention from all fields of knowledge, but not the field of linguistics. There have been studies covered Arab spring from a legal point of view, such as the study done by Panara and Wilson (2013). In their book, they presented the notion of Arab Spring to the world by discussing critical issues from different angles within the international law domain, such as the right to democracy, the recognition of newly installed governments, human rights and international troops involvement for humanitarian purposes. Further studies of the Arab Spring have focused on issues such as democracy, security, gender, colonialism, international relations, communication and media. Almost all the studies of speeches delivered by the presidents in the countries of Arab Spring have considered speech extracts in contexts unrelated to linguistics. One of the studies that gave a partial linguistic account to some of the speeches delivered during the Arab Spring was Laremont (2013).

The main aim of this paper is to give two speeches delivered during the notion of Arab Spring some linguistic attention. simplicity and readability of these two speeches are going to be studied and linked to the society in which these two speeches were delivered in, which is the Egyptian society. As we are going to see in the review section of this paper most of the studies that study discourse in terms of readability and simplicity do not usually study political discourse. They study only discourse for educational and pedagogical purposes. Further, most of the studies just get quantitative results and explain them in terms of what they mean within the analysis method used. In this study we will try and link the results to the society and see whether Mubarak succeeded in delivering speeches that were appropriate to the audience he was targeting or not. The link between the results of the different formulas of readability and simplicity and the society will give the results more depth and credibility. Further, it will test these formulas with political discourse after they have been tested before with other genres such as educational and tertiary discourse.

# 1.1 Questions of Interest

There is one main question that is going to be tackled in this paper and this question is, how complex and readable the texts under investigation are? This is the main question under which analysis is going to be carried out and results will be linked to the society in which the speeches were delivered. Some attention will be given to the discussion of how readability and simplicity formulars differ in the results they yield and whether the

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differences, if present, have significant statistical value.

# 1.2 Relevant Scholarship

Readability and simplicity of texts in general is a topic of interest to different scholars of different fields. This topic has attracted the attention of educators, psychologists and linguists for a long time. Investigations of readability for English texts date back to the 1920's (Cavalli-Sforza, Saddiki, & Nassiri, 2018). The topic has been looked at from different angles and been a place of critique by many scholars, which shows how important the topic is and how deep the discussion about it could get. Within literature we can find many definitions to the topic of simplicity and readability. In the coming lines we will provide some of these definitions and see what brings them together.

In general and as could be inferred from the available literature, text readability and simplicity could be defined as the ability of the reader to read and understand a text in a satisfactory amount of time. Almost all of the definitions of the topic of readability and complicity revolve around the general definition just provided.

It is suggested by Fulcher (1997) that text readability, difficulty and simplicity refer to the accessibility of the text to the reader. In the just provided definition it could be assumed that certain texts could be difficult complex or even unreadable to some categories of humans due to certain reasons. In another definition it is proposed that text readability and simplicity refer to the topic of how fast a human can read, understand and fully comprehend a text (Morris, 2013). The definition suggested by Morris (2013) is a little bit problematic as it makes it important that the reader must fully comprehend the text otherwise the text could be described as hard to read or high in complexity. This leads us to ask the question of do we fully comprehend everything we read in order to safely say that we understood a certain text? Even though the two terms are used interchangeably it is suggested in the literature that comprehension is different to understanding. Understanding is looked at as the ability to mentally get the grasp of something, which is a text in our case. Comprehension is referred to as the ability to going through a process so that finally we can reach a conclusion or a result (Duke & Carlisle, 2011). So, we can say that comprehension is deeper than understanding and we can understand a text, but sometimes it is hard to fully comprehend everything in the text due to geopolitical or contextual issues. The last definition of readability and simplicity is provided by Duke and Carlisle (2011). It is suggested that text simplicity and readability could be defined as the measurement of the difficulty of a text based on its meaning, its structure and its clarity of language (Williamson, Fitzgerald, & Stenner, 2013). We can see that the last definition provided go in line with the other definitions in targeting difficulty as a main issue when it comes to readability and simplicity. Moreover it makes it clear that this difficulty could be measured. Before we go into discussing how readability and simplicity could be measured we will ask the question of why? Why is it important to give a certain text a grade or measure its difficulty?

