

Phonological Fossilization of Arabic Pronunciation among Malays: A Review Article

*Kekerasan Lidah terhadap Penyebutan Huruf Arab dalam Kalangan orang Melayu:
Satu Sorotan Kajian*

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Abstract

Arabic pronunciation has been used widely among Malay speakers in worshiping and religious deeds. However, tongue hardness has affected the Arabic pronunciation among Malays including the factor of different language system. Mahjub's Theory (1993) mentioned that there were nine the most difficult Arabic sounds to non-native speakers. This concept paper aims only a major objective which is to develop and propose a conceptual framework for the application of air pressure control technique in the vocal tract for reducing phonological fossilization of Arabic pronunciation among Malays. This concept paper is a qualitative study which use library research method, with research for the most part of researches that related to phonological fossilization in second language that were compiled to be analyzed in order to comprehend the concept of phonological fossilization. Besides, observation method towards previous scientific research was made particularly research on the articles that were published in international academic journal. A conceptual framework then will be utilized to apply the technique of air pressure control in the vocal tract that constructed based on Warren's Theory of Air Pressure Regulation (1986). The technique is then expected to help in improving particularly the pronunciation of the nine most difficult Arabic sounds among Malays.

Keywords: Phonological fossilization, Pronunciation, Arabic Language, Air Pressure Control, Malays

Abstrak

Sebutan huruf Arab telah digunakan secara meluas dalam kalangan penutur jati Melayu bagi tujuan amalan ibadah dan agama. Namun begitu, kekerasan lidah telah mempengaruhi sebutan huruf Arab dalam kalangan penutur jati Melayu termasuk faktor perbezaan sistem bahasa. Teori Mahjub (1993) menyebut terdapat sembilan huruf Arab yang paling sukar disebut oleh bukan penutur jati Arab. Kertas konsep ini bertujuan untuk memfokuskan kepada satu objektif utama iaitu untuk membangunkan satu kerangka konseptual bagi pengaplikasian teknik pengawalan tekanan udara di saluran suara untuk mengurangkan masalah kekerasan lidah dalam kalangan orang Melayu terhadap penyebutan huruf Arab. Kertas konsep ini berbentuk kajian kualitatif iaitu menggunakan metod kajian kepustakaan dengan meneliti sebahagian besar kajian yang berkaitan dengan fosilisasi fonologi dalam bahasa kedua dikumpulkan untuk dianalisis dalam usaha untuk memahami konsep kekerasan lidah tersebut. Selain itu, metod pemerhatian terhadap kajian-kajian saintifik yang lepas dilakukan dengan meneliti artikel-artikel yang telah diterbitkan di dalam jurnal-jurnal akademik antarabangsa. Kerangka konseptual tersebut kemudian digunakan untuk mengaplikasi teknik pengawalan tekanan udara di saluran suara yang dibina berdasarkan Teori Pengawalan Tekanan Udara Warren (1986). Teknik ini dijangka memberikan

implikasi yang positif terhadap kualiti sebutan huruf Arab dalam kalangan orang Melayu terutamanya bagi 10 huruf yang paling sukar disebut.

Kata kunci: Kekerasan lidah, sebutan, bahasa Arab, pengawalan tekanan udara, orang Melayu

INTRODUCTION

Pronunciation problems among second language learners is a common issue in the field of phonetics and phonology. The notion of fossilization has been interpreted differently by different scholars since it was proposed. In short, it refers to the linguistic development that has reached the saturated level at a certain time. Interlanguage fossilization might occur at any level of linguistic structure namely phonological, morphological, syntactic, semantic and pragmatic. Generally, there are two types of fossilization; temporary and permanent fossilization. Temporary fossilization also known as stabilization reflects fossilized interlanguage consists of learning plateaus where the development of TL is blocked and detained for shorter or longer periods of time (Selinker, 1972; as cited in Wei, 2008).

Phonological fossilization is one of the types of interlanguage fossilization. It refers to the repetition of phonological errors which result from the incorrect acquisition of pronunciation of L2, usually affected by L1 (Wei, 2008). The phenomenon commonly occurs to those who learn more than a language in life. Basically, it can be considered that everyone in Malaysia is susceptible to the problem. A phonologically fossilized people are inconsistent in their pronunciation. They might be pronounce a particular phoneme or word accurately in a time but inaccurately the rest of the time (Long, 2003). It depicts the widely established fact that second language learners who had fossilized sometimes may use the same target language structure accurately and inaccurately the rest of the time. The terms 'phonological fossilization' in this context of research reflects the inability of the Malay's tongue in pronouncing Arabic phonemes or tongue hardness that leads to the repeated errors in Arabic pronunciation. In Arabic, it is known as (اللساني التثجير). Pronunciation problems among second language learners is a common issue in the field of phonetics and phonology.

