



Mora in Basrah Arabic: A Morpho-Phonological approach

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Abstract

This paper has been written to fall within the orbit of the moraic framework of the syllable, particularly the syllable weight, of Basrah Arabic. Universal as its nature is, mora, when studied and then applied, has, metaphorically speaking, the power of casting its phonological 'spell' over the problems of the morpho-phonology of Basrah tri-segmental verbs, adjectives, and nouns which have popped up in the context of investigating the behavior of Basrah syllabicity, and thus the mora 'spell' gets these problematic issues easily solvable and surmountable. The problems overcome by applying the moraic model are of two facets: some of them are phonologically-based problems and others are morphologically-based ones. Either case, mora is manipulated to throw its shadow on them equally and adequately. With this in mind, the application of moraic aspects to some Basrah verbs presupposes a drastic shift in segmental durations, namely, vowel ones when occurred word-medially. Among different results reached by this paper is that Basrah Arabic syllabic templates of certain verbs, adjectives, and nouns need to be pinpointed from the mora-tier angle other than from the CV-tier and X-tier angles.

Keywords: Mora; Basrah Arabic; Syllable weight; Morpho-phonology; segmental duration

1. Introduction

Reckoned as the most dominant prosodic unit in the phonology of a syllable, mora is set forth to elucidate how syllable weight would be marked and determined (i.e. whether the syllable is light or heavy). Traditionally, syllable weight is referred to as being closely related to the phonological length of a particular syllabic unit, namely stressed vs. unstressed syllables. The moraic model of analyzing the syllable has not taken place in a vacuum. It really manifests the irrelevance of onsets (consonantal segments at the beginning of a syllable) to syllable weight, and instead, rhymes (non-consonantal segments in addition to the final sequence of consonantal ones) play a pivotal part in the demarcation of such a weight. The moraic application to syllable weight is very much activated in many language and dialects, and in the present paper, an attempt is made to employ a moraic analysis so as to unveil some sort of problems of the morpho-phonology of syllable weigh in Basrah Arabic (A sub-dialect of Iraqi Arabic).

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The nature of these problems, first of all, resides in that some Basrah one-syllable words show a difference between a canonical syllabic pattern of (CVCC) and the one of (CCVC). Next, another problem arises as to how Basrah vowel duration is strongly influenced by particular lexical or morphological contexts. Important as it is, the moraic model has been manipulated to cast a shadow on how a syllable is approached at the phenomenon of phonology-morphology interaction. This study is basically orientated to a data description adopted by Abdul-Sattar (1997) in which lexical items and expressions presented in Basrah Arabic are thoroughly examined to check the extent to which they are subjected to the moraic approach of this dialect. The lexical items, as well as expressions, are transcribed phonemically as they are uttered natively and then they are translated into English.

2. Literature Review

2.1. The Moraic Treatment of the Syllable: A Juxtaposition of Two Phonological Models

Complex as it, the notion "mora" has burdened phonologists with how it is possibly defined and described in a straightforward way. However, laborious attempts have been made by Hyman (1985) and Hayes (1989) to depict its phonological model since it is very often juxtaposed with the skeletal slot model (Clements & Keyser, 1983; Levin, 1985).

In its original version, the skeletal slot model has been designed with an auto-segmental approach in which it has covered the concept of "tone" to be a vital element of phonological representation (Goldsmith, 1976). Linguistic pitch is possibly elucidated via tones in the first place, and next via both consonantal and vowel segments which are ordered on independent, equal tonal tiers. Practically speaking, words whose syllables are high-toned would have the feature [H], whereas those of being low-toned would take [L]. For example, the following are tri-syllabic words of three different varieties¹: English, Classical Arabic, and Basrah Arabic as in (1), (2), and (3) respectively:

- (1) /rɪ si: və/ "receiver" (2) /ka bu ra/ "he became old" (3) /maʃ mi:l hum/ "their customer"