It is suggested in the available research on the topic of simplicity and readability that readers might be driven away from a text if it is too difficult to read or understand (Cavalli-Sforza et al., 2018). It is not only the matter of difficulty or simplicity of the text that might drive the reader away from a text, there are also other factors such as the age of the reader, social factors and contextual factors. However, the biggest decider on what interest people in any text as suggested by research is how clear the text is and how long it takes to be processed (Cavalli-Sforza et al., 2018).

To team together the right text with the right person we need to study and discuss the topic of readability and simplicity. It is not assumed here that the answer to the question of interest in text and simplicity of reading could be the studies of simplicity and readability, but we assume here that these studies and formulas are significant and so far could give a fair indication of what text suits what person in terms of understanding and comprehension. It is simply put by research that we need studies of simplicity and simplicity to match the right text with the right person or in other words to make a certain text available to the level of certain people (Wray & Janan, 2013).

It is noticed from the available literature that readability and simplicity formulas and studies are used and applied to make decisions and discuss texts in certain fields more than other fields. Most of the studies that have been found discuss in a way or another educational or pedagogical texts. This claim could be seen as stating the obvious if we knew that the different readability and simplicity formulas were originally formed and coined to discuss and grade reading material in schools (Tabatabaei & Bagheri, 2013). The use of these readability and simplicity formulas is not limited to the educational setting. We can find studies that are of medical nature and use these formulas to discuss medical texts. It is suggested in the United States of America that in the last few years, many health organizations have used infographics to publish vital medical information. Recognized guidelines for readability and simplicity suggest levels should be targeted between a 4th and 6th grade education

level to avoid disadvantaging individuals with lower literacy skills (Royal & Erdmann, 2018). The purpose of this case study was to evaluate the readability levels of several published medical materials from the field of athletic training and establish a model for evaluating readability levels in other medical and health jobs (Royal & Erdmann, 2018). In another study it is proposed that online information of health should meet the reading level for the wider community, which is sixth-grade level. It is stressed that readability is a key requirement for health information to be helpful and improve value of care. The researchers conducted a systematic review to evaluate the readability of online health information in two countries (Daraz et al., 2018). Out of 3743 references, the authors included 157 cross-sectional studies evaluating 7891 websites using 13 different readability scales. The mean readability grade level across websites ranged from grade 10 to 15. The researchers concluded that, online health information in the United States and Canada has a readability level that is inappropriate for the general wider community. Poor readability can lead to misinformation and may have a detrimental effect on health (Daraz et al., 2018).

We can say now that these formulas could be used to discuss any text of any filed and that they are important in determining their level of readability and simplicity and political texts are not an exception. However, how valid are these formulas and how accurate? Before going into answering this question we will discuss some of these formulas and what they measure.

One of the most popular formulas that measure text readability and simplicity is the Flesch–Kincaid grade-level formula (Crossley, Skalicky, Dascalu, McNamara, & Kyle, 2017). These readability formulas are used widely in the education's field. The "Flesch–Kincaid Grade Level Formula" offer a score as a U.S. grade level, making it easier for those who are interested to judge the readability level of several texts. It can also identify the education years generally required to understand this text, relevant when the formula results in a number greater than 10 (Crossley et al., 2017). The grade level is calculated with the following formula (0.39 (total words/total sentences) + 11.8 (total syllable / total words). By applying this formula on a text or even a sentence we can get a text that is graded in accordance to the U.S grade level (Crossley et al., 2017). For example a sentence like "Railway tracks and electricity lines in the northern city of Kharkiv were damaged in a series of attacks" is an 12.41 as it has 32 syllables and 18 words. The result means that this sentence is difficult to read. However, it is still accessible to above average and average readers who have had college education. This formula is widely used in the field of education and some other fields such as websites designing, medical brochures production and marketing as it is well established, Whereas some other formulas are more specialist (Wang, Miller, Schmitt, & Wen, 2013).

