Reduplication in English and Arabic: A Contrastive Study

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Keywords	**Abstract**
Reduplication, English Reduplicatives, Arabic Reduplicatives	Reduplication is a morphological process where the base of a word or part of it is repeated completely or with a slight change. The present study aims to investigate reduplication and its similarities and differences in English and Arabic languages concerning definition, classification, productivity, uses, universality from phonological, morphological, syntactic, semantic, and pragmatic aspects. The process of reduplication has attracted very much the attention of linguists in recent decades. This study is based on the Principles and Parameters Theory of Generative Grammar (Chomsky, 1981). It is a contrastive qualitative analytic study. The data of this study has been collected from different resources in English and Arabic such as various books, articles, researches, dictionaries etc. This study has shown that there are similarities and differences between reduplicatives in English and Arabic. The results support the Principles and Parameters Theory of Generative Grammar

Reduplication in English and Arabic: A Contrastive Study

التكرار في اللغتين الإنجليزية والعربية: دارسة تقابليه
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الكلمات المفتاحية:	الملخص:
التكرار، الكلمات التكرارية في اللغة الإنجليزية، الكلمات التكرارية في اللغة العربية	تعرف عمليه التكرار على أنها عمليه صرفية، إذ يكرر الجذر وهو جزء من الكلمة بصـورة تامة أو مع تغيير طفيف. تهدف هذه الدراسـة إلى تناول عمليه التكرار في اللغتين الانجليزية والعربية للوقوف على أوجه التشـــــابه والاختلاف بينهما من حيث التعريف، والتصـنيف، والإنتاجية، والاسـتخدام، والعمومية (الشـمولية) إضـــافة إلى السـمات الصـوتية والصـرفية والنحوية والدلالية والبراغماتية، وجذبت عمليه التكرار انتباه اللغويين إلى حد كبير في العقود الأخيرة. تســـــتند هذه الدراســـة إلى نظريه المبادئ والمتغيرات للنحو التوليدي (شـومسـكي،1981). وقد تم اسـتخدم المنهج الوصـفي التحليلي المقارن لتحقيق الهدف، وتعتمد الدراسـة على بيانات جمعت بشـكل وصـفي من المراجع والمعاجم الإنجليزية والعربية حول موضـــوع التكرار. وتوصـــلت الدراســـة إلى أن عمليه التكرار هي عمليه صــرفيه تعمل على توليد كلمات جديدة، وإن هناك تشـــــابه واختلاف بين الكلمـات التكراريـة في اللغتين الإنجليزية والعربية؛ وبما أن هناك تشابه واختلاف بين الكلمات التكرارية في اللغتين الإنجليزية والعربية، تدعم النتائج نظريه المبادئ والمتغيرات للنحو التوليدي.

1. Introduction

Reduplication is a word formation process used in many languages of the world. It is defined as a morphological process by which the base is fully or partially repeated to form a new word (Inkelas, 2006). This process creates new words called reduplicatives. Several scholars such as Wilbur (1973), Marantz (1982), McCarthy and Prince (1986), Steriade (1988), Rubino (2005), Hurch and Mattes (2005) and Raimy (2000) studied reduplication in different languages, including English and Arabic reduplication. However, English and Arabic reduplication is studied in great details. Nadarajan (2006, p. 39) stated that "the role of reduplication in English has been widely ignored". This study focuses on reduplicatives in English and Arabic in terms of the definition, classification, productivity, uses and universality and from phonological, morphological, syntactic, semantic, and pragmatic aspects in these two languages.

1.1. Objectives of the Study

This study tries to achieve the following aims:

1. To show reduplicative words in English and Arabic.
2. To identify phonological, morphological, syntactic, semantic and pragmatic aspects of English and Arabic reduplicative words.
3. To show to what extent the two languages are similar or different in terms of reduplicatives

1.2. Questions of the Study

This study intends to answer the following questions:

1. Are English and Arabic reduplicatives similar or different?
2. What are the characteristic features of the reduplicatives in English and Arabic in terms of phonology, morphology, syntax, semantics and pragmatics?
3. To what extent do English and Arabic languages share similarities and differences in reduplication process?