Arabic language is a foreign language that closely related to Malays Muslim society in Malaysia. Arabic language particularly in the aspect of pronunciation is used in daily worshiping deeds, religious deeds and Quranic recitation. Hence, it is extremely prominent to be mastered by all Malays Muslim in Malaysia particularly in the aspect of Arabic pronunciation. Arabic pronunciation has begun been taught at primary government schools level under the subject of *Tajweed al-Quran* (تجويد القرآن). All Malays Muslim in Malaysia are having a similar opportunity to acquire the Arabic pronunciation. However, there are several obstacles that arrest the efficacy of learning sessions in schools namely teaching method of Arabic pronunciation, a big number of students and time period of teaching (Daud Ismail, Wan Khairul and Mahadi, 2014). Consequently, they did not completely comprehend the topic continuously until the time they were fully prepared to learn, but their ages exceeded the puberty age at around 15 years old thus unlikely to acquire the most accurate L2 pronunciation (Hulin, 2013). Ibrahim Kh. Ar-Rifou (2015) found that Malay speakers who are over 15-16 years old encountered a very difficult in Arabic pronunciation. The phenomenon eventually led them to phonological fossilization of Arabic pronunciation.

However, in the aspect of al-Quran study, there were many students could not afford to recite al-Quran fluently, in fact their Arabic pronunciation in terms of places of articulation (مخارج الحروف) level was low (Daud Ismail, Wan Khairul & Mahadi, 2014). Besides, about 34.5% of several secondary school students in Perak could not afford to pronounce Arabic sounds well in terms of places of articulation (Masnan Jemali, 2005). Majdan et al. (2015) revealed that debaters also encounter the pronunciation problems particularly the letter *Hā'* (الحاء), *Ayn* (العين), *Qāf* (القاف), *Tā'* (طاء), *Dād* (الضاد), *Khā'* (الخاء) and *Ṣād* (الصاد). It is obviously that most of the problems occurred in emphatic consonants (Hajar Salman, 2018) which existed in *Surah al-Fātiḥah* as well. A total of 10 Arabic phonemes that are the most

difficult for non-native speakers (Mahjub, 1993) namely ʔaḥ (أَح), ʔakh (أَخ), ʔaṣ (أَص), ʔad (أَد), ʔaṭ (أَط), ʔaz (أَظ), ʔa' (أَع), ʔagh (أَغ), ʔaq (أَق) and ʔah (أَس). In *Surah al-Fātiḥah*, there are three Arabic pharyngealized consonants which need more than ordinary strategies that they have learnt. The consonants have a coronal constriction as a first articulation and a secondary constriction at the pharynx (Hajar Salman, 2018). The situation is getting worse when they commit to mistakes of these consonants repeatedly over the years since *Surah al-Fātiḥah* is one of the compulsory elements in worshiping deeds (الصلوات).

A good speaking skill is closely related to the mastery of the pronunciation aspect. In the context of Arabic language, there are some specials and uniques that involve the pronunciation aspect of its consonants. This is due to some Arabic consonants should be pronounced through the most accurate places and manners of articulation which do not exist in Malay consonants (Fared Din & Mohammad Seman, 2019). Pronunciation aspect is a very crucial element in any kind of language in the world. It is one of the keys in effective communication across all ages (Harun Baharudin, 2017). Pronunciation is a part of speaking, and both are needed with each other. When a bad pronunciation is delivered, it could affect the meaning of a message that leads to the misunderstanding and misperception (Nik Rahimi et al., 2010). Even though Malays Muslim society in Malaysia use Arabic language in their daily worshiping deeds and other religious deeds, it does not sufficient enough to reduce phonological fossilization of Arabic pronunciation. This situation presents hints that phonologically fossilized people were not easily able to improve their pronunciation quality merely by frequent use. Hence, it is extremely encouraged to all Malays Muslim to aware of their Arabic pronunciation.

The teaching and learning strategies of Arabic pronunciation were discussed in numerous previous studies (Issraq, 2017; Harun, 2017; Nik Rahimi, 2010, 2015; Fared Din & Mohammad Seman, 2019). However, the practicality of some strategies are questionable. It might use more time consumption in order to acquire the strategies very well. Some learning strategies are merely a kind of psychology strategy which learns the easiest first, then the most difficult letters (Zarima Zakaria & Nik Rahimi, 2015).