The second formula or test that is going to be discussed here is the Dale -Chall formula. This formula or test was proposed by Edgar Dale a professor of education at Ohio State University and Jeanne S. Chall a Harvard graduate psychologist. Certain steps need to be followed to apply this formula. First, the selection of several 100-word samples throughout the text should be done. Secondly, division of number of words by the number of sentences should be done to get the average sentence length in words. Thirdly, the percentage of words that are not on the list if the easy 3000 words should be computed. The 3000 words list is a list that Dale and Chall compiled together. They suggest that 80% of fourth-grade students understand the words in this list (Gunning, 2003). Lastly some equations should be applied to get a raw score and then a final score. For example a sentence like "Railway tracks and electricity lines in the northern city of Kharkiv were damaged in a series of attacks" is an 12.41, which means it is difficult to read and accessible or understood by 13th to college people. We can see that in the two discussed formulas or tests the same sentence was deemed difficult to read and that some higher education is needed in order for the readers to understand it. Which means that when we apply – at least- these two formulas on the same text, no significant statistical difference or differences are going to be found.

The third formula or test that is going to be discussed is also one of the popular tests and formulas which is the Gunning fog formula. This formula or readability test estimates the years of formal education an individual needs to understand a text on the first reading (Goh, Fung, Depickere, & Wong, 2007). For example, a fog index of 12 requires the reading level of a U.S high school senior. The test was proposed in 1952 by Robert Gunning, who was interested in printed media publishing (DuBay, 2004). The fog index, like all of readability tests and formulas is used to approve that texts can be read easily by readers. In accordance to the test, texts for a wide readers generally need a fog index less than 12. Further, texts requiring near-universal understanding generally need an index less than 8 (Saini, 2014).

As seen from the discussion on some of the available formulas and test of readability and simplicity, these formulas follow certain rules and equations to reach and give grades to texts. In general, these rules and equations measure certain aspects in the different texts to reach or give a final grades. It is assumed that this grade that is reached by the different formulas is only indicative and could vary among formulas (Bailin &

Grafstein, 2001). This point of variations among formulas will be discussed further later in the paper.

The aspects these formulas and texts measure are the linguistic factors of any given text. That means that the biggest determiner of the grade that is given to any text is its linguistic features (Bailin & Grafstein, 2001). It is meant by linguistic features word characteristics such as length or familiarity and sentence length. All of the formulas measure these two things with different approaches and methods. Research suggest now that the formulas used in different fields need to include further features to give grades to different texts such as grammar, style, background knowledge, textual coherence, repair and interaction of factors. All readability formulas ignore completely the conventional use of the prescriptive grammar for standard written English, which is an important factor in determining the readability of a text. The conventional use of grammar for Standard Written English or deviations from it may make a text more difficult to comprehend or understand (Bailin & Grafstein, 2001). Sometimes a text maybe perfect when it comes to grammar. However, some styles might be difficult to understand or process by some people than others (Bailin & Grafstein, 2001). The current readability formulas do not take styles into account. The same applies to background knowledge. It is suggested that the readers' characteristics have so much to do with their ability to understand a text (Bailin & Grafstein, 2001). In other words readability is a function of the interaction between the properties of texts and the characteristics of readers.

Another factor that should be taken into consideration when looking at texts in terms of readability is the textual coherence. Researchers of readability limited themselves to looking only at the sentence and the boundaries of the sentence. Readability formulas and tests should not reduce themselves to looking only at the sentence and its length, but they should look into the connections and interrelationships between the sentences in a text. Another direction that readability research should give some attention to is how skillful the readers are. It is suggested that Further research into the capability of readers to overcome problems that otherwise might make a text less readable may clarify what constitutes a skilled reader (Bailin & Grafstein, 2001). If certain readers are able to overcome certain problems more than others when it comes to reading then an easy text will be different from an easy text for other readers.

As we could see in the discussion above that all of the formulas and tests we discussed are well established and used extensively in the field of education and the other fields. However, the use of these formulas and tests in different fields does not mean that they are immune to criticism. The main criticism that is always directed at the readability formulas is that they do not take into consideration some factors that might affect the grade or the result of the readability tests. There are factors that may affect the grade other that complexity of phrase or words difficulty such as motivation prior knowledge. It is proposed that these factors that may affect the grade of readability tests are not isolated from each other and each factor may interact with the other factors to yield effects that could not be produced independently (Bailin & Grafstein, 2001).

We have managed to discuss so far that when it comes to English texts there are certain formula that can be used to assess these texts and assign them a grade. We have also discussed some of these formulas and the way they assign grades to different texts. However, what about other languages such as Arabic? Can these formulas work with different languages the same way they work with English?

It could be seen and anticipated from the available literature that all of the available readability tests are built to study and test English texts. Further, in some of the readability test and formulas, as we have seen in the discussion above, the scores are explained in terms of the US grade system of education, which shows how much these formulas are affected by the western literary and tertiary background especially the educational system.