1.3. Significance of the Study

Reduplication has recently become a focus of considerable research in theoretical and applied linguistics. Therefore, this study has both practical and theoretical significance. This study is not only useful for the field of cognitive linguistics, but is also practically useful for teaching and learning of both languages which are compared. This study is a useful addition to prior research on reduplication in general and to the English and Arabic reduplication in particular. The findings of the study can be used as a reference for those who want to conduct researches in English or Arabic. The findings of this study can enrich the theory of English and Arabic languages learning. The findings of the study can be used as input in English or Arabic teaching/learning process. It will help teachers to focus on the areas of differences to enhance students' understanding of the reduplication process of the two languages.

1.4. Methodology of the Study

The methodology of this study is contrastive qualitative analytic in nature. It is mainly based on the analysis of the collected data, which is descriptively examined and compared.

2. Literature Review

This section reviews the literature related to the topic of the study. This includes theoretical background and previous studies relevant to the topic of the study.

2.1. Theoretical Background

Reduplication has been of great interest to linguists, especially in phonology and morphology (Broselow & McCarthy, 1983; Haspelmath, 2002; Inkelas & Zoll, 2005; Kiparsky, 1986; Marantz, 1982; McCarthy & Prince, 1986,1993, 1995; Spencer, 1991; Steriade,1988). On the phonology and morphology levels, there have been different opinions as to whether reduplication is a morphological or phonological process. Phonologically, reduplication in many languages is often described as a process in which a unit of syllable or mora is repeated completely to create a new lexical item. On the other hand, reduplication is morphologically described as a process in which the base is completely or

partially repeated to derive a new single lexical item. Each lexical item has its own independent meaning, when it is repeated, it shows the modified meaning of the whole lexical item that is different from the single independent roots. According to Spencer (1991), reduplication involves adding material whose identity is partially or wholly determined by the base. While in some languages, it is regarded as a morphological and semantic process which marks a grammatical or semantic contrast by doubling all or part of the base to which it applies; it is phonetically significant in others (O'Grady & de Guzman, 1996, p.143). Mattiello (2013) claimed that reduplicatives constitute a heterogeneous set of words which are typically characterized by several phonetic features as rhyme, vowel alternation, consonant alternation, onomatopoeia, but with a low degree of morphological regularity. She has extensively studied reduplicative patterns on the basis of phonological constraints rather than morphological rules. Similarly, Barbaresi (2008, P. 229) marginalized reduplicatives in morphology, claiming that "the process of their formation is not rule-governed, in the sense that they exhibit various violations of basic properties of morphological grammar". Dienhart (1999) stated that reduplicatives represent a phonological class of their own, with several phonetic and prosodic regularities. On the contrary, Thun (1963) argued that reduplication is a morphological process and stated that reduplication is an independent way of word formation. According to Parimalagantham (2009), a word formation process is one of the sources for increasing vocabulary of a language. The word formation process does not refer to the formation of different word forms of a lexeme, where the meaning does not change. Rather, it is restricted to the formation of new words in a language, where the meanings of new words are different from that of the base which are usually related to their bases. If new words are not generated in language, the language will be dead.

2.2. Previous Accounts of Reduplication in English and Arabic

There are many studies in the field of reduplication. To the best of the researcher's knowledge, there are four studies such as Igaab (n.d), Al-Asbahi, (2020), Omer (2012) and Hasan (2011) which have discussed reduplication in English and Arabic. Igaab (n.d.) discussed reduplication contrastively from different levels: phonology, morphology, syntax, and semantics in English and Arabic. Her study focused on emphatic reduplication only. Moreover, the study identified four groups into which reduplicatives were classified: (1) the two elements can have the same meaning, (2) the two elements can have different meanings, (3) one of the two parts can be meaningless, or (4) the entire reduplicative word can be meaningless. The present study does not agree with the last category of Igaab's study as she believed that the whole word in a language is meaningless. However, Al-Asbahi (2020) focused on the semantic level of reduplication in English and Arabic. His study showed more semantic similarities in reduplication than differences between both languages.

Omer (2012) studied reduplication in English and Arabic and focused on the morphological level, types of reduplication and the function. She argued that reduplication is used to get new syntactic or semantic functions. The difference between English and Arabic is that in English, the main functions are "argumentation, contrast, emphasis and intensity"; while, in Arabic, the same functions in English are achieved in addition to plurality, exaggeration, and abundance.

