

Phonological Adaptation of Arabic Loanwords in Maguindanaon

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ABSTRACT

This study delves with the phonological adaptation of Arabic loanwords in Maguindanaon to enhance our understanding of Maguindanaon phonology. The phonological adaptation is examined using the Optimality Theoretical framework. Twelve Maguindanaon native speakers were asked to enunciate a corpus of 250 Maguindanaon loanwords from Arabic for analysis. The phonological nature of the adaptation process has been disclosed despite phonetics and other linguistic factors. Numerous modifications these loanwords undergo are attributed to Maguindanaon native phonology. Unmarkedness is highlighted in the adaptation process where closeness to the Arabic input is disregarded to brand the Maguindanaon adaptation unmarked. However, some Arabic phonemes which marked counterparts are equally attested in Maguindanaon still arose making way to the Emergence of the Unmarked. Maguindanaon maps Arabic segments onto their phonologically closest Maguindanaon phonemes. Phonological, morphological, and semantic changes are all observed in the adaptation. The phonological adaptation seeks to preserve the sound system of Maguindanaon. Morphologically, inflectional word-formation and derivational integration were mapped. Affixation and clipping are also attested within word-formation processes. Inflection for gender, number and possessive assignments are also demonstrated. Loanwords have undergone major changes such as semantic broadening, extension, and shift.

Keywords: *Arabic, Maguindanaon, phonology, adaptation*

1. INTRODUCTION

Current proliferation of Arabic borrowed words in Maguindanaon deserved an inclusive phonological analysis towards enhancement of understanding of understudied Maguindanaon phonology. The analysis of Arabic loanwords will stimulate Maguindanaon phonological aspects that would have remained unfamiliar, thus, given new awareness that will eventually pay for an improved discernment of Maguindanaon phonology and phonological theories.

This study sought to address this hole through investigating the adaptation of Arabic loanwords to Maguindanaon. More specifically, this research pursued response to the following queries:

1. What is the inventory of Arabic loan words in Maguindanaon in terms of their semantic fields?
2. How are the phonemic features of Arabic loan words mapped in Maguindanaon?
3. What extra phonological factors influence the adaptation of Arabic loan words in Maguindanaon?

2. LITERATURE REVIEW

Various studies were done on the Maguindanaon language, but these, by themselves, are no substitute for the thorough investigation of sound shifts. Adequate studies in comparative phonology and the synthesis of these are necessary to establish a solid scientific evaluation of this language. In response, this study analyzed a corpus of 250 Arabic loanwords in Maguindanaon with the purpose of exploring the Arabic lexical items on their phonological and morphological adaptations in Maguindanaon.

The researcher undertook analyses within the Optimality-Theoretic framework (Prince & Smolensky, 1993). OT is a constraint-based theory in which the candidate is selected if it best satisfies a set of ranked constraints, and is known as the optimal output. Constraints are of two basic types: markedness and faithfulness.

Another theory as the framework for this study is “The Emergence of the Unmarked” (TETU), by McCarthy & Prince (1993) which indicate cases whereby a marked structure is normally permitted where the spotless

assessment of a language feature surfaces when faithfulness is not at risk.

3. METHOD

Synchronic analysis using descriptive, qualitative, and structural methods was utilized within the realm of contrastive analysis in identifying Arabic and Maguindanaon sound segments and morphological structure.

It was administered in Maguindanao, which is the largest Maguindanaon speaking province. Potential participants were recruited using a purposive sampling method and were selected because they had particular characteristics that were of interest to the researcher.

First, loanwords initially compiled by the researcher were validated and sifted. Second, a systematic search for loanwords in *English-Arabic Dictionary* (2004) was carried out. Finally, as a native speaker of Maguindanaon, the researcher penciled self-observation techniques on naturally occurring conversations in collecting more loanwords.

4. RESULTS AND DISCUSSION

4.1 Semantic Fields

This study found out that the abundance of Arabic loanwords into the Maguindanaon language is attributed to the great influence of Islam.

