

The Linguistic Features of Onomatopoeia Words in Arabic-English: Contrastive Study

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ABSTRACT: A few of studies have investigated English Onomatopoeia in its own and in terms of relations to the other languages such as: French, Korean, Japanese, Chinese and many others. However, this paper aims to investigate onomatopoeia and making a comparison between Arabic and English. This paper answers the following questions: are onomatopoeic expressions having the same categorization in both languages? Do they have one meaning or multiple meanings? Do they have the same common linguistic features either in sound or meaning?

This paper uses the contrastive methodology which compares between various onomatopoeic words in Arabic and English. The collected data are 14 words for each language which also show the limitation of the study. The data are analyzed explicitly by tables.

The results showed that English and Arabic are tuned languages and both can use onomatopoeia in different situation and settings, such as technology and poetry. It proves that Arabic and English languages have similarities due to the category, meaning and same sounds of the onomatopoeia words.

This paper also aims to contribute the knowledge by inventing a new typology and classification of onomatopoeia to both languages English and Arabic in terms of using onomatopoeia and linguistic hyponym.

Keywords: Onomatopoeia, Phonology, Sounds, Hyponymy, Consonants, Vowels, English and Arabic languages.

Date of Submission: 28-08-2019

Date of acceptance: 13-09-2019

I. INTRODUCTION

It is known out of linguistics and semiotics that the relation between signifier and signified is arbitrary undoubtedly. Sounds are the smallest units that are produced by human beings which are scientifically called phonemes. Al-Zubbaidi views that onomatopoeia as a great device for both English and Arabic particularly in poetry [1].

Arabic language is the dominant language in all Arab countries and the language of media, publications, meetings, lectures and technology [2]. There are various types of onomatopoeia [1] since poetry is not our subject, it is excluded. However, it seems that onomatopoeia has paved the road between style and content in order to provide two kinds of onomatopoeia as follows: lexical and non-lexical one. They could be explained as:

“Lexical onomatopoeia draws upon recognized words in the language system, words like thud, crack, slurp and buzz, whose pronunciation enacts symbolically their referents outside language. Non-lexical onomatopoeia, by contrast, refers to clusters of sound which echo the world in a more unmediated way, without the intercession of linguistic structure”. (Simpson, 2004, p.67) [1].

The former; lexical, expressions such as chinked from English can be translated into /khashkhashat/ into Arabic [3].

A melodic beauty found in the Arabic onomatopoeic vocabularies, where some authors have made a comparison between the elegant sound of Quran when read and music [4].

Sounds are the smallest units of onomatopoeia; therefore, imitating of other sounds and providing the sound's source [5] partially or completely accounts on onomatopoeia [6].

II. DEFINITION

Fromkin, Rodman, and Hyams view Onomatopoeia as it “Refers to words whose pronunciations suggest their meaning, e.g., meow, buzz” (p.587) [7]. The sounds of nature and animals are onomatopoeic sounds [8]. Moreover, Al-Azzam [9] views onomatopoeia as the sound that is imitated from the world around us such as miaow (cited in, Al-Sibai) [4]. In other words, onomatopoeia comes from the sounds of nature either by imitating the referred sound or by using such a word. Alexander states that onomatopoeia can be caught in words that imitate sounds that may describe or refer to objects (cited in Eliza) [10]. Hence, the imitated sound is onomatopoeia [11].

III. OBJECTIVES

It is worthy enough to mention that onomatopoeia is a universal feature among languages. Therefore, some arguments try to neglect or deny this feature of language as will see shortly. However, onomatopoeia is used in any spoken language daily. Due to the inadequacy of research about onomatopoeia between English and Arabic, the research aims at:

- I- Investigating the importance of onomatopoeia in English and Arabic
- II- Exploring the scarcity of references on this topic
- III- Providing a new topology in terms of onomatopoeia (categorization)

IV. LANGUAGES AND ONOMATOPOEIA

4. The genesis of languages

The origin of language is a questionable phenomenon. Adam is the first human creature, who had been learned the names of all things by Allah before he came to earth. Humans who descended were speaking a language for many ages until the time of the prophet Noah when the great flood submerged, the land but very few survivors. Aftermath, those survivors lived like other creatures, but they were having a language which accordingly got the languages varied and went into many amendments since then. Language is a rhythmic manifestation [12].