However, Hasan (2011) examined reduplication phonologically and semantically as a child-centered contextual tool of teaching language through nursery rhymes, especially at the pre-school stage. The semantic aspects of reduplication include diminution, repetition, intensity, baby register, scattering, contempt, lack of control, lack of specificity, and continuity. The study hypothesized that reduplication refines moral and instill values

within the hearts and souls of the children, as depicted through its contextual investigation. Thus, this study differs from the previous ones. It investigates the similarities and differences between English and Arabic reduplication in terms of definition, classification, productivity, uses, universality and the aspects of phonology, morphology, syntax, semantic and pragmatics.

3. Similarities and Differences between English and Arabic Reduplicatives

This section deals with the analysis and comparison of reduplicatives in English and Arabic as in the following points:

3.1. Definition of Reduplicatives

An English reduplicative word is defined as a construction which is composed of two parts, either identical or different by a consonant or a vowel. The following examples illustrates this definition: *pooh-pooh, goody-goody*, *teeny-weeny, hocus-pocus, chit-chat* and *flip-flop*. In English, some reduplicatives have at least one or occasionally both of their components do not exist in English language independently as in *hocus-pocus* 'trickery', *wishy-washy* 'feeble, weak' or *harum scarum* 'in a reckless way'. On the other hand, an Arabic reduplicative word is defined as mixed composite (Ibn Al-Athir,1420; a Ibn Al-Sarraj, 1408; Ibn- Yaysh, n.d.; Sibawayh, 1316). This is exemplified by the following : شــذر مــذرšaðara maðara, هرج و مرج haraj wa maraj and حيص بيص ħayşa bayşa are called mixed composites because each reduplicative word is composed of two words that are mixed with each other and given one meaning as in the meanings 'scattering' for شــذر مــذرšaðara maðara, 'difficulties' for حيص بيص ħayşa bayşa and 'confusion' for هرج و مرج haraj maraj.

3.2. Types of Reduplicatives

On the basis of the morphological structure, it can be noticed that both English and Arabic have complete and partial reduplicatives. That is, English and Arabic are similar in terms of the main categorization of reduplicatives as shown in the Table 1 below

Table (1) : Types of Reduplicatives in English and Arabic on the Basis of the Structure

	Types of Reduplicatives	Examples
English	Complete Reduplicatives	*bye-bye* 'greeting, *goody-goody* 'affectedly self- righteous person', *so-so* 'average', *ha-ha* 'sound of laughter', cha-cha 'type of dance' and *boo-boo* 'an error'
	Partial Reduplicatives	*flip-flop* 'to change your opinion about something', *chit-chat* 'gossip', *ding dong* 'the noise made by a bell', *dilly-dally* 'to waste time' and *pell-mell* 'quickly and in an uncontrolled way'
Arabic	Complete Reduplicatives	وسوس *waswas* 'to whisper', زلزل *zalzal* 'to shake', حف حف *ħaf ħaf* 'birds wing sound', مذ مذ *mað mað* 'lier' and كركر *karkar* 'laugh'
	Partial Reduplicatives	حيص بيص *ħayşa bayşa* 'diffiaclty', شذر مذر *šaðara maðara* 'scattering', شغر بغر *šaɣara baɣara* 'scattering', شكس لكس *šakis lakis* 'bad- mannered hard' and سهد مهد *sahad mahad* 'good looking'

3. 3. Productivity

Productivity is the property of language which allows a native speaker to create new words in a rule-governed way (Mattiello, 2013; Booij, 2005). According to Lieber (2009), Productivity refers to the extent to which a morphological process can be used to create new words. Similarly, Bauer (2001) points out that productivity deals with the number of new words that can be formed using a certain morphological process. The process of reduplication in English and Arabic has the quality of linguistic productivity. It is mainly used to create new words in both

English and Arabic. For example, *tip-top* (Adj) 'excellent' (*tip* 'the end of something'; *top* 'the highest part of something') and *chit-chat* (N) 'gossip' (*chit* 'note, young girl'; *chat* 'an informal conversation') in English; and in Arabic سهد*sahd* 'insomina' and مهد*mahd* 'cradle' are combined together to form a new word with a new meaning which is سـهد مهد *sahd mahd* 'good looking'. Another example is خذع*xiðaʕ* 'dividing' and مذع *miðaʕ* 're-vealer' are combined to give new word خذع *xiðaʕ miðaʕ* 'scattering'. Furthermore, the independent word مذر *'maðar'* is combined with شذر*'šaðar'* to give a new word شـذرمذر *šaðara maðara* 'scattering', but when it is combined with هذر*'haðar'*, a new word will be هذر مذر *haðar maðar* 'bad speech'. More-over, reduplicatives in Arabic are more pro-ductive than English. Because, Arabic redu-plicatives have the capability of changing the complete reduplicative word into partial re-duplicative word to form command by a vowel change, for instance, the sounds /æ/ is mainly changed to /i/ as in the following ex-amples:

a- فَتَفَت*fatfat* → فَتفِت *fatfit* 'break into tiny pieces'

b-لفلف *laflaf* → لفلِف*laflif* 'warp up' (Omer, 2012, p.73).