Semantic changes in the Arabic loanwords in Maguindanaon may fall in three specific categories – broadening, narrowing, and shifting. The findings reveal that the main reason of these semantic changes is that Maguindanaon society does not get exposed only to words but also to beliefs and culture of the Arabic society so there was borrowing of new words along with new concepts and notions. That is mainly because words are borrowed to signify a cultural concept rather than their literal meaning in the source language, to name things by the way they are utilized or because of overgeneralizing forms that occurred in Arabic loanwords to include other words in the Maguindanaon language.

4.2 Segmental Adaptation

4.2.1 Substitution of Phonemes that do not exist in Maguindanaon

4.2.1.1. Voiceless Uvular Plosive [ق] /q/

This Arabic sound is produced when the back of the tongue that plays as active articulator bumps with the uvula which is the passive articulator. This is followed by an explosive noise caused by the release of air (Shariq, 2015).

This sound is not found in Maguindanaon. The presence of uvular /q/ in Arabic loanwords is altered with voiceless velar plosive /k/ by default as in the word قرآن *Qurʾan* /qurʾan/ into *Kuran* /kuran/.

4.2.1.2. Voiced Uvular-Fricative [غ] /ɣ/

In this sound, back of the tongue, which is the active articulator gets on to the uvula, the passive articulator. This scenario creates friction in the release of the air (Shariq, 2015). This sound is the voiced [غ] [ɣ] in Arabic.

Maguindanaon only has the voiced velar plosive sound /g/ which is being substituted to this particular Arabic sound as it is the nearest sound that shares almost the same articulation as in the word مغرب *maghrib* /maɣrib/ into *magrib* /magrib/.

4.2.1.3. Voiceless Uvular Fricative [خ] /x/

Arabic has one consonant under this phonetic description which is the voiceless [خ] [x]. Shariq (2015) describes this sound to be articulated through the back of the tongue (the dorsum) at the uvula.

The Maguindanaon nearest sound for its substitution is the voiceless velar plosive /k/. It may be noticed that it is consistently replaced with this sound in all the Arabic loanwords as in the word خطبة *khutba* /xuʔba/ into *kutba* /kutaba/.

4.2.1.4. Voiceless Pharyngeal-Fricative [ح] /ħ/

This pharyngeal fricative is the voiceless Arabic sound [ح] [ħ] is articulated with the throat (pharynx) against the tongue root (Shariq, 2015).

The pharyngeal fricative [ħ] is not a common sound in Maguindanaon. The unrepresented sound segment may be switched with clustered consonant of velar, /k/ in some well-established Arabic loanwords in Maguindanaon as shown in the word محمد *Muhammad* /muhammad/ into *Mokamad* /mukamad/, while replaced with fricative glottal /h/ in some spontaneous loanwords as shown in the word حلقة *halaqa* /halaqa/ into *halakat* /halakat/.

4.2.1.5. Voiced Pharyngeal Frictionless Continuant [ع] /ʕ/

The pharyngeal Arabic sound [ع] [ʕ] is deeper in the throat, located in the area where the air involved in vomiting is located.

Maguindanaon lacks this sound but is very common in Arabic. Loanwords having this pharyngeal frictionless sound are substituted with simplified sound segments as the glottal plosive vowels such as, /a/, /i/, and /u/ depending on the vowels attached to it. This is shown in the word عالم *ʕalim* /ʕa:lim/ into *alim* /alim/.

4.2.1.6. Voiced Palatal Affricate [ج] /dʒ/

In this single Arabic sound [ج] [dʒ], there is an obstruction caused palatal made by the contact between the front of the tongue and the roof of the mouth -- hard palate (Shariq, 2015).

This palatal affricate sound / dʒ / which is not very common and is not part of Maguindanaon phonemes, is always substituted in loanwords by their velar plosive complement /g/, except for two spontaneous loanwords in

the corpus in which the sound is retained as it is such as /idʒma:ʕə/ which is pronounced as /idʒma/ and the word /hidʒra/ which is also not modified in Maguindanaon due to its frequent use.

Also, there are some words where this Arabic phoneme is realized as velar plosive /g/ in Maguindanaon as in the word جهاد *djihad* / dʒiha:d/ into *gihad* /gihad/.