| | |
LH L

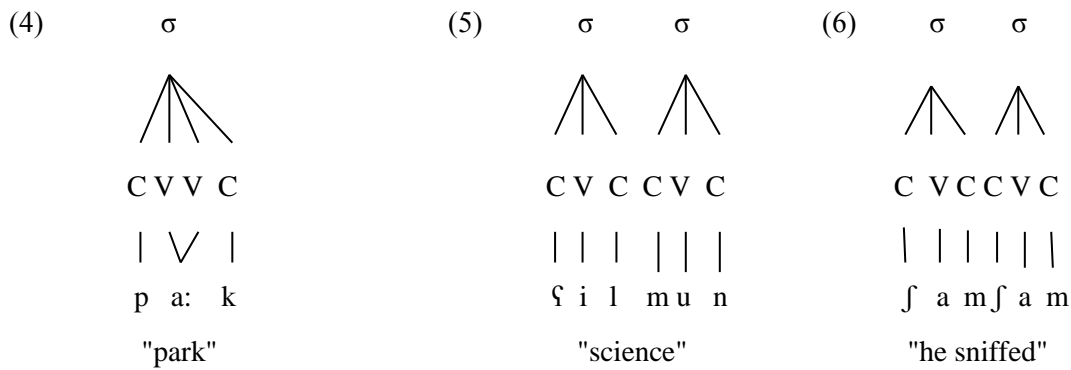
| | |
H L L

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L H L

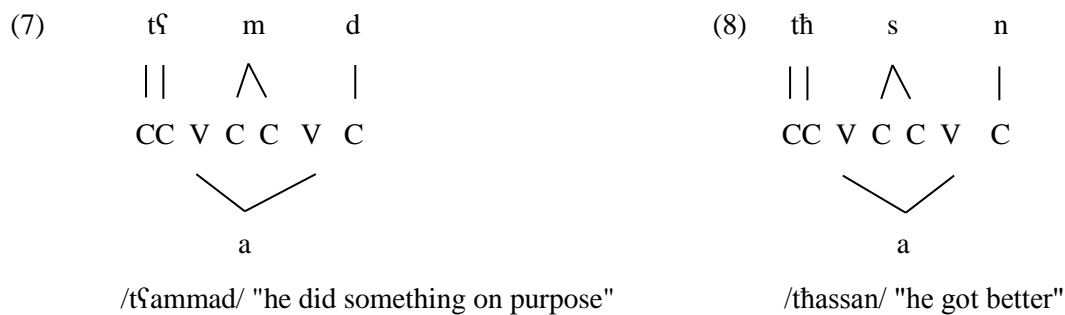
The above-mentioned examples illustrate that the auto-segmental model is working on word-based tone patterns and that the timing of an auto-segment can possibly be represented by means of an association line. The element with which the tone is attached is termed the tone-bearing unit (TBU, for short): the number of tones is automatically the same as that of TBUs.

It has already been pointed out that tone is obviously embodied as being an independent string of segments. However, when produced, words are of a growing tendency to have segmental duration². The concept of segmental duration has triggered off the real beginning of the CV slots model (Clements & Keyser, 1983). That the syllable governs different segments indirectly entails that there is some sort of an extra layer of structure between the two, i.e. the CV tier. This tier serves the purpose of determining "the syllabicity of the segment": a segment may either be central (nucleus) or marginal (coda or onset). This process can best be accounted for via segmental duration as well as segmental quality that is expressed in the phonological representation. The CV slots are made up in a way that single slots associate both non-geminate consonants and short vowels, whereas two slots are represented by double lines to refer to geminate consonants and long vowels.

The CV slots are dominated by the syllable nodes (symbolized as σ). For instance, a duration contrast for consonants and vowels in English, Classical Arabic, and Basrah Arabic can be tree-diagrammed³ in (4), (5), and (6) respectively:



Besides, the realm of the CV tier already initiated to equip segmental duration and syllabicity with a particular representation has been expanded to pave the way for the morphological representation to be activated on the basis of CV templates (McCarthy, 2002). Morphologically speaking, templates are labeled for those morphemes (e.g. Basrah Arabic ones) which are said to be restricted by virtue of strings of consonants and vowel positions. It is possible for Basrah Arabic verbal root forms such as /tʃmmd/ "to do something on purpose" and /tʃssn/ "to get better" to underlie different morphological verbal patterns on condition that the consonants and vowels constitute independent tiers and that adjacent slots of the same type can be occupied by the same segment as in (7) and (8):



2.2. The Phenomenon of Syllable Weight and the Evolution of Mora

It has been observed that most phonological accounts look upon certain syllable structures as being heavier than others. For example, in the English words of (9) and the Basrah Arabic ones of (10), stress is placed finally and thus they are all of a heavy weight:

(9) decrease /dɪˈkri:z/ betray /beˈtreɪ/ recommence /ri:kəˈmens/

(10) /taʔˈxi:r/ "delay" /miθˈwall/ "he has become perplexed"

It is apparent that in these words, the stressed syllables are all heavy, because their rhymes have a long vowel, a diphthong, or a two-consonant coda as in (9) or because they have a long vowel or a geminate coda as in (10). Otherwise, the stressed syllable is referred to as a light one when its rhyme is composed of neither a long/ diphthong peak nor a coda as in (11), or of a short peak with one-consonant or a zero coda as in (12):

(11) elephant /ˈɛlɪfənt/ platitude /ˈplætətju:d/ cinema /ˈsɪnəmə/

(12) /hɪʔa/ "he talked" /daxla/ "the wedding night" /fatra/ "period"

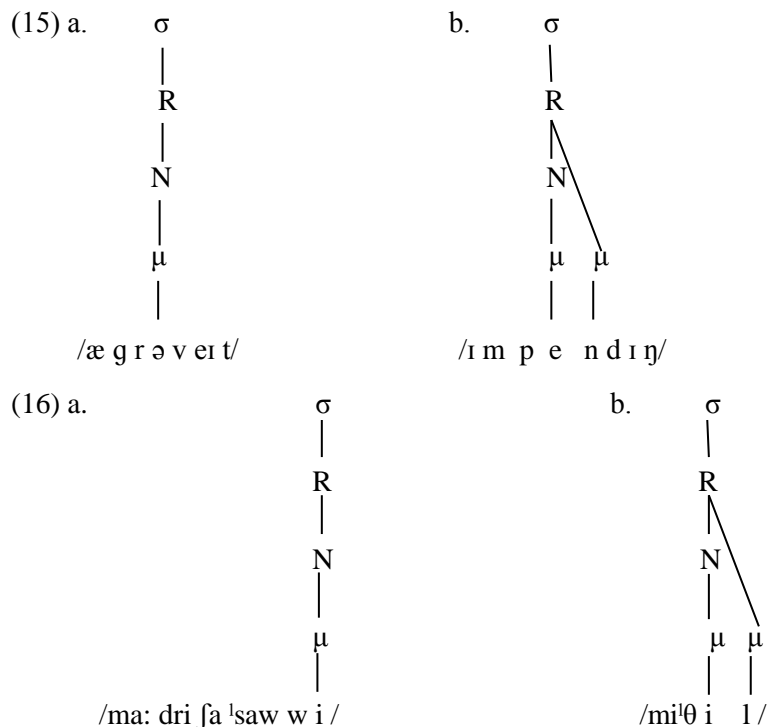
Given that the binary opposition of heavy/light syllables is the most predominant of the syllabic structure of languages, mora is introduced to be a phonological unit, originally derived from the phonological analysis of Japanese⁴ and symbolized by the Greek letter "μ" (Hogg, 1992). It is convenient to use and then to be thoroughly described as follows: a heavy syllable is a syllable that has

