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SONORITY BETWEEN ARABIC AND ENGLISH

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إِنَّ وَلِيِّيَ اللَّهُ الَّذِي نَزَّلَ الْكِتَابَ ۖ وَهُوَ يَتَوَلَّى الصَّالِحِينَ

الاعراف (196)

Dedication

TO

Our parents

Our teachers

Our dearest brothers and sisters

And for everyone supported us

ACKNOWLEDGMENTS

Firstly, We would like to express our gratitude to our supervisor ,Mr .Kareem Ashoosh, for his patience, motivation and enthusiasm in guiding us to complete this paper . We have come to realize that success comes with hard work. We also want to say thanks for our families and our masters in the Department Of English.

Chapter One

SONORITY BETWEEN ARABIC AND ENGLISH

1-Introduction

Sonority is a nonbinary phonological component categorizing sounds into a relative scale. Numerous forms of the resonation order exist; a typical one is vowels > glide > liquid > nasals > fricatives >stop. The phonetic premise of resonation is antagonistic; it is generally yet defectively associated with commotion. An essential capacity of resonance is to linearize fragments inside syllables: more resonating sounds have a tendency to happen all the more intently to the pinnacle. (Steve parker –sonority)

Then in dealing with the syllabification ,it enables the speaker to know the internal structure of the syllables :onset/is the consonants before the vowel. Peak / is the vowel .While coda/ is the consonants after the vowel .In this section many principles appear to solve the problem of the coda if it comes between two syllables ;for example ,SSP(Sonorant Sequence Principle), MOP(maximal onset principle) and Phonetic of medial consonant sequence.

Through the acoustic term or sonority scale in which each sounds start to raise from stop, affricative, fricative ,nasal, liquid, glide and vowel then it falling in the opposite way.so it arrange the sounds hierarchically in order to form syllable . A syllable is the littlest conceivable unit of discourse. Each expression must contain at least one syllable. It's helpful to discuss discourse as being made out of fragments, for example, vowels and consonants. A syllable can likewise be separated for depictions purposes into it's onset and rhymes.

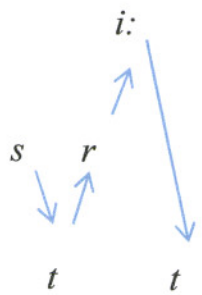
Finally, with Arabic sonority and the discussion of the two sounds /s/ and / ʂ / and how they phonetically have the same place ,manner of articulation and the state of the vocal cords. But this problem is solved acoustically by examine their sonority hierarchy through the spectrogram.

2-sonority in syllabification

Syllable is a semantic significant unit in hierarchically sorted out prosodic structure. It has internal constituent structures and they are parallel expanding. Each syllable consists of onset and rhyme-(peak-coda).Each two syllables are connected by the coda of the first syllable with the onset succession of the following syllable. For that reason many principles appear such as;

- *SSP(Sonorant Sequence Principle):*

  sounds are in climbing resonation to the vowel, and after the vowel sounds are in portraying to the trough, for example, street/stri:t/



The problem of SSP is that we don't know climate the trough consonant has a place with the previous coda or the following onset.

- *MOP (maximal onset principle)*

  consonants ought to be doled out to the syllable onset instead of syllable coda unless doing as such would disregard widespread or dialect particular limitations.

- *Phonetic of medial consonant sequence:*

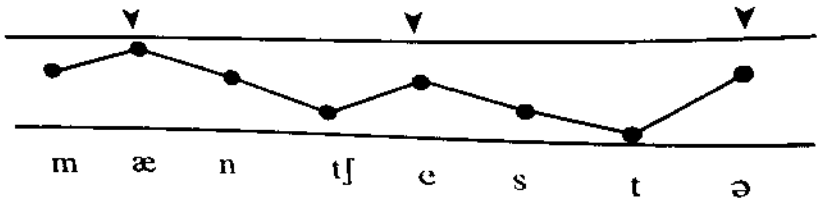
  Any Medial consonant sequence is gone before by /e, æ, ʌ, ɑ/ the primary adjusts left to be a coda of the main syllable, if the arrangement is gone before by alternate vowels it is the onset of the following vowel, For example;

  Extra /ekstrə/ →/ek.strə/, Father /fɑ:ðə/ → /faa:.ðə/ Mother /mʌðə / →/mʌð.ə/. book2

In any speech some solid emerges as more noticeable or sonorous than other , i.e. they are felt by the audience members to be more sonorous than their neighbors .Another method for judging the resonance of sound is to envision it's ' conveying power'. Another method for judging the sonority of sound is to envision it's ' conveying power'. A vowel like [a] plainly has more conveying power than a consonant like [z] which in turn has more conveying power than a [b]. Surely the last stable , a plosive , has for all intents and purposes no resonation at all unless took after by a vowel . A resonation scale or chain of command can be set up which speaks to the relative vibrancy of different classes of sound ;while there is some contention over some of points of interest of such pecking order ,the principle components are not debated . one form of progressive system is as follows (the most resonating classes are at the highest point of this scale):