Bulk of speculations have been appeared trying to investigate the origin of languages. The former mentioned by Evans & Green [12] is one of the top speculations enlightening the nature of origin of languages that is expressed as divine source [8] is the most famous one admittedly. The other essential speculation, which superbly espouse onomatopoeia from one hand, is telling the genesis of human speech is nature and it is called natural source that insists that people mime the environment around them in order to produce sounds. There are many words to demonstrate this in English such as: splash, bang, book, buzz [8]; consequently, this view has been designated as bow-wow theory.

On other hand, early human beings at early ages could exert hard physical efforts in different context like lifting, hunting, cutting huge trees and carrying heavy rocks or goods, which demand them to produce appealing, painful and tired sounds like grunts, shouts, grasping and groans voices. The former view has been called yo-heave- ho theory.

From Arab scholars' views, there is no precise evidence to investigate about the genesis of language at any level. Therefore, scholars believe that the origin of language would be: I. language is from Allah II. It is an inspiration III. It is by nature [13] and IV. It is imitating sounds as Ibn Jenni stated.

Language is considered as a means of communication or social behavior. It has also been a concerned issue of psychology in terms of behavior. However, a plethora of studies tackle language in terms of waves from the view of physics [14]. Hence, it seems that the physics is significantly studied the language internally [14] as well as neurolinguistics [15].

4.1 History of English language.

English is determined originally to Indo-European language family. Celtic people lived in England a long time before the year of 43 when the Roman conquered the Celtic land. At the fifth century, three German tribes, Anglo, Jutes and Saxons, had attacked the Celtic and captured their land. From the linguistic perspective, it was possibly that those three tribes might discern each others' accents. The Anglo lived in the central area of what had been known later England. Moreover, the history of English can be divided into three fundamental eras chronologically as follows: 1) archaic era from AD 450 to 1100 2) middle era from AD 1100 up to 1500 and 3) the modern English from AD 1500 up to now [16].

4.2 Arabic language History

Arabic language is geologically belonged to Semitic languages [17]. For most, the etymology of Arab is unknown but some speculations referred almost to the arabi who lived in desert and had camels [18]. Garbin views that "the language which we call Arabic was developed in this process of nomadisation or bedouinisation" (p. 27) [18]. Arabic language follows the grammatical rules that Aramic and Assyrian for example follow. Kees in his valuable book, *The Arabic Language*, states that:

"but even within the lengthiest ones there is not enough material to enable us to trace the development of the Arabic language in the period preceding the historical period. Still, the stage of the language that we find in the Iamudic, Liliyanitic, Safaitic and I:ia\$aitic inscriptions, and the Arabic elements that emerge from the Aramaic inscriptions from Petra and Palmyra, give us at least some glimpse of this early development" P.35 Arabic language can be dated greatly since the Holy Qura'an revelation. It is obvious that the Holy Qura'an use the attribution of Arab to designate people and Arabiya to attribute the language [18].

4.3 Previous Studies about Onomatopoeia in English

English as a word refers to many things such as people from England. It is originally a Germanic word particularly west Germanic language. Broadly, English language has spoken by some two billion which equals third of the globe comparing to less than two million speakers in 16th century, most of them had lived in Britain. Many of people from diverse population on earth such as UK, USA, Australia, New Zealand, Canada and so forth. English language dated to 449 when the Germanic and Celtic tribes reached Great Britain. English comes from the word Angles (a name of those tribes which moved earlier to Britain [19]. This unique status of English language characterizes it as the lingua franca of the world.

In the book "Lectures on the Science of Language: Delivered at the Royal Institution of Great Britain in April, May, and June, 1861"; Müller [20] claimed that onomatopoeia is nothing but merely "playthings" as a result of imitating sounds which if they have been segregated into root segments, the root showed incomplete. The symbolic function of language could be either a sound, orthography [12] particularly if the signified (object) is represented in the signifier form.

Sangoi attributes the diffusion of onomatopoeia among comic books, magazines and stories to the effectiveness of those linguistic phenomena which is onomatopoeia, consequently, those phonemes immeasurably improve the shining and affect of this genre of books [21].

Resonance in sounds may provide high disparity between any two forms of languages; consequently, in this paper the two forms are Arabic and English. Acquiring phonology of any form is having trouble in terms of encoding those sounds. Nevertheless, Ramachandran & Hubbard [22] dissect that onomatopoeia is one of those significant factors to realize the resonant mappings on top of other factors [23].