4.2.1.7. Voiced Alveolar Fricative [ز] /z/

This Arabic voiced alveolar fricative consonant [ز] /z/ is enunciated by raising the soft palate forcing all the breath to go through the mouth which places the blade and tip of the tongue near the alveolar ridge.

In Maguindanaon, this is another sound segment which is subjected to rigorous modification and not present in the phonemic inventory of Maguindanaon. The segment is adapted by adding schwa /ə/ followed by the /d/ and /s/ combined if found at word-initial position and the removal of the schwa while retaining the /d/ and /s/ combined if it is found in the medial or final position. This is elaborated in the word زينا *zina* /zina:/ into *edsina* /ədsina/.

4.2.1.8. Voiceless Alveolar Velarized Fricative [ص] /sʕ/

This sound is similarly produced with the fricative consonant /s/ only that [ص] /sʕ/ is a velarized one and is commonly found harder to pronounce. It is being simplified by its closest counterpart in Maguindanaon which is the /s/ sound as seen in the word صحابة *ṣahaba* /sʕaha:ba/ into *sahaba* /sahaba/.

4.2.1.9. Voiceless Palate-Alveolar Fricative [ش] /ʃ/

This sound is produced by slightly rounding the lips and by raising the soft palate. This is followed by forcing all the breath to go through the mouth with the narrowing between the back of the alveolar ridge and the lip of the tongue.

This type of phonemic modification is coronalization. Post-alveolar retroflex fricative, /ʃ/ is simplified in Maguindanaon as alveolar fricative /s/ in adaptation as well, indicating that the language obstructs coronal fricative as in the word إن شاء الله *Inšhaa Allah* /ʃinʃa:ʔalla:h/ into *Insaala* /insaala/.

4.2.1.10. Voiceless Dental Plosive [ط] /tʕ/ and [ث] /θ/

The voiceless emphatic consonant [ط] /tʕ/ under this category is almost similar to the sound [ت] /t/ only that the former is emphatic and its manner of articulation varies since there is contraction of the vocal tract in the articulation, which is insufficient for producing turbulence in the airstream (Shariq, 2015).

This sound is not part of the Maguindanaon phoneme and is substituted by its plain counterpart /t/ illustrated in the word طلاق *ṭalaq* /tʕala:q/ into *talak* /talak/.

Another emphatic voiceless dental fricative is the sound [ث] /θ/. It is produced by having the soft palate raised so

that all the breath is forced to go through the mouth. The tip of the tongue is close to the upper front teeth, the narrowing where friction is made. It is an Arabic sound not found in Maguindanaon and is substituted by its alveolar complement /s/ as in the word إثنين *ʔithnin* /ʔiθni:n/ into *Isnin* /isnin/.

4.2.1.11. Voiced Dental Plosive [ض] /dʕ/, [ذ] /ð/, and [ظ] /ðʕ/

Arabic has three voiced consonants under this category which are not part of Maguindanaon phoneme such as [ض] /dʕ/, [ذ] /ð/, and [ظ] /ðʕ/.

According to Shariq (2015), these sounds are produced with the upper teeth and tip of the tongue that gives closure in the mouth. The air is suddenly released with some explosive noise.

Maguindanaon language lacks these interdental consonants. In other words, this part of speech organ is inactive in this language and there is no such place of articulation. Thus, in confrontation on loanwords with this class of consonants, the closest consonants in terms of the manner and place of articulation as substituted are the following: [ض] /dʕ/ → /d/ as in the Arabic word, محاضرة *muḥa:dʕara* into *muhadara* /muhadara/, [ذ] /ð/ → /d/ if it is word-initial and is followed by a vowel as in the Arabic word أَدَان *ʔaḍa:n* into *adan* /adan/, [ذ] /ð/ → /ds/ if it is word-final or is followed by a consonant as in the Arabic word أستاذ *usta:ð* into *ustads* /ustads/, [ظ] /ðʕ/ → /d/ if it is word-initial as in the Arabic word دُحُر *duḥur* /duhur/, and [ظ] /ðʕ/ → /ds/ if it is word-final as in the Arabic word حافظ *ḥa:fiðʕ* into *hapids* /hapids/.