3. 4. Phonological Aspect

Most of English reduplicatives begin with a consonant in the initial position as in *hanky-panky* and *crisscross*. However, a few cases of reduplicatives start with an initial vowel, for instance, *arty-farty* 'pretentiously artis-tic', *argy-bargy 'noisy quarrelling'* and *itsy-bitsy* 'very small'. In contrast, the whole Ar-abic reduplicatives begin with a consonant in the initial position as in ثعد معد*θaʕad maʕad* 'softening of the dates', شغب جغب*šaɣab jaɣab* 'unrest, trouble', وسوس *waswas* 'to whisper', زلزل *zalzal* 'to shake' and خب ضب*xab đab* 'deceiver/ trickery', but there are no redupli-catives that begin with a vowel in Arabic.

3. 4.1. Sound Change

Many reduplicatives in English have a consonant change. The consonant change in English is dominated by the consonant /h/, /k/, /s/, /p/, and /r/, in initial position of the first component. The majority of reduplica-tives in English also tend to have the conso-nants /p/, /b/ and /w/ in the initial position of the second component.

Similarly, reduplicatives in Arabic have a consonant change. But the consonant change in Arabic reduplicatives is dominated by the consonants: ' خx', ' حħ' and ' شš' in initial position of the first component. In addition, most reduplicatives in Arabic tend to have the consonants ' بb', ' مm', ' لl' , ' نn', 'أʔ', ' وw' and ' ذð' in the initial position of the second component. Consonant change of re-duplicatives in English and Arabic is exem-plified in the Table2.

Table (2): *Consonant Change of Reduplicatives in English and Arabic*

English Examples		Arabic Examples	
hocus-pocus	'trickery'	خبيث نبيث *xabiiθ nabiiθ*	'bad'
kowtow	'to be too eager or polite'	حسن بسن *ħasan basan*	'good looking'
super-duper	*'extremely good'*	شذر مذر *šaðara maðara*	'scattering
pow-wow	'a meeting or discussion '	حيص بيص *ħayşa bayşa*	'difficulties'
ragtag	*'untidy'*	شغر بغر *šaɣara baɣara* '	scattering'
hurly-burly	*'a lot of busy noisy* activity'	هاع لاع *haaʕ laaʕ*	'coward';
teeny-weeny	'very small'	شحيح نحيح *šaħiiħ naħiiħ*	'stingy'
		شديد اديد *Šadiid ʔadiid*	'strong, powerful'

On the other hand, English and Arabic re-duplicatives have a vowel change. The vowel-change is limited to two vowel pairings in English reduplicatives and three vowel pairings in Arabic reduplicatives as il-lustrated in the following Table 3.

Table (3): *Vowel Change of Reduplicatives in English and Arabic*

Languages	Vowel Change	Examples
English	/i / ~ /æ/	*chit-chat* 'gossip', *dilly-dally* 'waste time', *zigzag* 'curved road' and *mishmash* 'mixture'
	i /~ /ɒ/	*ding-dong* 'the noise made by a bell', *ping-pong* 'a table tennis', *tip-top* 'excellent' and *drip-drop* 'drop slowly'
Arabic	/æ/ ~ /i/	فَتْفِت*fatfit* 'break into tiny pieces', لفلف*laflif* 'warp up' and الملم*lamlim* 'to gather up' in command
	/æ/ ~/u/	حلالا لا زلا *ħalalan zulalan* 'halal; legal'
	/u/~ /i/	زلزلت*zulzilat* 'shaken', فكبكبوا *fakub-kibu* 'thrown; about the non-believers', زعزع *zuʕziʕ* 'to shake, flicker' and زحزح *zuħziħ* 'take away'

3. 4.2. Syllabicity

Components of English and Arabic reduplicatives are monosyllabic, disyllabic or trisyllabic words. As Table 4 illustrates the syllabicity in English and Arabic reduplicatives.