two moras, i. e. that branches, while a light syllable is one that consists of one mora, i.e. it does not branch. What is logically implied in the forgoing description is that syllable onsets are entirely irrelevant whether they are complex or simple, and this can clearly be illustrated in the penultimate syllables (i. e. the ones before the last) of English words and in the last syllables of Basrah Arabic words as in (13a and b) and (14 a and b) respectively:

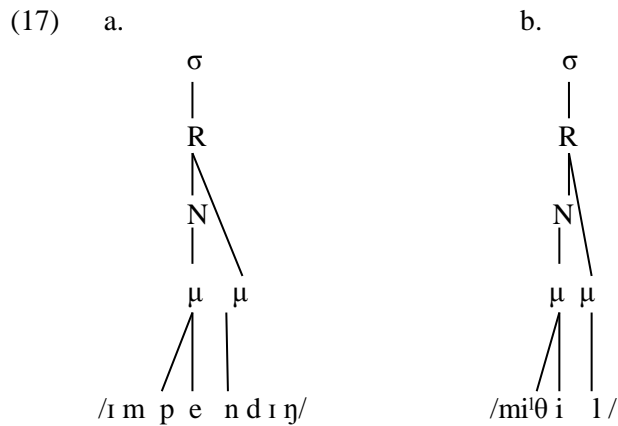
(13) a. /ægrəveɪt/ "aggrivate" b. /ɪm'pendɪŋ/ "impending"

(14) a. /ma:driʃa'sawwi/ "I do not know what to do" b. /mi'θil/ "like, similar"

On the ground of skeletal slots, the moras of the previous instances are possibly tree-diagrammed as follows:



As stated above, the onset consonants do not play any crucial role in mapping mora-based branching trees and this, once again, confirms that moraic templates are the normal reflection of syllable weight whose function is to reveal how many skeletal slots are computed in the rhyme to determine its heaviness or lightness. However, the marginal role played by the onset consonants in the mora-based diagrams should be reshuffled in so far as the prosodic structure of a syllable is concerned, i.e. syllable units seen as prosodic components have to be licensed in succession: in prosodic phonology of the syllable, elements have the ability to license other ones via a relational property which marks them (see below). They are all obliged to construct a prosodic structure in a linear way (Nespor & Vogel, 2012). Accordingly, syllable onsets⁵ are to be affiliated to the syllabic structure by associating them to the first mora without having mora of their own and without contributing to syllable weight as in (17a) and (17b):

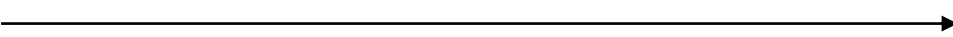


The very use of the notion of prosody to account for the moraic representation of syllable weight is not something new nor simple and straightforward in phonological literature. It dated back to some phonologists' works such as Hyman (1985) and McCarthy & Prince (1990) who have unleashed floodgates to the concept of mora to be subsumed under the prosodic approach of the syllable. Opening such prosodic horizons for the moraic representation of the syllable makes a big push into changing the concept of the syllable from being an inevitable core of the constituent structure approach to the one of the moraic approach. In Hyman's postulated theory, rather than viewing the mora typically as being a full constituent of the syllable, it is basically a syllabic sub-constituent whose function is to systematize different segments in a form of constituent texture. It, in this sense, becomes a prosodic unit⁶ simply because all segments are, in a way or another, affiliated to it.

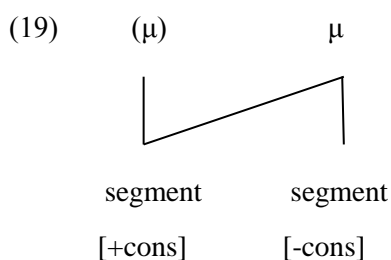
This line of Hyman and his followers' argument is neither strange nor vague in the prosodic school of thought. It is a real embodiment, if not an application, of the Principle of Prosodic Licensing (PPL) (originally proposed by Itô (1989)) which stipulates that the whole phonological units should be licensed in such a prosodic way that they belong to the higher prosodic structure. The (PPL) paves the way to conclude that all segments, in a particular prosodic construction, are interwoven in a hierarchical relationship as in (18):

(18)

segments	moras	syllables	feet	phonological words
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Low  High

More importantly, the concept of mora does not only find its special phonological status in prosodic phonology via the application of the (PPL), but it also sets out its road map in lexical phonology when the Onset Creation Rule (OCR) is set up to account for the following underlying representation of the syllable: every segment is primarily furnished with a mora (μ). When two segments with [+consonantal] and [-consonantal] are respectively adjacent, the first segment loses its mora in a way that it would be attached to the next one as in (19):



What is worth-noting in (OCR) is that the parentheses enclosing the first mora illustrate that it is, first of all, available in the underlying structure, but it is, later on, deleted by the application of (OCR). The availability of the first mora and then its deletion is lucidly represented by a link from the [+consonantal] segment to the second one. In terms of the CV slots model of the syllable, (OCR) actually initiates what is well-known as a CV mora which, by itself, provides the go-ahead of designing fairly complex syllable onsets (Ridouane et al.: 2014). Finally, a scrutinizing look at both (PPL) and (OCR) proves that they are two sides of the same coin in that syllables should commence with onsets as relative as possible.