4.2.1.12. Voiceless Labiodental Fricative [ف] /f/

This sound is produced with the upper teeth making contact with the lower lip. The continuous production of friction cause by the release of air earned its label as continuant fricative (Shariq, 2015). Arabic has only one voiceless labiodental fricative sound [ف] /f/.

This Arabic sound is consistently substituted by the Maguindanaon voiceless aspirated bilabial stop /p/ regardless of its position. It holds for orthographic representation in Maguindanaon adaptation of non-Maguindanaon words other than Arabic as shown in the word فتنة *fitnah* /fitna/ into *pitna* /pitna/.

4.2.1.13. Glottal Plosive [أ] /ʔ/

This sound [أ] /ʔ/ is one of the three letters in Arabic -- Alif [ا], Waw [و], and Ya [ي] which might either be a consonant or a vowel letter. It is considered as consonant when it comes with a Hamza (ء) on the top [أ] or underneath [إ] and considered as the vowel letter if it is without any Hamza [ا] and might even come in a completely different shape [ع].

Consonant Alif's sounds are (a) Alif with a fatha: [أ] which has a soft sound like /a /, (b) Alif with a kasra: [إ] which sounds like /i/, and (c) Alif with a damma: [ئ] which sounds like /u/.

This Arabic glottal plosive sound [ʔ] /ʔ/ is produced by entirely blocking airflow in the glottis followed by its sudden release which has earned its label as plosive (Shariq, 2015).

The glottal stop /ʔ/ is not present in Maguindanaon language. There is a tendency for the Maguindanaon learners of Arabic to substitute /h/ for the Arabic /ʔ/. In Maguindanaon, this sound is commonly deleted especially if it is found word-final as shown in the following: Alif [ʔ] /ʔ/ with *Fatha* as in the Arabic word *أخيرة*/axira/ into /akirat/, Alif [ʔ] /ʔ/ with *Kasra* as in the Arabic word *إخلاص*/ixla:s/ into /iklas/ and Alif [ʔ] /ʔ/ with *Damma* as in the Arabic word *أستاذ*/ʔusta:ð/ into /ustads/.

4.2.2 Substitution of Phonemes that exist in Maguindanaon that are showing Cases of the Emergence of the Unmarked

4.2.2.1. Voiceless Glottal Fricative [ʕ] [h]

The articulators for this glottal sound are the vocal cords. The air is released from the lungs with narrowing or obstruction that creates the perceptible friction through a narrow vocal tract.

This sound is a familiar sound in Maguindanaon and is adapted faithfully, except that sometimes, there is a tendency for the Maguindanaon learners of Arabic to substitute /h/ for the Arabic glottal stop /ʔ/.

4.2.2.2. Voiced Alveolar Trill [ʀ] /r/

This sound is articulated by the tongue touching the alveolar ridge. The tongue makes a fleeting contact, and pulls out to its point of rest immediately.

There are some well-established Arabic loanwords in Maguindanaon which are utilized in the language since time immemorial. In here, this Arabic sound is substituted with the Maguindanaon phoneme attribute /l/ being the commonly used sound and the only phoneme that partly separates them from their neighboring language, M'ranao. Maguindanaon prefers the /l/ sound while M'ranao prefers the /r/ sound, as seen in the almost same vocabulary from the two Moro dialects, *karuma* in M'ranao, and *kaluma* in Maguindanaon which both mean “spouse” in English.

An example of Arabic loanwords with /r/ sound that are substituted with /l/ sound is the word *مرتبة* martaba/martaba/ into malatabat /malatabat/.

Nonetheless, the rest of the loanwords that has this sound are not modified, and most of these loanwords are spontaneous ones or the newly borrowed ones.

4.2.2.3. Voiced Dental Plosive [d] /d/

During this sound's articulation, the slope of the tongue touches teeth-ridge closing the oral passage. There is a compression of the air in the lungs behind these closures

where the vocal cords are wide apart and may palpitate for all or part of the compressed stage.