Table (4): *Syllabicity of Reduplicatives in English and Arabic*

English	Monosyllabic components	e. chit-chat /tʃɪt tʃæt/, *bye-bye* /baɪ.baɪ/, *dindin* /dɪn.dɪn/, *crisscross/* krɪs.krɒs/, etc. [dɪn.dɪ]
	Disyllabic components	helter-skelter /helt.ər.skelt.ər/ *boogie-woogie* /bʊ.gɪ.wʊ.gɪ/
	Trisyllabic components	nimimy-pinimy /nɪ.mɪ.nɪ.pɪ.mɪ.nɪ/ higgledy-piggledy /hɪg.əl.di.pɪg.əl.di/
Arabic	Monosyllabic components	خب ضب xab ďab 'tricky' زحزحzaħzaħ 'to move' حار يار ħaar yaar 'very hot'
	Disyllabic components	خبيث نبيث xabiθ nabiθ 'evil' خراب يباب xaraab yabaab 'empty' كثير بذير kaθiir baðiir 'too much'
	Trisyllabic components	خفوت لفوت xafawat lafawat 'quiet' حلال زلالا ħalalan zulalan 'halal; legal'

3. 4.3. Stress Pattern

The stress in English reduplicatives is either placed on one component, or it can be placed on two components. The single stress is generally put on reduplicative nouns from a monosyllabic base as in *bóo-boo*, whereas the double stress is put on reduplicative verbs as in *póoh-póoh*, or it is also placed on reduplicatives that have polysyllabic components as in *hókey-pókey* and *super-duper* (Dienhart, 1999). In Arabic reduplicatives, however, there is no stress to place on their components.

3. 4.4. Metathesis

Hume (2004, p. 203) defines metathesis as "the process whereby in certain languages the expected linear ordering of sounds is reversed under certain conditions". Metathesis plays a vital role in the formation of reduplicatives in Arabic. For example, two consonants in the structure C1V1C2.C1V1C2 are metathesized and become as C2V1C1. C2V1C1. When the consonants of reduplcatives are metathesized, the meaning of resultant word is similar to the original forms. Some reduplicatives in Arabic are

metathesized such as حزحز zaħzaħ 'to move' ↔ حزحص ħazħaz 'to move' and ħaṣħaṣ to manifest ↔ صحصح ṣaħṣaħ 'to manifest' whereas English reduplicatives are not metathesized.

3. 5. Morphological Aspect

3. 5.1. The Lexical Category of the Components of Reduplicatives

English reduplicative word has the same or different category of its components but reduplicative word in Arabic has the same lexical category of its components. This is illustrated in Table 5.

Table (5): *Components' Category of Reduplicatives in English and Arabic*

English	ping(N)	pong (V)/ (N)	ping-pong (N) table tennis
	chit (N)	chat (N)	chit-chat (N) gossip
	tip (N)	top (N)	tip-top (Adj) excellent/ first class
	bye (interj.)	bye (interj.)	bye-bye (interj.) goodbye
	clip (N)	clop (V)	clip-clop (N)/ V) sound made by a horse
	dilly(V)	dally (V)	dilly-dally (V) to waste time
	pretty (Adj)	pretty (Adj)	pretty-pretty (Adj) excessively pretty
Arabic	حيص ħayṣa (N) escape	بيص bayṣa (N) precession	حيص بيص ħayṣa bayṣa (N) difficulties
	شذر šaðara (N) nugget/fragment /bead	مذر maðara (N) spoiling	شذر مذر šaðara maðara (N) scattering
	خذع xiðaʕ (N) dividing	مِذع miðaʕ(N) revealer	خذع مِذع xiðaʕ miðaʕ (N) scattering
	شغر šaɣara (N) exile from the country	بغر baɣara (N) falling/ thirst	شغربغر šaɣara baɣara (N) scattering in all directions
	ضئيل ðaʔiil (Adj) little	بئيل baʔiil (Adj) little	ضئيل بئيل ðaʔiil baʔiil (Adj) very little