Arabic pronunciation frequently uses three particular sounds that derived from uvular, pharyngeal and pharyngealized (Awaad, 2019; Shariq, 2015). Hence, a training of articulatory control skill could help in improving Arabic pronunciation more effectively rather than other methods. Realizing that learning Arabic pronunciation is more than acquiring Arabic speaking skills, it is about time to implement the one of articulatory control skills which is the technique of air pressure control in the vocal tract in order to highlight the importance of learner's perception in producing Arabic pronunciation very well. As stressed by Slim Ouni (2013), articulatory control skill gives emphasis on phonological awareness as well. Generally, humans are not really aware of the mechanism of articulating a given segment of speech as soon as they succeed in reaching the needed target. This kind of approach (articulatory control skills) takes into consideration learner's prior perception and target in order to help them acquire new techniques of articulatory control skill.

Therefore, this concept paper aims to develop and propose a conceptual framework for the application of the alternative therapy for phonological fossilization of Arabic pronunciation among Malays. The conceptual framework is constructed based on Mahjub's Theory (1993) and Warren's Theory (1986) in order to reduce phonological fossilization of Arabic pronunciation (particularly for the 10 most difficult sounds) among Malays.

LITERATURE REVIEW

Factors that Influence Phonological Attainment in Second Language

Age

Age factor is the most contentious issue in acquiring the accuracy of pronunciation in second or foreign language. In a study of numerous potential factors in phonological attainment, Purcell & Suter (1980) found no significant correlations between accent and age of onset, but other factors were significant, including aptitude for mimicry of speech, time period of residence in the target-language nation, especially if staying together with a native speaker, degree of awareness for pronunciation accuracy and the mother tongue itself. Tahta et al. (1981) deserves special mention here, as they documented a decline in phonetic imitation abilities among English schoolchildren learning French as early as age 5 years and continuing steadily on to the oldest learners, aged 15 years. A decline in the ability to mimic novel intonation patterns did not appear until age 8 years, and actually showed a slight uptick around 13-15 years old. Therefore, the learners can replicate intonation successfully at any age given enough exposure and practice. Some studies even report that children acquiring the L2 prior the age of 6 have an exceptional foreign accent (Flege, 1999; Oyama, 1976). L2 learner who start studying second language after the beginning of puberty phase are difficult to attain the accent of mother language speaker, instead of those who start prior fifteen years of age are more tend to form as much pronunciation capability (Hulin, 2013). According to the “Critical Period Hypothesis” proposed by Lenneberg (1967), there is a biological or neurological period which ultimately around the age of twelve years old; otherwise it becomes highly challenging to acquire at least the satisfactory level of mastery of a second language particularly in terms of pronunciation beyond this period of age.

Mimicry or Imitation Ability

Mimicry or imitation ability definitely is one of the prominent factors to acquire the most accurate pronunciation in L2 or foreign language. This ability is some sort of natural talent that not given to all people. Some people are gifted to born talented with many skills rather than others. However, this talent can be sharpened even though it requires a longer time. According to Brown (2008), a good learner would always realize on their ability in mastering the pronunciation aspect by imitating the sound produced by native speakers of target language. Ahmad Fared & Mohammad Seman (2019) points that learner’s ability to imitate the pronunciation such native-like pronunciation also one of the vital aspects in affordability of language use which could mastered through consistent practice. Speech sound imitation is a prominent learning platform for humans. Vocal imitation provides a fundamental for acquisition of both languages and musical systems (Fitch, 2010). In fact, the need of imitation is extremely necessary for human to perform life-long learning in life. Dissemination of any kind of knowledge is through imitation process from the previous scholars. For instance, our teachers imitated their teachers with the right methodologies (formal education in school and universities), they were then well-educated. The process is repeated continuously.

Attitude

Some second language learners are more enthusiasm at acquiring superb pronunciation. Even within one homogenous classroom, there is often a vast difference in terms of ability of second language pronunciation among the students. This situation has attracted many researchers to study the individual features of the learners that contribute to their excellence in foreign language pronunciation acquisition. If the students were more alert and aware about their pronunciation quality of the target language, they tended to have better pronunciation of the target allophones (Elliot, 1995). Undeniably, those are more concern on

pronunciation accuracy are more successful in L2 pronunciation acquisition. There are some L2 learners who are never concern or even thinking about the pronunciation accuracy as long as they can speak fluently. Attitudes can also play a significant role in the language-learning classroom. It is closely related to motivation. Attitude can contribute two different roles either as a booster or barrier of a certain language acquisition including in terms of phonetics. If a second language learner has a very good attitude namely optimistic, dedication, diligence and so forth, then the learning process could be run successfully. In short, attitude is one of the prominent factors to those who wants to mastery the second language pronunciation.