Thomas and Clara affirm from their comparison study that onomatopes are distinctive in terms of word class, sharing global features among language, they investigated. The system of phonology from gleaned data of 12 languages may cause some restriction; however, they are abundantly generative as well as other word class [24].

Dofs purports that, according to his comparison between animal sounds in English and Swedish, the sounds of them are the same but they are vocalized and implemented differently [25]. Moreover, onomatopoeia has been viewed as a process that reflects sounds in terms of echo whereas more important onomatopoeia has the conventional pattern more or less as any language [16].

Aliyeh & Zeinolabedin believe that onomatopoeic sounds of animal are different in English comparing to Persian and they attribute the reasons to: 1- species 2- phonological/ morphological systems [26]. Nevertheless, some other onomatopoeic sounds could be either similar or could have minor change in written or spoken patterns.

Conversely, there are four types of inventory of objections towards onomatopoeia as follows:

- Onomatopoeia is consisting of familiar signs and they are not emulated echoes
- If the imitation is taking place, they are not non-arbitrary.
- It is not a part of language.
- Onomatopes are not miming real sounds in the nature [27].

V. PREVIOUS STUDIES ABOUT ONOMATOPOEIA IN ARABIC

Arabs from early ages dealt with sounds in language as an important issue from linguistic side; however, study sounds scientifically appeared based on the Holy Qura'an scope. Observation to the of reciting the Holy Qura'an made linguists plunge into pondering those sounds, investigating, and studying them extensively. Those great efforts assisted Abu Alaswad Aldou'ali to adjust the Holy Qura'an by adding points to the verses based on the observation of lips movements which was the essential contribution among Arabs.

Arabs have their own concern towards sounds long time ago not in terms of grammar nor semantic only but in terms of phonology [28]. Lexicographers were the first ones who tackle the sounds among Arabs especially Alkhaleel Ibn Ahmed (718- 786) who launched in his premise about: 1- sounds in terms of articulation, sonority, voice, voiceless, lenis, fortis and so forth [28] which was the second significant contribution.

Seebawaih did his contribution by studying the sounds intrinsically and extrinsically. He elaborated in the folds of his book based on the position of the vocal cords but more precise. The former and lateral authors did great contributions, which confront to the scientific principles, which have been concluded according to the descriptive and observational method far away from assumption and prediction.

Speech as a process underlies five steps. There are five consecutive coherent steps to permit the communication between speakers and hearers as follows: 1- mental processes that occur in the brain's speaker before talking or through it. 2- produce sounds from the articulation system. 3- waves and vocal oscillation that

occur between the speaker`s mouth and the hearer. 4- essential processes that make auditory systems succumbed in the hearer perception and 5- listener receives sturdy of psychological processes and oscillations via air.

Almosawi classified the old schools of phonology as follows:

- Lexicographers school for sounds: it studied sounds theoretically and paid attention to the way of implementing those sounds and compared them to the originality of the vocabulary in Arabic
- Grammarian school: it conducted investigations about sounds in terms of Articulation and manner of sounds. It draws attention to: assimilation, homorganic and non homorganic process. Besides, it provides a plethora of rules such as: deletion, amplification, inversion and deviation.
- Intonation school: its concern was larynx, trachea, inhaling and exhaling, throat, uvula, soft and hard palate and dissected them in diagrams. It distinguished sounds via hymns, good and bad, and provided such phonological processes i.e. assimilation.
- Islamic Philosophers school: It concentrated on sounds perception between receiver and hearer and speed of sound (Acoustic); accordingly, they divided sounds into: auditory, vocalized and practical. It deliberated sounds based on Holy Qura`an recitation.
- Rhetorical School: it takes on shoulder the mechanic/ dynamic of sounds, it studies sounds` generating (productivity), it elucidates the principles and ramifications of sounds according to their articulators, manners, voicing and devoicing. Put differently, this school contributes greatly by adding the flavor of sounds` impact upon speech[29].

The foremost ramification of linguistics is phonology which is the forefront of human language even before syntax, morphology and semantics [28].

The most outstanding figure in the domain is Ibn Jenni (934- 1002). He defined language as a bulk of sounds that people use to express their needs and things among them. Therefore, his brief definition labeled three fundamental factors for language as follows:

- He asserted that languages must have sounds by definition.
- He confirmed that language must have social functions in terms of expressions and expository of concepts.
- He signaled that linguistic structure variation differs due to the social differences among nations.