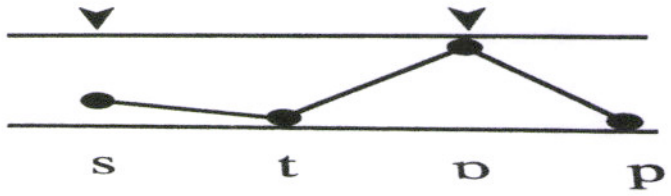
- *Open vowels*
- *Close vowels*
- *Glides /j/,/w/*
- *Liquids /l/,/r/*
- *Nasals*
- *Fricatives*
- *Affricates*
- *Plosives*

Moderate vowels are properly put between open and close. within the last three classes voiced sounds are more resonant than voiceless sounds. we have not beforehand utilized the terms 'float 'and 'fluid '. This is a subdivision of the classes 'approximant' : skims are short developments from a vowel-like position (e.g. English/j/,/w/), while fluid spreads sounds like English/l/,/r/, which have narrowing without rubbing however are not relatable to vowel sounds. Trills and folds are typically included with fluids, in spite of the fact that this isn't concurred by all (it fits well for English since trilled [r] and fluttered [r] are variations of the standard approximant [r] of RP).Using the resonance hierarchy we would then be able to shape or represent the fluctuating prominences of an utterance ,e.g



The number of syllables in articulation equates with the number of pinnacles of resonance. (Gimson,As,2008)

There are a few situations where forms plotted with the resonance hierarchy don't recreate outcomes about which accord with our instinct. Numerous such English cases in English include/s/in group ,as, in stop :



The shape of (stop) infers two syllables, while local speaker instinct is sure that there is just a single syllable. This recommends sounds underneath a specific level on the progression can't constitute peaks ,i.e. that classes from fricatives down words can't constitute crests in English. Formal explanations about the clustering potential outcomes of English consonants usually treat /s/ as a 'appendix' to syllables which may therefore abuse limitations on their resonation. (Gimson,As,2008)

3-Acoustic sonority

The sonority of a sound is it's loudness relative to that of other sounds with the same length ,stress, and pitch. Vowels like [i,e,a,o,u] here the audience hears the vowel [ɑ] has more noteworthy vibrancy (because of its being articulated with a more prominent mouth opening). So it's much simple to hear the low vowel [ɑ] than the high vowels [i,u].(Peter Landefoged & kilth Johnson ,2011)

The loudness of a sound depends fundamentally on it's acoustic power. The vibrancy of a sound can be evaluated from estimation of the acoustics force of a gathering of sound that have been talked on practically identical pitches and with similar degrees of length and stress. The low vowels [ɑ] and [æ] have more sonority resonation than the high vowels [u] and [i] . The approximate [l] has about an indistinguishable resonation from high vowel [i] . The nasals [m,n] have somewhat less vibrancy than [i], however more prominent resonance than a voice fricative as [s] . The voiced stop and all the voiceless sounds have almost little vibrancy. The level of sonority ought not be viewed as correct estimations. The acoustic force of various sounds may change significantly for various speakers. Accordingly, in some conditions, one speaker may articulate [i] with more noteworthy resonation than [l] Whereas another may not. . (Peter Landefoged & kilth Johnson ,2011)

We would now be able to see that one conceivable hypothesis of the syllable is that pinnacles of syllabicity correspond with pinnacles of resonance. In words, for example, visit , divide, condensation , there are clear pinnacles of resonance. In these words each of the syllable pinnacles has considerably more resonance than the encompassing sounds. The hypothesis likewise clarifies why there are contradictions

over words, for example, prism , seal , meteor. Distinctive individual may fluctuate in the quantity of pinnacles of vibrancy they have in some of these words. The last [m] in prism may have more noteworthy vibrancy than the first [z] for a few people , yet for nobody else . So, the [l] in seal and the second [i]in meteor may or won't constitute recognizable pinnacles of resonation. . (Peter Landefoged & kilth Johnson ,2011)

A resonation hypothesis of the syllable won't represent every single watched truth. It clearly flops in a word, for example, spa. This word is one syllable, however it must be said to contain two pinnacles of resonance. It comprises of three fragments, the first and the remainder of which have more noteworthy vibrancy than the second. A resonance hypothesis likewise neglects to represent the distinction in the quantity of syllables in the expressions (hidden aims and hid names) . For speakers who don't have a moment vowel in (hidden) , each of these expressions may contain a similar grouping of sections, specifically, [hɪdneɪmz]. In this manner, there are a similar number of pinnacles of vibrancy. In any case, the primary expression has three syllables, and the second has two. There are also number of words that numerous individuals can articulate with or without one of the syllables. Typical of these words are (paddling, frightening,reddening)Each of these words can be said as two syllables, with the division between them as appeared by the embedded period:['pæd.liŋ ,'fraɪt.nɪŋ. 'rƐd.nɪŋ]. On the other hand, they can be said as three syllables, with syllabic nasal or sidelong in the center: ['pæd.l.ɪnŋ,' fraɪt.n.ɪŋ.'rƐd.n.ɪŋ]. A few people assert that they make a qualification between lightning (in the sky)['laɪt.nɪnŋ] and helping (making light) ['laɪt.n.ɪŋ]. (Peter Landefoged & kilth Johnson ,2011)