Mother Language

The issues of pronunciation errors already exist in the use of a foreign language (FL) as a target language that learnt. In communication, non-native speakers often make mistakes or errors in pronouncing a phoneme, word or a phrase in the target language. The interference of L1 on FL is one of the major factors that underlies the pronunciation problem. The interference happens because the learner uses his previous mother-tongue experience as a means of organizing the second language data (Littlewood, 2002). The influence of mother language is not only affect the incorrect sound of a word, in fact the intonation or stress could be different. Mother language seemingly inevitable as among the major factors that interfere the second or foreign language. Prevalently, mother language consists of regional dialects. It can be seen obviously when some Malay strong dialects influence the Arabic pronunciation indeed. For instance, regions that classified as strong dialect are Kelantan, Terengganu, Kedah, Sabah and Sarawak. At the beginning of Arabic language learning, the mastery of the Arabic consonant term should be emphasized, because without good control, it will lead to misinterpretation and subsequent changes in the meaning of the word. The problem of the Arabic letter among Malays has been widely discussed in previous studies but has yet to be resolved completely. It is clear from the previous studies that mother tongue interference is one of the major problems to acquire the correct pronunciation in L2 or foreign language.

Neurocognitive/Intelligibility

A good pronunciation produced by second language learners or foreign language learners is related to the intelligibility of brain as well. To what extent the neurocognitive receives the impulse and interpret it well, it depends on individual. When a second language or foreign language learners listen to the sound of a particular word, they can understand the sound and its method of pronunciation. Anatomical predispositions in the brain have been proposed to explain why some individuals have better speech sound imitation or auditory discrimination skills (Golestani & Pallier, 2007, as cited in Reiterer, S. M. et al., 2013). While the direction of correlation between skill and level of brain activation continues to be hotly debated, neuroimaging experiments have consistently reported, that greater amounts of brain activation accompany poor imitation skill. This phenomenon of ‘cortical efficiency/effort’ (Reiterer et al., 2013) mentions that brain activation reducing in brain networks related to pronunciation, phonemic awareness, articulation, phonological processing, sound imitation and auditory working memory belongs to speakers with higher speech imitation ability. Some individuals seem to have larger capacity of memory and able to store any kind of sound. Thus, they know the way to reproduce the typical accent of foreign-sounding speech due to the existence of detailed phonetic representation and phonemic awareness in their brain. It seems to have less successful memorization strategies perhaps due to a lower articulation capacity in the first place for those with lower awareness for foreign accented speech. The brain imaging (fMRI) results revealed that high ability speakers activate speech production areas less than low ability speakers (Reiterer et al. 2013).

Motivation

Motivation is one of the prominent elements of second language acquisition including pronunciation. Motivation is some sort of desire or passion from the heart for learning. It is highly challenging to convey and disseminate the knowledge of second language pronunciation even in a formal learning environment if the learner does not have a passion to learn the language. Motivation is the main character which exist in

learner's soul. It is necessary to boost and push the strength of motivation up persistently. This reflects that a motivated student or learner could afford to create any booster for the persistence of their enthusiasm for a longer time rather than just having a brilliant student. A student who is highly self-efficacy and motivation can achieve much more excellence compared to intelligent student who is not. It can deny the factor of age even though the age of a learner after puberty. The level of motivation of a learner can be seen from other side of view which is proposed by Dörnyei (2005), who focusses an "ideal L2 self," an individualized concept supported by personal or professional aims. The knowledge on constructing self-concept and self-efficacy seem to have special prominence for learners with exceptionally good pronunciation in a second language. Cheng (2009) stated that learners with high motivation, adequate exposure to increase second language (L2) input, and plentiful opportunities for output will likely be easy to acquire a second language.