3. 5.2. Lexical Category of Reduplicatives

Lexical category of English reduplicatives can be nouns, adverbs, adjectives, verbs and interjections. For example, reduplicatives can be nouns such as *ding-dong* 'the noise made by a bell, *ping-pong* 'a table tennis' Examples of reduplicatives make verbs such as *shilly-shally* 'to show indecision' and *dilly-dally* 'to waste time'. There are also reduplicatives which are adjectives in English such as *wishy-washy* 'weak and insipid' and *tip-top* 'excellent', and *higgledy-piggledy* 'in an untidy way that lacks any order' and '*pitter-patter* 'with quick light steps or beats' are instances of reduplicatives which are adverbs. Moreover, reduplicatives can be interjection as in *bye-bye* 'goodbye', *ta-ta* 'good bye', or *yoo-hoo* 'used to attract someone's attention'. Similarly, the lexical category of Arabic reduplicatives can be nouns as in شـــذر مـذر *šaðara maðara* 'scattering', حيص بيص *ħayṣa bayṣa* 'difficulties' and شــغر بغر *šaɣara*

baɣara 'scattering'; adjectives, as in شائع ذائع *šaaʔiʕ ðaaʔiʕ* 'widespread', قسيم وسيم *Qasiim wasiim* 'beautiful', خفيف ذفيف *xafiif ðafiif* 'fast' and ضئيل بئيل *ðaʔiil baʔiil* 'very little'; verbs, as in زلزل *zalzal* 'to shake', حصحص *ħaṣħaṣ* 'to *manifest*', غرغر *ɣarɣar* 'to gargle' and وسوس *waswas* 'to whisper'. However, reduplicatives in Arabic cannot be classified as interjections and adverbs.

3. 5.3. Lexical   Integrity

A lexical integrity property indicates a major difference between morphological construction and syntactic structure (Štekauer & Lieber, 2005). Both English and Arabic reduplicatives have lexical integrity property. However, some reduplicatives in Arabic are the result of lexicalization of phrases. Thus, some reduplicatives in Arabic are syntactically formed, and gradually have become lexically integrated .There is conjunction like و *waw'* that separates the components of some Arabic reduplicatives as in the following

examples: هرج ومرج *haraj wa maraj* 'confusion', حياك وبياك *ħayyaak wa bayyaak* 'welcome', كروفر *karr wa farr* 'attack and escape' and هش وبش *haš wa baš* 'smiled and welcomed'. In contrast, English reduplicative word behaves as one unit and cannot be separated by inserting a word between its components. For example, *hocus-pocus* is reduplicative word in English, it is not inserted by other word like conjunction 'and' * hocus and pocus. In other words, reduplicative word in English cannot modify its components by other material, because they are lexically integrated components.

3.5.4. Orthographical Forms

Written forms of reduplicatives in English and Arabic differ in hyphenation as shown in Table 6 below:

Table (6): Orthographical Forms of Reduplicatives in English and Arabic

English	Reduplicatives are written as one word as in *zigzag,riprap* and *ha-bhab*.	Reduplicatives are written as two words as in *hip hop* and *fifty fifty*.	Reduplicatives in English are separated by a hyphen as in *pell-mell* and *dilly–dally*.
Arabic	Reduplicatives are written as one word as in زلزل *zalzal* 'to move' وسوس *waswas* 'to whisper', etc.	Reduplicatives are written as two words as in شذرمذر *šaðar maðar* 'scattering and حيص بيص *ħayṣa bayṣa* 'difficulties'.	Reduplicatives are not separated by a hyphen in Arabic.

3.5.5. Headedness

A head in English is always right. However, it is not possible to determine the exact location of base and reduplicant in English reduplicatives. Štekauer and Lieber (2005) pointed out that reduplicatives break universal rules and might be formed from a base standing either on the right or left, or from a nonexistent base altogether. Therefore, the head can come on the right as in *crisscross*, *mishmash*, dilly-dally or on the left as in *super-duper* and *fuzzy-wuzzy* in English. Minkova (2002) argues that this depends on the prosodic pronunciation of reduplicative units, their correct construction. For example, *zagzig* is more difficult to pronounce than *zigzag*. Moreover, some English reduplicatives have no head at all, as in *riff-raff* and *hocus-pocus*. When both bases are meaningful as in *sing-song*, neither of them is the semantic head. In contrast, the head of Arabic reduplicatives are always in right position as in خبيث نبيث *xabiiθ nabiiθ* 'bad', عطشان نطشان *ʕaṭšaan naṭšaan* 'thirsty', etc.

