

مجلة كامبريدج للبحوث العلمية

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The Phonological Rules in Tajweed in the Holy Quran

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Abstract

This paper examines the phonetic validity of assimilation rules in Quranic tajweed, focusing on the widely adopted reading style of Hafs from 'Aasim. Tajweed rules often align with contemporary phonetic principles, particularly in anticipatory assimilation, but some aspects diverge significantly, especially regarding stops and fricatives. The study highlights inconsistencies, such as the unnatural assimilation of /n/ to plosives and the debated treatment of certain phonemes like /m/ and /l/. It explores the socio-phonetic dimensions of these rules, noting their historical and cultural motivations. While tajweed preserves the sanctity and clarity of Quranic recitation, this analysis suggests that some traditional rules lack phonetic rationale and could benefit from alignment with natural speech patterns. Nonetheless, these variations do not compromise the Quran's meaning or spiritual essence.

Introduction

Tajweed practices have not changed over the centuries. This does not preclude differences among the founders of the tajweed project, nor among the practitioners of tajweed itself. On the whole, the similarities outweigh the differences by far. In this paper, the assimilation rules and their phonetic environments are reproduced for the purpose of having an integrated picture on the points of consensus. It has traced the most widespread reading at present, that of 'Aassim, and listeners to this style are very much likely to think of it as the only valid style. As can be seen from the following list showing features of consensus among all styles, there are authenticated variants on many aspects. However, I include in the list those features on which four or more out of the seven canonical readers agreed.

• They all report assimilation to be regressive or anticipatory, going from sound number \(^{\gamma}\) to sound number \(^{\gamma}\) in a consonant cluster.

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- On the /n/ sound, whether in the stem or in the affix marker of indefiniteness, they assimilate it completely to all non-pharyngeal consonants including itself. When assimilated to /l/ or /r/, the /n/ loses nasalization.
- They all assimilate the /n/ completely to a following /b/, thus producing a kind of an /m/ sound with no total closure but with a slightly open aperture, as if it were a bilabial nasal fricative. This process applies to both intraand inter- word contexts. (The terms in Arabic do not matter, in my view.)
- The /n/ assimilation rule in r above does not apply to the /w/ and /y/ in the following words 'Dunya, Kanwan, Sunwan'.
- With the exception of two instances in the 'Quran text And the pen and what they line, yes and the wise Quran', they all assimilate the /n/ sound to the following labio-velar /w/ sound. (With one exception; see ¿ above.)
- They all agree that the 'L' sound of the word/particle 'If' assimilates to a word-initial 'L' or 'D' sound.
- They all agree that the /d/ sound of the particle 'cod' assimilates to a word-initial /d/ or /t/ sound.
- The assimilation of the /l/ sound of the particle 'is' and the particle 'but' to the next /l/ or /r/ sound in the following word is common to all reading styles.
- A word-final /t/ affix marking feminine subject assimilates to any of the following sounds at the beginning of the word 'T, D, I.'
- An /m/ sound in word-final position DOES NOT assimilate to a following voiceless labio-dental fricative, /f/. 'And they're immortal.'

The phonological rules in Tajweed the Holy Quran

Having looked at major aspects of consonant cluster assimilation in current phonetics knowledge, we can now identify the points on which the tajweed rules are in consonance with what occurs in languages and the points which seem to contravene or show a phonetically unnatural process. The term *natural* refers here to what can be motivated or explained by reference to musculature or gesture mechanics. If a gestural rationale can be identified on the basis of its occurrence in languages, the phonetic conditions for assimilation obtain. However, having the 'right' conditions does not entail that the process is activated in one or more of the languages of the world, including Arabic. Below, an interface of the tajweed rules and current scholarship on the topic is drawn.

On the first rule, the direction of assimilation, the tradition indicates that assimilation in tajweed rules is anticipatory. This is a confirmation of the

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generalization in current phonetics that some languages are more anticipatory than perseverative.