However, the fact that these formulas were built to discuss English texts in the first place did not stop researchers from applying them to texts of different languages such as Russian German and Czech. Solovyev, Ivanov, and Solnyshkina (2018) explored to what extent average number of words per sentence, syllables per word, nouns per sentence, frequency of content words and other text parameters can successfully rank academic texts of Russian for different age and grade levels. The authors discussed previous research on readability of Russian texts and described the corpus of school textbooks from grade 5 to grade 11. Based on the tests of a set of extended text features, the authors proposed one innovative metric for better prediction of Russian text complexity, i.e. the adjectives' numbers per sentence. It could be seen in this study that even though the authors proposed a one innovative metric for better prediction of Russian text complexity, they did not go out of what all or at least most of the readability formulas are built around. They did not take into account the suggested future directions of readability research such as repair and background knowledge. They simply used a modified version of Flesch Reading Ease and Flesch-Kincaid Grade to analyze their texts.

Arabic texts is not an exception of the language that were tested using readability and simplicity formulas. One

of the first formulas that were proposed to study Arabic texts were the formula of Dawood and it was built and proposed back in 1977 (Cavalli-Sforza et al., 2018). The second formula was proposed by Al Heeti and the formula is referred to as Al Heeti formula (Cavalli-Sforza et al., 2018). In order to test Arabic texts Dawood formula targets five features of any text which are average word length, word frequency, percentage of nominal clauses, average sentence length and percentage of definite nouns (Cavalli-Sforza et al., 2018). The other proposed formula which is Al Heeti formula test one feature only which is the average word length or the AWL (Cavalli-Sforza et al., 2018). However, it could be seen form what the two formulas cover that they have not provided anything different from what the other formulas have provided and tested, all of the other formulas that we have discussed here targeted in a way or another the five features that were mentioned in the formula of Dawood and the one feature of interest in Al Heeti formula. It is further suggested that The selection of the features mentioned in both formulas had not been thoroughly justified (Al Tamimi, Jaradat, Al-Jarrah, & Ghanem, 2014).

When it comes especially to Arabic language, researcher in the field of readability studies are in an agreement that we are in a dire need to do more research on Arabic texts to improve the understanding of information written in Arabic. The political language of Arabic is part of the language that needs to be studied like any other type or genre of Arabic such as the language of education and the language of technology. The question here is can the readability formulas help us in the political language the same way they provide help in the field of education the answer lies in many studies, political studies precisely, that used the different readability and simplicity formulas to study political language and political speeches as we are going to see in the following discussion.

The speeches of Donald trump the president of the United States between 2017 and 2021 were studied in terms of readability and simplicity. A total of 10 interviews and debates were analyzed using three readability formulas: Flesch–Kincaid, Simple Measure of Gobbledygook and Gunning-Fog. The analysis revealed that a fourth- to fifth-grade level of education is required to understand Trump's language. In total, 10 additional interviews and debates of other candidates in the presidential election of 2016, from both the two major parties Republican and the Democratic, were analyzed, using the same formulas, in order to shed more light on the results of Trump. The analysis of the other candidates' data showed that the average score was at a ninth-grade level. Furthermore, the study reveals that Trump's sentences and words were to a far extent shorter and less complex than the sentences and words of the other candidates. This study suggests that Trump uses low readability and simplicity of language as a strategy to gain popularity, in accordance with the trend of anti-intellectualism. This study by analyzing the speeches of trump and the other candidates made two things. The first thing it gave us an indication of how to use the different readability formulas in the field of politics or the political language to be precise. The second thing it linked the scores to a social aspect which is popularity. However, the use of language or the simple use of language to gain popularity cannot be generalized over all societies as the use of simple words and sentences could be interpreted differently in different contexts.

In another research lexical density of some of the Arab Spring speeches were discussed. By running a lexical density analysis on six speeches that were delivered during what is known as the Arab Spring it has been concluded that most of the speeches that were delivered were written to be delivered and were not an improvise of the leaders who delivered them (Qabani, 2017). For example in the speech that was delivered by Ben Ali of Tunisia on the 28th of December 2010 46% of the words in the text of 879 are content words, which suggest that the text could be described as lexically dense and thus of written Medium (Qabani, 2017). It is suggested that a large majority of written texts have a lexical density of 40% or higher (Thida, 2018). The study of Qabani (2017) concluded that the Arab leaders used high end sophisticated words at that time of unrest to show and convince their people that they are fit and the most suitable individuals to be heads of state and rule. What is unique about the study of Qabani (2017) is that it was one of the first studies that studies lexical complexity of Arabic political speeches and organized an prepared the data following a method that was inspired by the different readability method, however, with paying attention to the uniqueness of Arabic language.