Moreover, he initiated that the origin of languages is a bulk of sounds; *exapli gratia*: the sound of wind is a blow (Dawi) , the sound of horse is a neigh (Saheel), the sound of donky is a bray (Naheeg), the sound crow is a caw (nae`eg) and so forth.

VI. METHODOLOGY

This study aimed to investigate onomatopoeia between English and Arabic in terms of its importance, providing clear idea about them, similarities and differences and contributing greatly to this field by giving a new category and adding two correlated significant perspective. It has been conducted based on contrastive study method. The inventory of words was selected randomly from sources as follows: web sites and dictionary. The study is limited to English and Arabic onomatopoeic words not more than 14 words for each language.

Table 1: English Arabic Onomatopoeic List

S	English	Arabic	Pronunciation
1-	Ewwe	اوو	Eoo
2-	Ops	اوف	off
3-	Outch	أح	aah
4-	haha	هاها	haha
5-	waah	اهي اهي	Eooo
6-	Meyaw (cat)	مياو	Meyaw (cat)
7-	chirping	زقزقة	zagzagah
8-	neigh	صهيل	saheel
9-	moo	مواء / موو	Khwar (moo)
10-	gulp	قعقع	Qa`aqa`a
11-	ding	ترين	teren
12-	beep	بيب	beep
13-	errm	أمم / آآ	aaa
14-	woov	وش	hoov

First lexicographer Alkhaleel Ibn Ahmed has received the honor of ascribed the short vowels notation to

him [18]. Therefore, Arabic and English have the same systems.

Humans may produce sounds such as: ewwe, ops, ouch and eooo, afa and ah for English and Arabic, respectively. Moreover, aforementioned sounds are showed semi-vowels or vowels initially in both languages from the phonology perspective as the table 2 demonstrates below:

Table 2: English Arabic Onomatopoeic List (Human sounds)

Series	English	Arabic
1	Ewwe	Eoo
2	Ops	off
3	Outch	aah
4	haha	haha
5	waah	Ehiehi

Alternatively, onomatopoeic sounds demonstrate that in spite of culture variations, English and Arabic show that they are cognates. They all show vowels or semi vowels initially which more or less prove that onomatopoeia in this case is universal. The aforementioned list shows doubling vowels for Arabic and English, starting with E sound as in (1). It indicates similarity as (4). However, deep crying sounds are clear for pain and anguish as in (3) and (5). The examples demonstrate O sound initially plus fricative ones afterward which conspicuously shows similarity in the manner of articulation.

Conversely, English and Arabic demonstrate another pattern in terms of describing animal sounds such as: meyaw, chirping, neigh, moo, and neyaw, zagzagah, saheel, khwar for English and Arabic, respectively. As in (7& 10) both languages utilize exactly the same sound “meyaw” that comes from the cat’s sound. Arabic and English have the intuitive mimic production for the cat and cow sounds (Meyaw and moo). On the other hand, (8 &9) show that they are nominated rather than copies from their nature.

Comparing to human sounds, sounds of animals are different because both languages provide nouns by nominating those sounds. They all showed consonant initially.

Table 3: English Arabic Onomatopoeic List (Animal Sounds)

Series	English	Arabic
6	Meyaw (cat)	Meyaw (cat)
7	chirping	zagzagah
8	neigh	saheel
9	moo	Khwar (moo)

Sounds for nature that are reproduced by humans could be in terms of imitating them. Humans elicit sounds from nature around them and use them to express some meaning and allow listener to grasp the situation. Sounds from nature are as follows: blow, gulp, and rustle in English and darb, qa`aqa`a, hoov in Arabic. Therefore, sounds below take place when the human beings attempt to imitate sounds close to them. Number 10 mimic drinking sounds by using the same consonant /g/ sound in Arabic and English and try to emulate the sound of water while drinking by using sounds that either from almost pharyngeal as in Arabic or aspirated so they can be recognized as in English /gulp/. Investigating 11 dissects that both Arabic and English go for the same alveolar sounds /t/ and /d/ respectively which illustrates that they have substantial similarity when both language treat technology in terms of onomatopoeia as well as 12. Nevertheless, (13) proves dissimilarity between Arabic and English. The way of thinking may reflect a difference of onomatopoeic pattern based on community background or habit. Accordingly, they show the same pattern by using almost consonants initially. The remaining one number 14 that conspicuously copies a similarity between Arabic and English is soar in terms of copying nature.