On the second rule, the assimilation of /n/ to following consonants, current phonetic knowledge upholds the tradition only on the fricatives. In this group, the /n/ sound acquires the fricative feature from the following fricative consonant. The rules of tajweed on the glides /w/ and /y/ are also confirmed by current knowledge in phonetics.

However, on the plosives, the tradition does contravene the principles of current phonetics in a very striking deviation or anomaly. 'Hopefully, you were' in the following two phrases, the /n/ sound is changed to an approximant, in a process they call concealment. It is clear, however, that the sound following the /n/ sound in the first instance is U, which is a fricative; in the second instance, on the other hand, the sound following the /n/ sound is a stop. Naturally, their effects on the preceding /n/ must be different. The /n/ sound is a (nasal) stop, in the sense that in producing it the air stream is totally blocked in the oral cavity. The airstream is not held or trapped in the oral cavity; rather, it is released through the nasal cavity and this is why it is a continuant, but certainly not a fricative.

Theoreticians consider the influence of neighboring consonants on each other to be the result of the speaker's desire for expending less effort and saving on the time needed for the pronunciation of the individual phoneme. Whereas the speaker tends to save on effort and time, a tendency toward saving, the listener tends toward the same principle but as it is related to the perception of speech, desiring maximal distinction of pronunciation. Eventually, a balance between the expectations is struck. (Jun, 1990) Speakers of all languages engage in some kind of assimilation leading to consonant cluster simplification, but they may not be aware that they are doing so. (Collins and Mees, $7 \cdot \cdot \wedge pp$, 110/7)

The direction of assimilation may be forward in the linear flow of sounds, i.e., progressive/ perseverative, or it may be in the opposite direction to the linear flow. Both types of direction of assimilation occur in languages, but some languages seem to display a higher level of incidence in a direction than in the other. English speakers, for example, favor the anticipatory/regressive type whereas the French and the Italians favor the perseverative/progressive type (Ladefoged, \\^99\pm pp. \^7\). That is, while the assimilation process depends on objective phonetic conditions, its activation, extent of application in terms of type and token, and patterns of assimilation depend on subjective social choice. (Coenen, et al., \(\fambda \cdot \cdot

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Both complete and partial assimilation, especially the regressive sub-type, can lead to surface weakening or elimination of underlying phonemic oppositions or distinctions. (Gaskell, $^{\gamma} \cdot \cdot ^{\gamma}$. pp $^{\xi \xi \gamma}$) As will be shown below, the phonetic realization of an $^{\prime}$ n/, $^{\prime}$ m/, $^{\prime}$ t/, or $^{\prime}$ z/ phoneme may neutralize the opposition between that phoneme and another phoneme. Furthermore, Son $^{(\gamma \cdot \cdot \cdot \wedge)}$ research for the PhD degree at Yale University involved the study of gestural (or articulatory) overlap and gestural reduction in Korean. In an experiment, using midsagittal articulometry techniques on the study of assimilation in Korean, Son concluded that in the behavior of clusters, labials and coronals were the target of assimilation more often than dorsals; that is, the change in (or reduction of) articulatory gestures occurred more frequently in labials and coronals than in dorsals. (Pp. $^{\gamma \gamma \gamma}$)

The Arabic /t/ and /d/ phonemes are stops and plosives, in the sense that the air stream is held or trapped in the oral cavity with the passage to the nasal cavity completely closed until the articulators separate and make the plosive feature. Therefore, when the /n/ precedes these consonants in a cluster formation, the assimilation should be only in place but not in manner because the latter possibility has no phonetic conditions to support it (Rippin, Y··٩). The rule of Hide is completely phonetically irrational because it generates an /n/ sound that is an approximant in an assimilation process to a stop (Cragg, \quad \q

Thirdly, the assimilation of /n/ to an upcoming /b/ changes the place of articulation for the phoneme /n/, from dental or alveolar (depending on which description one subscribes to) to bilabial but does not change the nasality of the (new) sound (McAuliffe, ' · · ¹). In the tajweed tradition, the /m/ sound, whether it is the underlying or the surface form seems to be construed in a very 'unnatural' way. The description of this /m/ sound makes it either a bilabial nasal fricative followed by a bilabial stop, or a bilabial nasal affricate in the sense that the lips are closed at the beginning of its production, then they slightly separated, than they are brought back together for the production of a voiced bilabial oral /b/ sound. This is what the tradition calls 'Oral concealment' (Lannoy, ' ۹۹۷). As is obvious, there is no justification for introducing the fricative feature within an all-stop environment.