The study of Qabani (2017) also linked the results of the analysis to the context which is one of the aims of the current study. The speeches that are going to be analyzed in this study are speeches delivered by Mubarak of Egypt. Some insights into the Egyptian society will be discussed and presented in the coming lines so that results can be backed up and justified in the light of the context or the Egyptian context.

Egypt has been a republic since the 1952 revolution which was led by who referred to themselves as the Committee of the Free Officers Movement (Abou-El-Fadl, 2015). After the revolution of 1952 Egypt has seen 10 wars. Some of these wars were major and some others were just minor conflicts between Egypt and its neighbors (Gat, 2012). Egypt is a patriarchic country or nation in the sense that the leader or the head state is seen as the

father and he has the final word in what happens in the country and how things should be done (Qabani, 2017). The leader or the head of state sees the people as his sons and daughters and addresses them as such (Qabani, 2017).

Even though Egypt was one of the first countries in the world that has known the modern educational system, most of the Egyptians still have not received proper education. Numbers of illiterate population is decreasing, however, compared to the whole population or the numbers are still very high. Literacy is placed at 20.1 percent in Egypt, which means that 14.3 million of the total population of Egypt are illiterate (ElKholy, 2019). Literacy rate is one of the most important factors when it comes to the communication between the audience and the head of state. The head of state in order to make sure that he is reaching to the audience needs to address his audience in a way that is understandable and suitable to them. So, in accordance to the readability and simplicity score of the two speeches delivered by Mubarak did Mubarak tried to reach to his audience by using a language that is proper to their education and background? We will see in the discussion.

#### 2. Method

Under this section we will discuss the data that is going to be analyzed and the steps that we are going to take to prepare the data. Further, in this section we will decide on the readability and simplicity formulas that we are going to use to analyze our data and extract results.

In this paper two speeches delivered by Mubarak during the unrest in Egypt in 2011 will be analyzed. The two speeches were collected and transcribed from the televised speeches. The speeches were aired live on the national TV of Egypt on the 28th of January 2011 and the second one, which was given just one day before Mubarak left the presidency, was aired on the 10th February 2011. In the first speech Mubarak discussed the unrest and the victims who were injured or list their lives trying to let the world hear their voice. Mubarak further discussed the steps the government took to address issues such as employment, corruption, standard of living and urban development. Mubarak clearly stated in his first speech that he already accepted the resignation of the government and that he will assign a new government in the coming days. Mubarak concluded his first speech by showing that he determined to fight for Egypt, its independence and sovereignty. Mubarak in his second speech touched upon the same topics. However, he discussed the topics he discussed in the first speech in a more specific way for example in his first speech he declared that he accepted the resignation of the government only. In the second speech he went on and discussed that he asked for the amendments of some constitutional articles and formed specific committees to attend to some specific files that is of concern to the people. In general the second speech was more emotional and focused on Mubarak more than the first speech.

The speeches we just discussed were delivered in Arabic and as we discussed in the review Arabic data needs to be prepared before any analysis is done on them. In the coming lines we will discuss these preparations and how are we going to deal with the data before we analyze it.

There are three main steps that need to be followed before we analyze any Arabic text and these steps are used and tested in more than one paper such as (Qabani, 2017), (Al Tamimi et al., 2014) and (Cavalli-Sforza et al., 2018). These steps are as follows:

- 1. The first step is removing the punctuation marks, and Arabic diacritical marks. The reason why we remove the punctuation marks, and Arabic diacritical marks is so we do not get distracted by them and sometimes that add to the numbers of words in a sentence and the number of the total analyzed words in the text.
- The second step is normalizing the spacing between the words. The reason we do this is that sometimes spacing can add to the total number of words and sentences in the document which could interfere with the results and the analysis.
- 3. The third step is converting the Arabic letters (, , , ) to ( ) and ( ) to ( ) so that no distraction takes place while analysis is being delivered.