3. Method

As being a morpho-phonological approach addressing the realm of the non-linearity of word representations, the paper adopts entirely tree-diagrammed examples of Basrah Arabic. In essence, the word and expression examples cited from Abdul-Sattar (1997) reflect a data-analysis orientation in line with the concept of mora as a phonologically solving device apt to various pitfalls of Basrah lexical items. Moreover, two-dimensional figures of the sonority scale are also manipulated to confirm that the moraic structures of Basrah Arabic syllables cope with the sonority values of the sound segments that set up the syllables in concern. Throughout the discussion of mora and its relation to Basrah Arabic lexemes, the reference would be made to certain phonological rules that are necessarily required to throw some light on how particular phonological phenomena can best be formalized.

4. The Morpho-Phonological Reality of Syllabic Mora in Basrah Arabic

As profoundly ingrained in the structure of the syllable, mora has its own morpho-phonological reality in different Basrah syllabic word patterns which are, in fact, viewed as phonetic "mirrors" reflecting the original tri-segmental roots of words of particular grammatical categories. Here, mora entails a binary treatment of phonological and morphological trends. In the first place, mora basically comes into being as a phonological response to the mapping of the templates of Basrah syllables. Secondly, mora is also resulted from the way of knitting the morphological textile of Basrah words.

Earlier in the introduction of this paper, a reference has been made as to how the canonical nature of some monosyllabic words poses certain problems in relation to such particular patterns as CVCC and CCVC. The core of these problems resides in that a vowel epenthesis⁷, more accurately anaptyxis, must be inserted to deconstruct consonantal clusters (Lass, 1984). In its essence, an epenthesis is a phonological phenomenon according to which a vowel segment may be, in a given context, realized from zero with a phonotactic motivation. In Basrah Arabic, an epenthetic vowel exerts two positional influences on the sequel syllabification of tri-segmental roots of words (CCC): it splits either the initial two consonants to get a pattern like (CVCC) or the final two ones to have a pattern such as (CCVC) as formalized in phonological rules of (20) and (21):

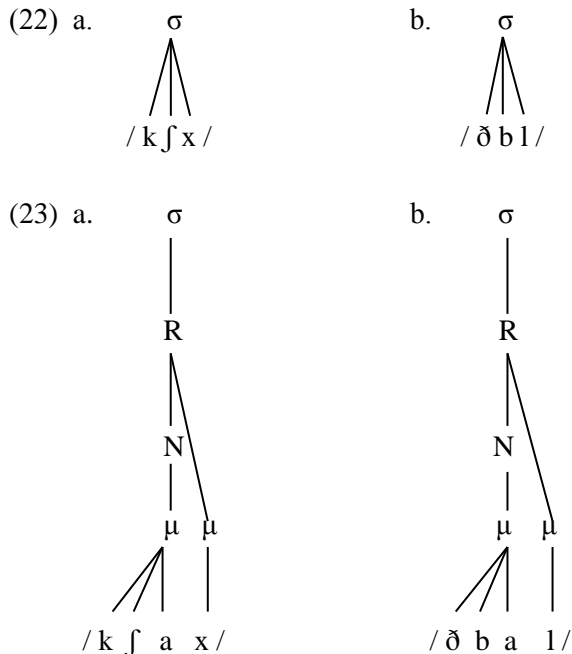
(20) $\emptyset \longrightarrow V/ \text{ ——— } CC$

(21) $\emptyset \longrightarrow V/CC \text{ ——— }$

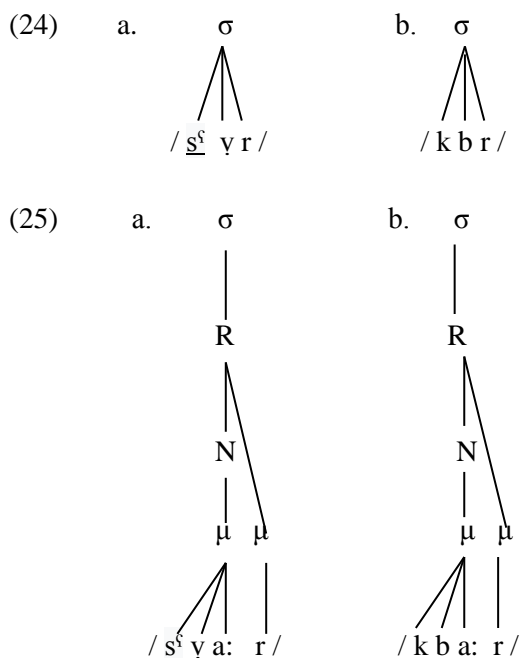
Whether parsing the initial two-consonant cluster or the final two-consonant one, the locus of a vowel epenthesis is highly affected by the morphological class of the base in question, namely, verbs, adjectives, or nouns. So, it is possible to argue that Basrah Arabic verbal and adjectival forms undergo a vowel insertion of the last two consonants, whereas, in nominal forms, a vowel epenthesis is active initially.