METHODOLOGY OF RESEARCH

This concept paper used a qualitative study design which use library research method, with research for the most part of researches that related to phonological fossilization in second language that were compiled to be analyzed in order to comprehend the concept of phonological fossilization. Besides, observation method towards previous scientific research was made particularly research on the articles that were published in international academic journal. The further actual research will utilize quasi-experimental design and action research that consist of an experimental group only. A pilot test would be carried out prior to the actual study in order to acquire the most suitable instrument. A total of 22 respondents would be selected by non-random sampling which consist of six to sixteen years old respondents. A set of ten most difficult Arabic phonemes would be used which sum up to a total of 660 tokens. Pre-test and post-test score would be compared. The intervention process will apply communicative and behaviourist approach towards the respondents in ensuring the success of the application of the proposed technique. Data would be analyzed profoundly in order to identify the impacts of phonological fossilization towards Arabic places and manners of articulation. Two experts in the field of al-Quran might be selected in order to appraise pronunciation score of the ten phonemes. Data would be analyzed descriptively based on the scores obtained. The use of paired sample t-test is to examine the effectiveness of the technique of air pressure control in the vocal tract in reducing phonological fossilization of Arabic pronunciation among Malays.

CONCEPTUAL FRAMEWORK

Mahjub's Theory (1993)
<ul style="list-style-type: none">• Listening Skill• The use of audio visual• Group pronunciation• Individual pronunciation• Pronunciation practice based on phrase or sentence• Listening Differentiation• Pronunciation differentiation practice with writing

Table 1: Mahjub's Theory in Improving Arabic Pronunciation for Non-native Speakers.

Mahjub's Theory (1993) consists of two main parts in the module of Arabic pronunciation teaching and learning to non-native speakers. The first part covered 10 chapters namely places and manners of articulation, practice of consonants, the difficult consonants, significance of the module, important

fundamentals in phonetic teaching, pronunciation difficulties of non-native speakers, the importance of listening skill and methodologies of improving. While the second part covered directly towards the nine most difficult letters to non-native speakers and the ways to pronounce it accurately. The second part of the theory was very good however, there are critiques concerning the first part of the theory in terms of practicality. The practicality is one of the pivotal elements in determining the efficacy level of a methodology. For instance, the last chapter of the first part from the module has covered only a traditional method of behaviourist approach. The use of listen and repeat style looks quite lagged behind if the approach was not attached with another approach along the method (Sultan, 2016). The researcher proposes a behaviourist and communicative approach attached with a novel technique of air pressure control in the vocal tract as an alternative way of improving the most difficult letters in Arabic pronunciation, thus leading to reduction of phonological fossilization of Arabic pronunciation among Malays. Based on Mahjub's Theory (1993), the researcher has come up with a conceptual framework in order to establish the existing theoretical framework in improving Arabic pronunciation among Malays.

Arabic language is a foreign language in Malaysia. A student who learns Arabic language in Malaysia is prevalently susceptible to the pronunciation problem due to the linguistic system used that known as interlanguage. The phenomenon of interlanguage then lead to the Arabic pronunciation problem among Malays. The triangulation of theories or combination of theories lead to form this research conceptual framework. Although studies based on a particular theory have helped students of Arabic language to improve the pronunciation quality, there are critiques concerning the practicality of the theory in terms of the Arabic pronunciation aspect. Mahjub's Theory (1993) was designed to overcome the Arabic pronunciation problem among non-native speakers. However, the theory merely covers more to the listening skill and teaching & learning methodologies in classroom. Secondly, the theory does not emphasizes the articulatory control skills that most related to the speech production. In the Arabic pronunciation learning process, there are nine the most difficult letters for non-native speakers to pronounce very well (Mahjub, 1993). The good pronunciation of the letters could not be achieved by beginners of non-native speakers completely without a novel approach that would be presented by the researcher which is the technique of air pressure control in the vocal tract. As a result, the pronunciation problem continuously stabilized among Malays in particular, then classified them as interlanguage fossilization. Pronunciation problem refers to one of the fossilization types which is phonological fossilization. Due to phonological fossilization, there are many implications existed towards the Arabic pronunciation particularly in terms of place and manner of articulation of Arabic letters or even phonemes. Warren's Theory of Air Pressure Regulation (1986) is used by the researcher in order to come out a technique of air pressure control in the vocal tract. The technique is expected to be acquired by Arabic learners by the instillation of awareness and perception through behaviourist and communicative approach. Therefore, the technique of air pressure control in the vocal tract is expected to reduce the phonological fossilization of Arabic pronunciation among Malays.