In general and regardless of the formulas that we are going to use to analyze the scripts the following features are going to be targeted and manually entered into an excel sheet so that we get an organized analysis:

- 1. The number of characters in each text. In the case of our data we will calculate the number of characters in each and every one of the speeches we have.
- 2. The number of words in each text.
- 3. The number of sentences in each text.
- 4. The number of difficult words in each text. What constitute a difficult words is a topic of argument among the scholars. However, as suggested in Qabani (2017), Al Tamimi et al. (2014) and Cavalli-Sforza et al.

(2018) in Arabic a difficult words is a words that consisting of more than six letters after removing the article (-1) from the beginning of the word.

- 5. The average length of a sentence will be calculated in both texts using the following equation (number of words in text / number of sentences in text = average sentence length).
- 6. The average word length will be calculated in both texts using the following equation (number of letters in text/number of words in text = average word length).
- 7. Average number of difficult words will be calculated using the following equation (Number of difficult words in a text/ number of words in text = average number of difficult words).

The quantitative data that will result from the above mentioned steps will be used to analyze the two speeches in terms of the different readability formulas and also discuss both texts generally.

Three readability formulas are going to be used to analyze the two speeches we have in this paper. These readability formulas are Flesch-Kincaid Reading Ease formula, Gunning fog formula and SMOG index. The reason why these formulas were picked because they are the most used ones when it comes to text analysis as seen in the review. After analysis has been carried out the results will be discussed and linked to the society in which it was originated in.

#### 3. Results

Some statistics about the two speeches will be presented here and discussed before presenting the results of the analysis of the two speeches in accordance to the three readability formulas. The first speech we have here, which was aired on the 28th of January 2011, consists of 122 sentences. In the text there are 1290 words, which means that there are in average 10.57 words in a sentence. After analyzing the text in terms of complex words it could be found that in average a word in the text has 1.50 syllables. The number of complex words in the first text is low. There are 160 complex words in the first text. These 160 words make 12.40 percent of the text, which is also a very low percentage.

As for the second speech, which was aired on the 10th February 2011, it is significantly longer than the first speech. There are 156 sentences in the second speech. In the text there are 2089 words, which means that there are in average 13.39 words in a sentence. After analyzing the text in terms of complex words it could be found that in average a word in the text has 1.53 syllabus, which is a little bit higher than the number of syllables per words in the first speech. However, the difference is insignificant as could be seen. The number of complex words in the second text is low. There are 298 complex words in the first text. These 298 words make 14.27 percent of the text, which is also a very low percentage. However compared to the first text the second one has more complex words and also higher than the first one in the percentage of complex words to the total numbers of words.

The statistics discussed and presented above will help in the analysis of both speeches in terms of the different readability formulas. In the coming paragraphs we will presented the analysis of both speeches in accordance to Flesch-Kincaid Reading Ease formula, Gunning fog formula and SMOG index. As mentioned before these three readability formulas were chosen as they are widely and more commonly used in research and analysis.

The first text is going be discussed now in terms of the Flesch-Kincaid Reading Ease formula. To apply and get results from this formula we need to apply the following equation on the text in hand.

After the application of the formula mentioned above the analysis revealed that the first speech by Mubarak enjoyed a score of 69.5. Based on a 0-100 scale, a high score means the text is easier to read. Low scores suggest the text is complicated to understand. It means that the first text is easy to read and that individuals who are in grade 8-9 usually attend to and read such texts with ease. Further, the score suggests that individuals who are between the age of 13-15 and received proper education can read this text easily.

The first text of Mubarak is going to be analyzed now in terms of the Gunning fog formula. As mentioned before, this formula or readability test estimates the years of formal education an individual needs to understand a text on the first reading (Goh et al., 2007). The following equation needs to be used so that we can give a grade to our text.

After the application of the Gunning fog formula on the first text it was revealed that the readers of the first text needs to by at least high school freshmen. The first text scored 9, which means that readers of such a text needs

to receive 9 years of education before they can attend to and understand such texts. However, in accordance to the Gunning fog formula the text is still easy to read and cannot be judged to be hard to read or complex.