The vowel epenthesis serves the purpose of re-mapping the syllable structures of tri-segmental roots so as to witness the birth of underlying moraic slots. This can lucidly be shown in (22 a and b)

where tri-segmental roots of Basrah verbs such as /kʃx/ "to smarten up" and /ðbl/ "to wither" are drawn in a form of syllable-based bare tree diagrams and also illustrated in (23 a and b) whereby the verbal forms /kʃax /and /ðbal/ are diagrammed according to a mora-based trees:

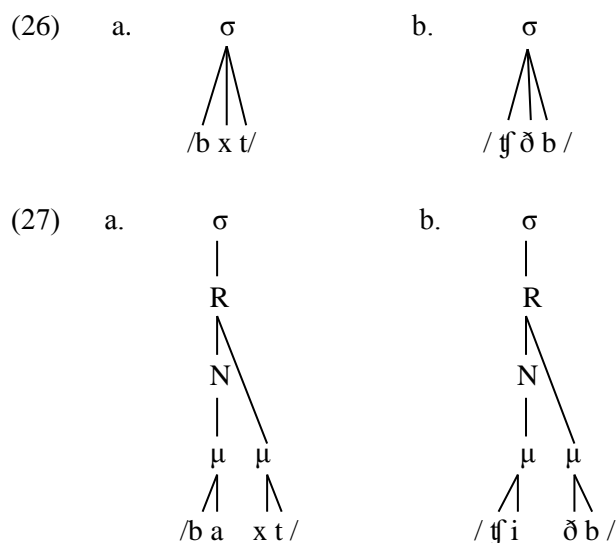


By analogy to Basrah Arabic verbs, adjectives clearly behave alike. A vowel epenthesis tends to penetrate the clustering of the last two consonants of tri-segmental adjectival roots. Syllable-based diagrams of (24 a and b) reveal tri-segmental roots of such adjectives⁸ as /ṣʃvr/ "to be small" and /kbr/ "to be large" in comparison with those of (25 a and b) in which the adjectival forms /ṣʃ ʔa:r/ "small (p.)" and /kba:r/ "large (p.)" are moraicallly diagrammed:

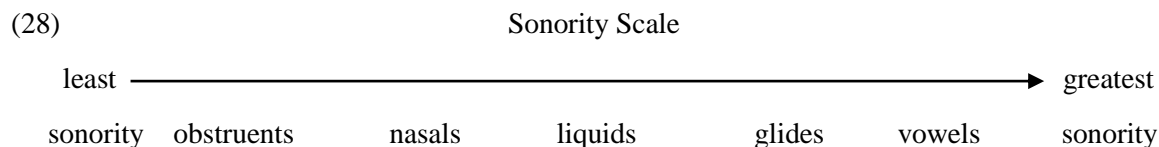


As being introduced in the foregoing argument, nominal forms presuppose a different vowel insertion whose locus splits up their two-consonant initial clusters. Exemplary words of tri-segmental roots include /ʃlb/ "a dog", /bxt/ "fortune", /wld/ "a boy", /bɣl/ "stinginess" and /ʃðb/ "lie" compared with their full-formed counterparts: /ʃalb/, /baxt/, /wald/, /buxl/ abd /ʃiðb/. In (26 a and b), syllable-

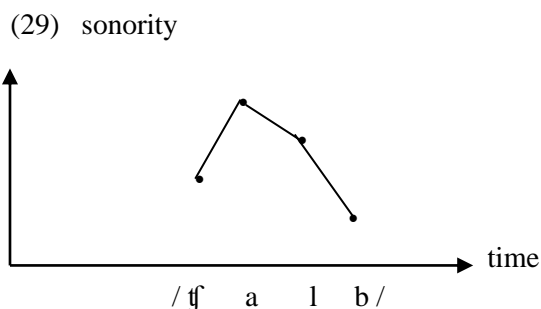
based diagrams are drawn to illustrate two examples of nominal tri-segmental roots, while in (27 a and b), the same examples are embodied via mora-based representations:

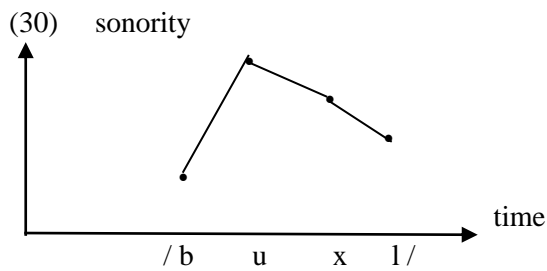


What makes Basrah verbal/adjectival and nominal locations of a vowel epenthesis markedly diverge from each other divulges that they do not carry the same expository value: at the first end of the scale, both verbal and adjectival vowel insertions are of lexical or morphological repercussions, while at the other end of the scale, the nominal ones seem to be of phonological orientations. To put in another way, nominal vowel epentheses are overtly dominated by the sonority "atmosphere" of the adjacent segments in their trilateral bases. Sound segments are not haphazardly distributed in syllables, but they are patterned in a systemic hierarchy known as Sonority Scale (katamba, 1989; Giegerich, 1992; Zec, 1994; Gussenhoven & Jacobs, 2005). The sound sonority is chiefly based on the kinetic energy of the airflow pulses which are, in turn, energized acoustically. Sounds are thus ranked in terms of their relative loudness: the louder a sound is heard, the more sonorous it is:



In Basrah nouns, a vowel is accordingly inserted before the last two consonants on the condition that the first consonant is more sonorous than the second one. The rationale behind such a constraint is that in bimoraic syllables, there is a growing tendency to exhibit a systematic asymmetry in sonority hierarchy of segments: the first mora is represented by a vowel epenthesis (i.e. the nucleus) is naturally more sonorous than the second mora manifested as coda. Turning back to Basrah nominal forms, e.g. /ʃalb/ and /buxl/, it is possible to illustrate their sonority profiles by the following graphic representations:

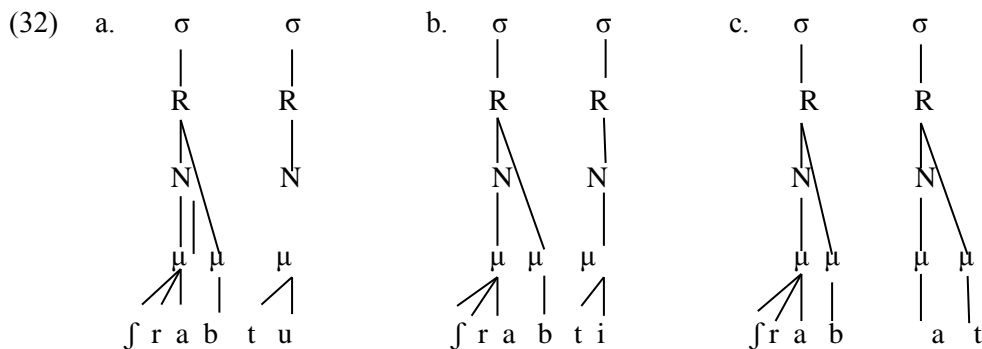
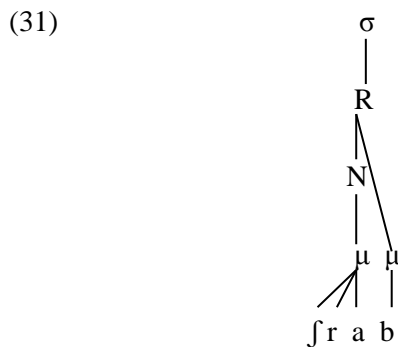




Apparently, the last two consonants (coda) metaphorically prefer to commence with "a bang" (more sonorous consonant) and to end with "a whimper" (less sonorous one). The sonority of Basrah nominal coda is thus of a bang-whimper transition.

Contrary to the phonological behavior of nouns, Basrah verbs violate sonority parameters of adopting anaptyctic vowels in their trilateral bases, i. e. they turn "a blind eye to" the degree of consonantal sonority. A vowel insertion is instead subject to the internally morphological paradigm of verbs. Like Standard Arabic and its own dialects and sub-dialects, the morphology of verbal forms of Basrah Arabic abounds in three illustrative declensions: Perfective, Imperfective, and Imperative. The syllabic templates of their stems are highly influenced by the nature of affixations to which they are attached and by the presence of certain alternations with which they are associated.

The Perfective declension, among others, ill-forms, albeit plays havoc with, the universality of the bi-moraic constraints by which Basrah verbal mono-syllables are governed in two remarkable ways. First, in Perfective forms other than the first person singular one, the two-mora syllable would be deviated from their line of syllabification as a result of attaching suffixes like (-tu), (-ti), and (-at) as in /ʃrab-tu/ "you (m. pl.) drank", /ʃrab-ti/ "you (f.) drank" and /ʃrab-at/ "she drank" respectively. Once added to the verb, the suffixes change the verbal mono-syllabic structure of (31) into di-syllabic ones of (32 a, b, and c). Secondly, the number of moras would be word-internally augmented: the two moras either become three or four moras for each syllable (three or four moras on a row):



5. Vowel Duration and Mora Reduction

In purely phonetic treatises on sound segments, there is general consensus on segregating vowels into two major categories: vowel quality and quantity (Hammond, 1997; Kreidler, 2004; Ladefoged, 2012; Gruttenden, 2014). The former incorporates an undeniably sonorant parameter of vibrations into airflow when vowels are uttered. The parameter of vibrations is determined by the size and shape of the vocal tract, and thus vowel segments are of quality divergence as to what different postures the tongue takes and as to what different configurations the lips adopt. The vowel quality, like any other sound qualities, is a speaker-specific articulated. The latter is usually referred to as a term possibly replaced by other alternative terms like vowel duration or vowel length. Vowel sounds are not only fallen within the ambit of different audible impressions of quality, loudness, and pitch, but they are also perceived in different duration by a listener. Vowel duration values vary considerably from word to word in terms of such certain criteria as whether the word is said in a rapid, casual way or in a slow, careful way, whether the syllable having the vowel is stressed or unstressed, and whether the vowel is followed by a voiced or voiceless consonantal segment. Such variations of length within words highlight the notion of rhythmic delivery of sounds and consequently implant the impression that some syllables are longer than others (earlier in Section 2.1, it has been hinted that different syllable models take advantage of the concept of segmental duration to be a stepping stone towards mapping the CV components of the syllable). Variations of duration are possibly measured on different grounds: acoustic, perceptual, and linguistic. Nevertheless, all of these measurable grounds have not roughly corresponded because of their own idiosyncrasy.

Labels like "short" and "long" vowels are the product of the linguistic dimension that is lucidly set to reveal two grades of duration. However, they do not necessarily constitute absolute duration judgments. All absolute durations, if existed, are seen as being 'a melting-pot' in which the two degrees of duration can phonetically be interpreted via their mutual relationship. In a word, the quantitative (length) opposition among vowels carries less contrastive weight than the qualitative one: word meanings are highly affected by the latter rather than by the former.