It is faithfully adapted in the entire corpus except for one word in which it is adapted as /t/ as in the word /masdzid/ adapted as /masgit/ where it is altered for no obvious reason, probably due to distinct Maguindanaon error in production of this foreign lexical item. Nevertheless, this Arabic phoneme is retained in both spoken and written variety in cases of both established and spontaneous loanwords.

4.2.2.4. Voiced Bilabial Plosive [b] /b/

In this Arabic sound, the lower lip touches the upper lip and produces obstruction of the air. It involves a stricture of complete closure. The air passage is closed at some point in the vocal tract which builds the air pressure behind the closure and is suddenly reduced with the sudden release of air with some explosive noise (Shariq, 2015).

Arabic only has [b] while Maguindanaon represents both the [b] and the bilabial plosive which is the [p] sound that differs only in voicing.

With regards to Arabic loanwords that are fully established in the Maguindanaon, the phoneme /b/ does not show constant integration. It is normally pronounced as it is in Arabic, and sometimes replaced by its voiceless counterpart /p/ in such well-established Arabic loanwords in Maguindanaon such as *pantalon* from the Arabic word /bântâlun/ which means “pants”, *saptu* from /sabt/ which means “Saturday” and *sabap* from /sabab/ which means “cause”. Nevertheless, the rest of the corpus that has this Arabic sound /b/ is faithfully realized as it is.

4.3 Extra-phonological Factors that Influence the Adaptation of Arabic Loanwords in Maguindanaon

4.3.1 Morphological Factors

Languages with varied morphological patterns prove to have more difficult morphological assimilation particularly if the borrowing language or the donor language has ‘complex’ inflectional and derivational paradigms, such as gender, number, case, etc. (Salem, 2015).

Integration related to word-formation processes (e.g., affixation and clipping), and inflectional integration are two areas examined.

4.3.1.1 Inflectional Integration

4.3.1.1.1 Gender

Masculine form is the “unmarked” form in Arabic. It is the feminine form that is “marked” which contains an inflection on the ending. By far, the most common ending is the letter ʕ called *taa marbuuta*, and only appears at the end of a word. It is constantly preceded by *fatha*, so feminine nouns mostly end in /-a/. For instance:

Table 1. Gender Inflection in Arabic

Root word	Masculine	Feminine
عالم (scientist)	عالم (male scientist)	عالمة (female scientist)
ṣalim	ṣalim	ṣalima

However, in Maguindanaon, animal referent’s biological sex does not play a vital role in defining the gender of the loan noun. The examples given above are all referred with their root term when referring to both male and female. Hence, the word ṣalim, for instance, is being referred to both the male and the female professor even without adding the suffix /-a/ for feminine inflection.

4.3.1.1.2 Number

Sound and broken plurals are attested in Arabic. Sound plurals /jam’ sālim/ are formed into plural by the singular form added with a suffix (*ونَ* /un/ or *ينَ* /in/ for the masculine and *اتَ* /at/ for the feminine), and broken plurals /jam’ taksīr/ modification the internal structure of the singular.

To illustrate, the Arabic singular masculine noun “muslim” is formed into plural as “muslimin” and the feminine singular “muslima” into “muslimat”. While the broken plural “masajid” is taken from the singular noun “masjid”.

However, in Maguindanaon, these loan nouns only appear in their singular form and are formed into plural by adding a Maguindanaon quantifier “mga” which means “many”, thus, forming a quantity phrase such as “mga muslim” for “many Muslims” and “mga masjid” for “many mosques”.

Loan nouns that take broken plural are inflected after they are phonologically assimilated into Maguindanaon. Hence, they are formed not based on their their Arabic original forms, but based on their assimilated forms. The loanword *masjid* which is pluralized in Arabic as *masajid* is phonologically integrated as *masgit*. It then forms its plural by adding Maguindanaon quantifier “mga masgit” is generated.