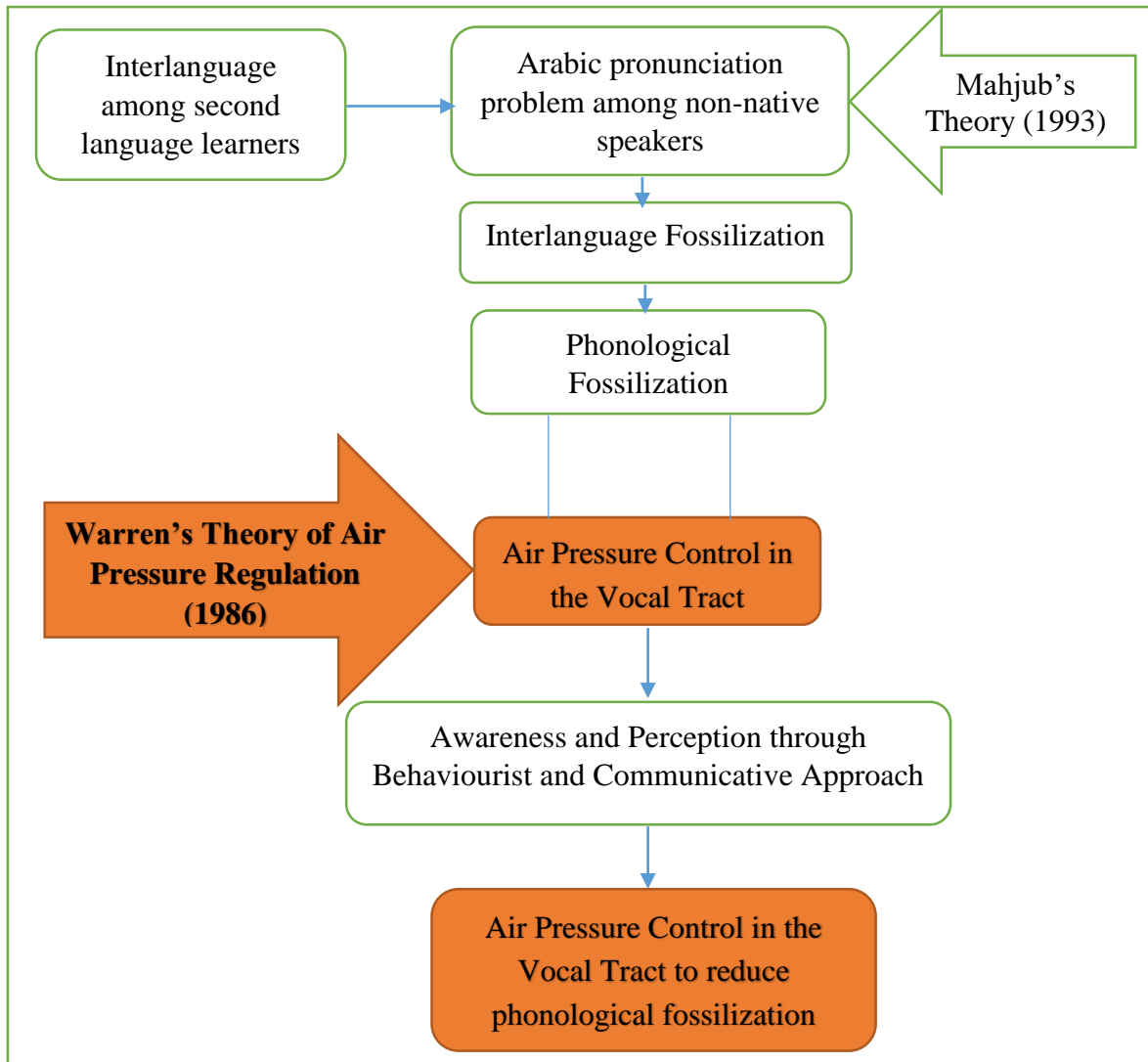


Figure 1: Research Conceptual Framework

CONCLUSION

In conclusion, the conceptual framework which is the analysis of this concept paper is to enhance the existing theory of Arabic pronunciation among non-native speakers which is Mahjub's Theory (1993) and Warren's Theory (1986). The technique of air pressure control in the vocal tract which is constructed based on Warren's Theory of Air Pressure Regulation (1986) believed to be achieved by respondents through the acquisition of awareness and perception in pronunciation learning. The technique is to be applied among Malays who aged between six to sixteen years old based on the theories on the range of onset age in phonological fossilization. The technique is expected to contribute and accepted as an aid to reduce phonological fossilization among Malays particularly the 10 most difficult sounds. The conceptual framework is believed to be carried out in the further actual study.

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