In Basrah Arabic, the durational relationship is also brought about as having a morpho-phonemic framework in which the long vowel in a particular morpheme of a particular verbal declension is shortened or altered into the short one. This phenomenon is considered another kind of vowel length and is usually termed as a morpho-phonemic alternation between long and short vowels. The vowel change involves a shift in verbal declensions: the medially long vowels in verbs of imperative and imperfective declensions are reduced to become short in the perfective one with exception of the third person:

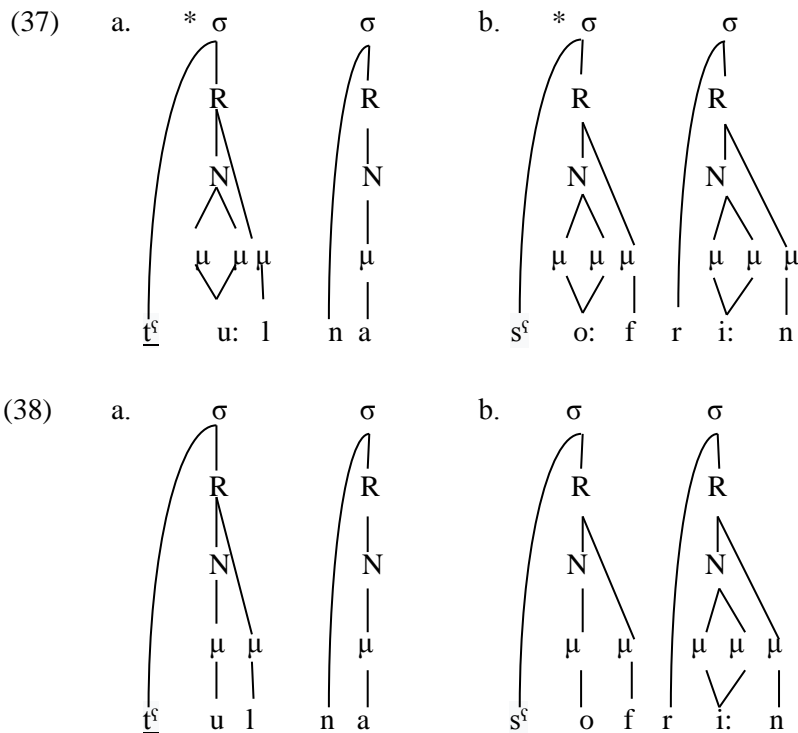
- (33) s^hu:m "fast" (imperative) → s^humt "I fasted" (perfective)
 (34) ʔ^hu:l "I can reach" (imperfective) → t^hulna "we can reach" (perfective)
 (35) s^ho:frun "they whistle" (imperfective) → s^hofri:n "you (fem) whistle" (Perfective)

The foregoing instances reflect semantically related morpho-phonemic alternant forms which are best illustrated by postulating a derivational rule commonly known as a *via rule*⁹ (Hyman, 1975; Lass, 1984):

- (36) V: → V / ---- CC#

A moraic approach of the syllable structure sets the scene for vowel reduction in the Basrah verbal declension of perfective to be fully justifiable as far as a universal constraint on syllable form is activated. Syllables whose long vowels are closed by two consonants (the first is the coda of the original verb syllable and the second is the onset of the suffix attached) are viewed as ill-formed structures since the constraint bans super-heavy syllables word-internally. The nature of super-heavy

syllables is chiefly based on having tri-moraic structures whose rhymes are of three branches, i.e., two moras (portions) for a long vowel (the nucleus) and one mora for a consonant (the coda). For this reason, long vowels must be shortened in order to reduce their moraic portions, and hence tri-moraic structures of Basrah super-heavy syllables would become bi-moraic ones in conformity with the universal constraint as illustrated in Basrah verbs which are ill-formed as a result of not involving mora reduction (37 a and b) but they are well-formed when applying mora reduction (38 a and b):



6. Results and Discussion

The concept of "mora" has been a very long time in theoretical "gestation" as a result of its crystallization and development out of two slot-based perspectives in which general frames gather them, but to-the-point details segregate them.

Remarkable as it is, mora can decisively be accounted for as a "one-in-all" notion simply because it, when being developed and then applied, shades into other phonological concepts and representations such as syllable weight and prosody.

The moraic model of Basrah word syllables has two distinguishable amalgamated dimensions of representations, i. e. phonological and morphological ones. This tendency proves that mora is not at all a unilateral phenomenon when applied to Basrah lexical items but it is in harmony with the idiosyncrasy of each language or dialect in question. The morphological or lexical axis is, to some extent, a foregone conclusion in as far as moraic builds-up of Basrah word syllables. Its manifestation side by side with the phonological one plays central roles in framing the final picture of the behavior of Basrah syllable weight.

In fact, Basrah Arabic sets a typical example of some dialects, albeit languages, as being a rarity to have tri-moraic templates whereby vowel shortening becomes inevitable to belittle the number of moras within the syllabic skeleton of certain words medially as a result of morphological/phonological concatenation. This may be fully justifiable on a phonetic ground when a long hard look is given to the way Basrah vowels (perhaps Iraqi and Standard Arabic ones are included) are articulated in highly

variable contexts. In some cases, durational parameters may be perished and thus short vowels tend to be lengthened and long vowels become shortened.

7. Conclusion

It is plain that mora is not a phonological phenomenon independent from the concept of a syllable. Rather, it is an in-between level of structure that has been proposed to forge common ground between the number of segments and the syllable particularly in relation to syllable weight. Mora, as such, serves the purpose of problem-solving addressed to the skeletal tier of the syllable that is sometimes doomed to failure in accounting for two issues: the first is segment omission in the case of the rhyme rather than in the case of the onset, and this is quite normal for an approach whose general tendency is to assign the syllabic onset to the mora of the rhyme. The second is that some dialects or languages vary considerably as far as how many segments are available in the rhyme regardless of their number in the onset.