One method for staying away from this trouble is to say that syllables are checked not by tops in resonance but rather by tops in prominence. The relative prominence quality of two sounds to a determined by what their relative vibrancy would have been whether they had a similar length, stress, and pitch. At that point we can state that, for instance, the [n]in (hidden aims) constitutes a pinnacle of unmistakable quality since (it has more stress or more length or both than the [n] in 'hid names'). (Peter Landefoged & kilth Johnson ,2011)

The problem with this sort of definition is that one can't express a cross linguistically legitimate method for consolidating resonance, length, stress, and pitch to frame prominence . Some portion of the issue is that the apparent noticeable quality of sounds depends on dialect particular weighting of phonetic factors, for example, length and resonance. What's more, some portion of the issue is that what makes a sound prominent is it's position in a word. There is, thus, no chance to get in which one can gauge the prominent of sound. Thus, the thought of a pinnacle of unmistakable quality turns into a totally subjective issue—it doesn't generally toss any light on how one characterizes a syllable. "A sound is prominent because it forms the peak of syllable; it's syllabic in light of the fact that it is prominent ". (Peter Landefoged & kilth Johnson ,2011)

A totally unique approach is to consider syllabicity not as property of the sounds one hears but rather as something created by the speaker. A hypothesis of this kind was advanced by the analyst R.H. Stetson, who recommended that each syllable is started by a chest beat, a compression of the muscles of the rib confine that drove more freshen up of the lungs.

Steton mentioned various objective facts of the activities of the respiratory framework. However, his cases about the activities of the muscles where almost all conclusions in light of his perceptions of the developments of the rib confine and his estimations of the weight of the air in the lungs. Tragically, consequent direct examinations of the action of the muscles themselves have neglected to affirm his hypothesis. (Peter Landefoged & kilth Johnson ,2011)

In summary , we can state that there are two kinds of speculations endeavoring to characterize syllables. In the first place, there are hypotheses in which the definition are as far as properties of sounds, length, stress and pitch. Second, there are speculations in light of the thought that a syllable is a unit in the association and arranging of the hints of an expression .In one sense, a syllable is the littlest conceivable unit of discourse. Each expression must contain at least one syllable. It's helpful to discuss discourse as being made out of fragments, for example, vowels and consonants, however these sections can be watched just as part of syllables. A syllable can likewise be separated for depictions purposes into it's onset and rhymes. The rhyming piece of a syllable comprises of the vowel and any consonants that come after it—a genuinely commonplace idea. Any consonants before the rhyme from the onset of the syllable. The rhyme of the syllable can be additionally partitioned into the "nucleus ", which is the vocalic part, and the "coda ", which comprises of any last consonants. Words, for example, "one " comprise of a solitary syllable which has just a rhyme, which is the nucleus . (Peter Landefoged & kilth Johnson ,2011)

4-Sonority in Arabic

The phonemes are universal system but languages are different from each other in specific parameters. In English, any phoneme has it's own features that differentiate it from other phonemes phonologically and we know quitely that any sound differ from the others either in place of articulation , manner of articulation or the state of the vocal cords; this means that in any language there are no two phonemes have the same features (phonologically speaking).

Though they are different phonemes, Arabic /s/,/ ʂ/ are having the same phonetic features for example; in their production both of them are having the same place of articulation (alveolar), both of them are having the same manner of articulation (fricative) and both of them are having the same state of the vocal cords(voiceless) .so they are phonetically the same since they are having the same features of production.

This problem is solved acoustically through examining the sonority hierarchy in acoustic terms. The process of producing / ʂ / in which the shape of the tongue creates more turbulence to the air flow .As a result it creates more noise component that adds more intensity than /s/.Since the intensity is the acoustic measurement of sonority so / ʂ / is more sonorous than /s/ .as a result the two are different phonemes /s/ and / ʂ/ are two sounds and they are different in their production in the since that / ʂ /is voiceless , alveolar ,fricative and emphatic. While /s/ is voiceless ,alveolar, fricative only.

Conclusion:

Through this research the reader can get many information, it enables the reader to know the meaning of sonority phonologically and acoustically. In phonology it enables the reader to know how to syllabify the words hierarchically and to know the internal structure of the syllable as well as the problems that may face him ,as in the middle consonants, and the principles that should follow. As a result the reader can count the number of syllables through counting the number of peaks. While in acoustic part it enables the reader to understand how the phonemes are different in their prominence, and since the loudness is the same as intensity ,so intensity means sonority.

Refrence

1-Gimson, Ac. 2008, (Gimson's pronunciation of English). Hoder education.

2- Ladefoged, P, and Johnson, K .2011, (A course in phonetics). University of California ,los Angeles, Berkeley.

3- parker , S .2016,(Oxfordindex; sonority) .Oxford university press.

4-Roach, P. 2009, (English, phonetics and phonology),Cambridge University press.