The third and last formula that is going to be applied on the first text is the SMOG index. an acronym for simple measure of gobbledygook, the smog index estimates the years of education a person needs to comprehend writing. The following equation needs to be used so that we can give a grade to our text.

$$1.0430 \text{ x sqrt}(30 \text{ x complex Words/sentences}) + 3.1291$$

The first text of Mubarak scored 6.8 in accordance to the SMOG index. This score means that this text is easy to read and those who have received 8-9 years of education can easily access the text and comprehend it. In other words, this text is accessible by those who are between the age of 12 and 15.

The second speech or text of Mubarak will be analyzed now in accordance to the three aforementioned formulas. After the application of the Flesch-Kincaid Reading Ease formula the analysis revealed that the second speech by Mubarak enjoyed a score of 63.8. This score means that the second text of Mubarak is somehow easy to read. The same applies to second formula of gunning fog. In accordance to the second formula the text is somehow easy to read as it scored 10.7. In accordance to the last formula, which is the SMOG index, the text or the second speech is easy to read as it scored 8.1. In general and by taking a look at the numbers each text scored it could be conclude that both texts are accessible and easy to read by those who are between the age of 14 to 15.

As could be seen from the numbers above there is no significant difference between the first and the second speech in terms of readability and simplicity. In accordance to the three formulas we used to analyze both texts or speeches the texts are easy to read and there should not be a problem for those who are in their teens to understand what Mubarak was trying to say to the people. It is needless to say that those who are older than 15 or have received education that is higher than middle school, should understand the two speeches with great ease. However, the question is now did Mubarak target the right people with his easy accessible speeches? Did Mubarak understand his people and the situation he was in and that is why he talked in this simple language? To answer these questions we need to discuss the Egyptian society and the context of the two speeches.

# 4. Discussion

The two speeches, as suggested before, were delivered during the notion of the Arab Spring and ended with Mubarak leaving the office On 11 February 2011. The Egyptians swarmed the streets of Egypt of 18 days before then Vice President General Omar Suleiman announced that both Mubarak and Suleiman had left the office and transferred authority to the Supreme Council of the Armed Forces. Before his resignation, Mubarak addressed the Egyptian people, especially the youths of Egypt, and asked them to go back and clear the streets and all their demands will be met.

In accordance to Ryssdal (2011) 75% of the Egyptians are under the age of 25 with only %3 of them over the age of 65 which makes them one of the youngest nations in the world. In accordance to the pervious clam it could be inferred why Mubarak tried to make his speeches as simple as possible because he knew his audience and knew who were listening to his speeches. In his two speeches Mubarak did not use many complicated, complex or interact words so that he can reach all educational levels of his audience. It is suggested that Mubarak did not succeed in reaching his goal and his audience regardless of his attempts. The Egyptian protesters received the first speech with despair and anguish because Mubarak tried to be manipulative and authoritative (Esmail, 2013). The situation or the opinion of the people did not improve by the last speech. People received the last speech with more resentment and willingness to continue with the revolution as people thought that Mubarak humiliated them and turned a blind eye to their demands (Raddawi, 2014). The protesters besieged Mubarak's palace and did not leave until the resignation of Mubarak was aired on TV.

In accordance to three different readability and simplicity formulas the two speeches of Mubarak which were described above were judged to be simple and not hard to read by the expected audience of Mubarak. Mubarak kept in mind the characteristics of his audience when he delivered his speeches and kept in mind one very important aspect, which was that most of his audience were young and of a certain age group. It is suggested that Mubarak did not succeed in reaching his goal and his audience regardless of his attempts. The protesters besieged Mubarak's palace and did not leave until the resignation of Mubarak was aired on TV.

As suggested before, even though Mubarak chose to address his people in a simple language, so that they could understand him, we could assume that this is not a phenomenon that is peculiar to the Egyptian case. It is suggested that the political elite in the Arab world prior to 2011 were in agreement that the Arabic society is ignorant and the main aim of the political elite is to feed the Arabic society whatever is needed so that the society can survive and prosper (Shalaq, 2014). The same is applied to the change of the Arabic society. The political

elite looked at the topic of change as a personal matter. Mubarak and the other Arabic political figures when addressed their people and promised change did not exclude themselves from it they promise a change that is lead by them and that could be seen in the speeches of the other political figures during the events of the Arab spring such as the speeches of Ghaddafi, Assad and Ben Ali (Qabani, 2017). So, we can say that Mubarak choice of language was influenced by the background of the expected audience and also by his impression that his audiences are ignorant.

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