On this principle, the moraic approach is highly employed to tackle the problematic issue of the morpho-phonological status of Basrah Arabic verbs/adjectives and nouns. The problem has been put to an end when a vowel epenthesis enters the scene to deconstruct the final clustering of tri-consonantal segments. In addition, moraic structures of some Basrah Arabic verbs are to be trimmed in an attempt to avoid violating a universal constraint on syllable forms. The process of trimming the number of moras word-medially comes into effect when the duration of long vowels has to be decreased in particular contexts. In a word, a moraic approach is conceived of as being of a twofold task, namely, it is both a means and target at the same time. It is set forth to solve the problems arisen from the syllabic components of certain verbs, adjectives, and nouns of different dialects, and it comes forward a viable alternative to other approaches of the syllable like the CV-tier or the skeletal one.

Notes

1. These preliminary examples are not cited to give an impression that the paper is geared to centre on something contrastive among these three varieties. It is, from the very beginning, an endeavor to assert the universality of the concept of mora and syllable.
2. In the post-generative theory of phonology, segmental durations, particularly vowel durations, have been unavoidable 'tuning points' required to diagnose the phonological behavior of CV-tiers of the syllabic nature of words.
3. Tree-diagrams are of different sorts and of multi-purposed uses. The present papers adopt those diagrams whose mora tiers are shown and are represented by mora slots (μ) instead of other ones in which CV-tiers are given priority to display C slots and V slots of the syllable in general.
4. Surprisingly, most of the phonological concepts and phenomena are derived, albeit borrowed, from languages other than English and Arabic, for example, mora (Japanese), vowel harmony (Turkish), arch-phoneme (German), nasalization (French), and so on.
5. In a linear treatment of the syllable structure, for example, CVC, onsets, though marginal (i.e. they may or may not present), are basic elements of the overall picture of the syllable and are of phonologically independent identity when compared with nuclei and codas especially in such a matter as phonotactic criteria. On the other side, in a non-linear perspective of the syllable template, the one adopted in this paper, onsets do not only remain marginally-based elements, but they are also subservient to rhymes (nuclei and codas).

6. It is very much convenient to state that prosody can be best looked upon as a 'device of transforming' by means of which mora is possibly converted to be a unit belonging to a rhythmical realm of a word rather than to a syllabic realm of a word.

7. In phonological literature, it is worth-noting that there are some phonological processes like a vowel epenthesis or a vowel elision which, in a way or another, contribute to reconstruct the build-up of the syllable in two reliable ways: they either distort the original structure of the syllable in order to give birth to a new syllabic model apt to some languages and dialects or they develop and improve the origin via adding or deleting some of its components on condition that it is 'survival of the fittest'.

8. On the same footing, it is possible to consider such Basrah adjectives as /brdan/ "he feels cold", /hran/ "he feels hot", /bðat/ "he is selfish", and so on.

9. The purpose served by the via rule is not to generate new different underlying forms. Rather, it is stipulated by twinning distinct underlying forms already prevailed in a given context.

References

- Abdul-Sattar, Mohammed, Ahmed (1997). *Elision in Standard English and Basrah Arabic*. Unpublished Ph.D. Thesis. Basrah: University of Basrah.
- Clements, George N. & Keyser, Samuel Jay (1983). *CV phonology: A generative theory of the syllable*. Cambridge, MA: MIT Press.
- Giegerich, H. J. (1992). *English Phonology*. Cambridge: CUP.
- Goldsmith, J. A. (1976). *Auto-segmental Phonology*. Bloomington: Indiana University Linguistics.
- Gruttenden, A. (2014). *Gimson's Pronunciation of English*. London: Edward Arnold.
- Gussenhoven, G. & Jacobs, Haike (2005). *Understanding Phonology*. London: Arnold.
- Hammond, M. (1997). vowel quantity and syllabification in English. *Linguistic Society of America*, 73(1), 1-17.
- Hayes, Bruce (1989). compensatory lengthening in moraic phonology. *Linguistic Inquiry*, 20, 253–306.
- Hogg, R. (1992). *The Cambridge History of the English Language*. Cambridge: Cambridge University Press.
- Hyman, L. M. (1975). *Phonology: Theory and Analysis*. New York: Holt, Rinehart & Winston.
- Hyman, L. M. (1985). *A theory of phonological weight*. Dordrecht: Foris.
- Itô, J. (1989). A prosodic theory of epenthesis. *Natural Languages and Linguistic Theory*, 7, 217-259
- katamba, F. (1989). *An Introduction to Phonology*. London: Longman.
- Kreidler, C. W. (2004). *The Pronunciation of English*. Oxford: Blackwell.
- Ladefoged, P. (2012). *Vowels and Consonants: An Introduction to the Sounds of Languages*. Oxford: Blackwell
- Lass, R. (1984). *Phonology: An Introduction to Basic Concepts*. Cambridge: Cambridge University Press.
- Levin, Juliette (1985). *A metrical theory of syllabicity*. PhD dissertation, MIT.

- McCarthy, J. J. (2002). *A Thematic Guide to Optimality Theory*. Cambridge: Cambridge University Press.
- McCarthy, John & Prince, Alan (1990). Foot and word in prosodic morphology: The Arabic broken plural. *Natural Language and Linguistic Theory*, 8, 209–83.
- Nespor, M & Vogel I. (2012). *Prosodic Phonology*. Berlin: Mouton De Gruyter.
- Ridouane, R. Hermes, Ann. & Hallé, Pierre. (2014). Tashlhiyt's ban of complex syllable onsets: phonetic and perceptual evidence. *Language Typology and Universals*, 67(1), 7-20
- Zec, D. (1994). *Sonority constraints on prosodic structure*. New York: Garland.

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