4.3.1.1.3 Possessive Assignments

In Arabic, the possessive case is shown by adding a possessive pronoun used as suffixes to the noun that is owned. In contrast, the possessive assignment in Maguindanaon varies. The stem or root word borrowed are added with Maguindanaon inflections on cases of pronouns. To illustrate, the following are the possessive forms of the word *umm* ‘mother’ in Modern Standard Arabic and Maguindanaon:

Table 2. Possessive Assignment in Arabic and Maguindanaon

Person	Modern Standard Arabic	Maguindanaon Adaptation	English meaning
1 st	<i>ummi</i>	<i>umi ko</i>	my mother

As shown in the table, Arabic adds a possessive suffix and is formed in Maguindanaon by still adding the Maguindanaon possessive pronoun on the root word borrowed from Arabic.

4.3.1.2 Word Formation Processes

4.3.1.2.1 Affixation

In Maguindanaon, there is a varied treatment of Arabic loanwords that has foreign suffixes. Suffixed loanwords such as *akh* (brother) which is made into possessive forms in Arabic by adding the suffix “i” for “my” as in *akhi* (my brother), as well as *ukht* (sister) into *uhkti* (my sister), *umm* (mother) into *ummi* (my mother) and “ab” (father) into *abi* (my father), are borrowed together with their Arabic possessive pronoun suffixes. However, the forms derived from existing Arabic root and affixation is still added with Maguindanaon possessive pronouns for ownership “ko” which is already composed in Arabic with the presence of the possessive suffix for ownership “i”. For this reason, these Arabic loanwords are borrowed in Maguindanaon as *aki ko* for “my brother”, *ukti ko* for “my sister”, *umi ko* for “my mother” and *abi ko* for “my father”.

4.3.1.2.2 Clipping

Katamba (2005) states that clipping is a word-formation process with a phonological dimension because the clipped word may become monosyllabic or disyllabic.

Clippings that were mostly found in the corpus are back-clipped. Majority of the loanwords belong to the area of everyday supplication and expression. The back-clipped Maguindanaon compounds *lakola* from the Arabic supplication *La hawla wa la quwwata illa billah* (There is no power and might except that by Allah.), *la ila* from the Arabic *La ilaha ilallah* (There is no deity except Allah.), *Astaga* from the Arabic supplication *Astagfirullah* (Forgive me Allah.) and *salam* from the salutation *Assalamu ‘alaikum* (Peace be upon you.) are some of the examples. In comparison, the clipped compound *latala* from the Arabic word *Allahu Ta’ala* (Name of God) is an example of fore-clipped compounds belonging to religious terms.

However, in the current society of Maguindanaon which are becoming more literate with Arabic, the first two examples mentioned such as *lakola* and *la ila* are now avoided because the meanings implied if you remove the rest of the words in the sentence would rescind the meaning of the supplication. *lakola* would only mean “There is no power,” and *la ila* would only mean “There is no God”.

In the current times, this can only be heard from an illiterate Maguindanaon especially among elders who became their habit to use these as exclamation expressions and who may still be not aware of the alteration on the meaning if they cut the supplication short. This scenario of clippings seems to be driven by the necessity to obtain ease in the pronunciation of these Arabic compounds.

4.3.2 Sociological Factors

Diverse factors have been projected to explain variation. Lexical adaptation is likely controlled by the need to interconnect subsequent to the community conventions. Maguindanaon tend to use the native forms of their varieties. The findings agree to Hamdi (2017) which accordingly view that whenever the context changes, as being in a formal context, standard form will likely be used.

5. CONCLUSION

Results reveal that the adaptation process is governed by the phonological perspective of the recipient language -- Maguindanaon that determines its adaptation. It was also shown that though the adaptation process is mostly attributed phonologically, it was not always faithful to source input which was partly accounted for in terms of markedness, which is in line with OT basic assumptions that faithfulness is violated to yield unmarked structures (McCarthy & Prince, 1993).

Markedness has also shown considerable role in the adaptation process. First, it was demonstrated that Arabic was assimilated onto Maguindanaon language's unmarked outputs. Second, it was shown that source input was also charted onto less marked Maguindanaon structures which is attributed to TETU. Cases were also shown where markedness constrains disrupts faithfulness to satisfy the former.

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