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As for the fourth rule of consensus in the tajweed tradition, the rule concerning /n/ does not apply to certain specific words. This exclusion from the rule domain is not groundless in current knowledge. There are phonetic rules that do not across the board, but they are lexicalized, i.e., restricted in application to certain items. Here, again the tradition rule is not anomalous.

The /n/ sound assimilation to /w/ in two instances, 'And the pen, yes and the Quran,' it is hard to find a principle in current phonetics to evaluate the position of the tradition; nor can we find support for the rule in the tradition (Rippin, '\.\forall). However, we may venture an idea. The ambiguity of the judgment derives from the absence in the literature of the basis for writing the sounds in letter form not letter name; for example, writing /l/ could be simply l or el, or jee (for g), and so forth.

On another rule, the assimilation is one related none of the dimensions of place, manner, voice, or nasality. The issue concerns the feature of velarization, which is phonemic in Arabic, unlike the velarization of /l/ in English, which is only phonetic. There are two sets of consonants in Arabic by this criterion: the plain and the velarized consonants (McAuliffe, Y...). There are two sets of consonants in Arabic by this criterion: the plain and the velarized consonants. Patchy and luxurious

The seventh and eighth rules relate to the class of words called 'particles', not nouns or verbs. Arab grammarians still think in terms of three parts of speech: nouns, verbs, and particles. There is no phonetic justification for restricting the assimilation of the /d/ to other sounds or the /l/ to other sounds. Normal speech in current Arabic exhibits such instances of assimilation. However, the principle still stands that the activation of phonetically motivated assimilation is a subjective, optional choice.

On the ninth rule, the founders of the traditions seem to have included grammatical functions in phonetic realizations of sounds. There is no substantial support for this in current phonetics; nor can we find a refutation for their position (Lannoy, 1997). To what extent can grammar provide a base for phonetic realization of phonemes can be a valid issue for future investigation.

Finally, the issue of the /m/ assimilating in place to a following /f/ sound seems to contradict the rationale of assimilation. While assimilation is considered to be based on natural speech which reduces the recognition features of the sounds, other rules are justified on the basis of avoiding phoneme overlap (Cragg, ۱۹۷۳). Pronouncing 'Who thanks?' as /mayyashkor/ produces a name of a female in the

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first word, which does not fit in the context. On the other hand, assimilating the /m/ to the /f/ would not bring in as much semantic violation in the phrase.

Conclusion

This study has attempted to question the phonetic validity certain rules of Quranic tajweed within the general field of the sciences of the Quran reading in the tajweed style. The presentation was made from the perspective of socio-phonetics. Giving special attention to the holy word is a universal element of faith in world religions and has historically been the prime motive for many pioneering language studies. The survey of tajweed practice has shown that the same reader may not be consistent in his style. The variations, however, whether in reading style or vocalization, do not undermine the sanctity of Quran, its meaning, or its form.

The paper aimed at finding elements in tajweed rules of vocalization that were based on principles in phonetics that still hold validity. It also aimed at identifying rules that do not meet criteria of phonetic principles, especially as regards consonant regressive assimilation. Most people who are exposed to the tajweed practice are now familiar with only one reading: Hafs from Naafi'. Despite its international standing, it is not any different from the less known styles in that they all have some phonetically unmotivated ways of vocalization. It is my humble suggestion that the unmotivated vocalizations be brought to what is phonetically plausible.

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