Table 4: English Arabic Onomatopoeic List (Miming)

10-	gulp	drinking	قَعَق	ga`aga`a	drinking
11-	ding	ringing	ترن	teren	ringing
12-	beep	Car`s beep/ alarm	بيب	beep	Car`s beep/ alarm
13-	errm	thinking	آآ	aaa	thinking
14-	woov	rustle	حفيف	hoov	rustle

Nevertheless, technology is a rich field for onomatopoeia in this era. People have been trying to imitate technology as commonly assigned in ding/honk and teren/beebe in English and Arabic, respectively. Thus, technology may provide diversified onomatopoeic forms for the English and Arabic languages. The tables above

show that English and Arabic should have a new hyponymy regarding onomatopoeia which is technological sounds.

VII. DISCUSSIONS

Many years ago, onomatopoeia was on the margin of language and susceptibility of this type of repertoire was barely accepted but for poems. A plethora of views upheld the former claim until recently as Pinker views "Onomatopoeia, where it is found, is of no help, because it is almost as conventional as any other word sound p.146" [30].

However, onomatopoeia may contribute greatly in language such as English and Arabic in terms of sounds, meaning and repertoire today compared to many years ago.

This paper would agree entirely with (Marttilla, 2009) against those who used to neglect its importance in terms of the universality of onomatopoeia. This paper may fortify onomatopoeia's importance as a living phenomena among humans in languages. Arabic English onomatopoeia has some similar sounds and both adopt these onomatopoeic sounds mutually.

Alternatively, this paper finds that onomatopoeia has been neglected for many years and faces an inappropriate lack of investigation. Consequently, it is recommended strongly that onomatopoeia is one of the repertoire linguistic parts of languages which needs further studies and investigations.

To answer the research questions, onomatopoeia has various taxonomies unequivocally. Onomatopoeia may show multi-sounds for pain, for instance. They may show three sounds (written letters) in Arabic and English such as: off, ops, consecutively whereas others may demonstrate four sounds such as beep, ewwe and eooo. Moreover, onomatopoeia in both languages may follow same pattern in terms of sounds and meanings in many linguistic contexts.

This paper aimed to provide a new hyponymy for onomatopoeia in languages as follows:

- 1- Humans' sounds
- 2- Animals' sounds
- 3- Natures' sounds
- 4- Technological sounds. Those ramifications could apply for English and Arabic languages beside the substantial similarities between them in terms of onomatopoeia.

This unique linguistic condition has also a neural counterpart: recent investigations show that abstract and concrete nouns are processed in brain [15] and onomatopoeic sounds are processed by extensive brain regions involved in the processing of both verbal and no-verbal sounds [31].

VIII. CONCLUSION

It is obvious that speech sounds have three binding facets that cannot be dissected without each other; accordingly, they are: 1- physiological perspectives: where the sound should be produced or vocal sounds 2- physical one: which refers to the transmission of oscillations and waves in the air. On the other hand, it is popular as acoustic perspective and 3- perception perspective that denotes to the auditory feature which reached the tympanum (eardrum).

Nevertheless, this paper insists to add a fifth perspective which is psychological one which applies in the first place in the speaker's mind and occurs later in the receiver's. Besides, the paper purports strongly that neurolinguistics has a great affect on both the speaker and the listener in terms of onomatopoeia which reveals that intonation of the onomatopoeia substantially has the neural impact, as the sixth perspective.

Language is seated miraculously in the brain [30] and [15] more specifically for the majority of people it is in the left hemisphere [32] and [15]. Language authentically is taking place subcortically in the cerebral cortex. Pinker as he viewed:

"Subcortical structures even control the swearing that follows the arrival of a hammer on a thumb, that emerges as an involuntary ticin Tourette's syndrome, and that can survive as Broca's aphasics' only speech p342-343" [30].

Human utterances such as: sobbing, laughing, moaning and shouting in pain are subcortical structure. Articulators of speech and neural system are working synergistically [15] to produce and perceive human utterances [30].

The future may show great impact of onomatopoeia that takes place among human beings' speakers because onomatopoeia is universal which meets from the literature with "The universality of onomatopoeia depends on whether speakers of different language choose to create lexical items on the basis of sound imitation or not" (P.94)[11].

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