3.6. Syntactic Aspect
3.6.1. Referentiality

Referentiality is a referential relationship where a word or phrase refers back to another word or phrase used earlier in a text. The connection between an antecedent and an anaphoric expression is created by the use of a pronoun such as *it, he or they*. Halliday and Hasan (1978, p. 281), view that "… repetition [is] accompanied by an anaphoric reference (the second pointing back to the first element)". A reduplicative word in English and Arabic always denotes a unique referent even if it is composed of two components. No syntactic co-reference to one of the components of the reduplicative word in English and Arabic is made as in the following examples:

a.   His namby-pamby behavior   only made the situation worse.

b.   They use forced   *willy-nilly* to sit through a lot of foreign speeches.

Similarly, the reduplicative word in Arabic شذر مذر *šaðara maðara* behaves as one unit, but there is no referentiality to one of its components as in   the following example: صــار القوم شــذر مذر ṣaar al-qawm *šaðara maðara* 'people scattered in all direction'.

In addition, there is referentiality to some reduplicative words as a whole in English such as I like *singsong*, but Ali does not like it. Here, the pronoun (it) refers to the word *singsong*. Another example, I *do not play ping-pong, but he plays it.* However, there is no referentiality to reduplicative words as a whole in Arabic.

3.7. Semantic Aspect
3.7. 1. Iconicity

Iconicity is the relationship between form and meaning. Booij (2005) states that reduplication is often a case of iconicity in language. This means that the formal structure is iconic for the meaning expressed. Therefore, a higher amount of iconicity is shown by English reduplicatives, such as *ping pong and zig-zag*, in which repetition in form is diagrammatic of repetition in meaning, the change of the vowel symbolising change of direction (Mattiello, 2013). In Arabic, there are some iconic reduplicatives such as زقزق *zaqzaq* 'to chirp', وشوش *wašwaš* 'whispered' and صر صــــر *şarşar* 'furious; describing the wind', حف حف *ħaf ħaf* 'birds wing sound', غرغر*ɣarɣar* 'to gargle', etc.

3.7.2. Meaning of Components of Reduplicatives

On the basis of meaning, there are reduplicatives in English and Arabic which have meaningful components such as tip-*top* 'excellent' (*tip* 'the end of something'; *top* 'the highest part of something') and *chit-chat* 'gossip' (*chit* 'note, young girl'; *chat* 'an informal conversation'). In the same way, some reduplicatives in Arabic have meaningful components such as بــذيرعفير *baðiir ʕafiir*, whose first component has meaning 'sowing' and the second component has meaning 'dust'. Another example is ساغب لاغب *saaɣib laaɣib*, whose first component ســاغب *saaɣib* has meaning like 'hungry, starving' (Ibn-Faris, as cited in Al-Suyuti, 1998). And the second component لاغب*(laaɣib)* has meaning 'tiredness'. Furthermore, there are some reduplicatives in English and Arabic have two components, but one component has a separate meaning and the other component is separately meaningless and is added for aesthetic effect as in in the following examples:

a. *mish-mash* 'a confused mixture ' (*mash* 'to crush something'; mish has no meaning)

b. شـغب جغب *šaɣab jaɣab* (*šaɣab* 'unrest, trouble'; *jaɣab* has no meaning)

Moreover, some English reduplicatives can have two meaningless components whereas Arabic reduplicatives cannot have two meaningless components. For example, *wishy-washy* (adj) 'weak and insipid', *helter-skelter* (adv) 'disorderly' and *hocus-pocus* (N) 'trickery' (Preuszová, 2017, p.2).

3.8. Pragmatic Aspect

According to Thomas (1995, p. 3), there are two levels of meaning. The first level is called "abstract meaning" which is concerned with what a word could mean (the dictionary meaning of words). The second level of meaning is the "pragmatic meaning" which refers to the speaker's communicative intention. Baldi (2000, P. 963) states that reduplicative constructions are part of "unusual coinages, which are expressive in that they convey a special pragmatic effect which extends beyond their lexical meaning". Therefore, many English reduplicatives have pragmatic meaning as in the following examples:

1- *zig-zag*

a. They travel along a zig-zag path.

b. The company has zigzagged a lot of commercial dealings.

The dictionary meaning of the reduplicative word in (a) means that they travel along the twisted and curved road, whereas the pragmatic meaning of the reduplicative word in (b) indicates that the company has made a lot of suspicious transactions.

2-topsy-turvy

a. His house is all topsy-turvy.

b. Wars topsy-turvied everything in our country.

In (a) the meaning of the reduplicative word indicates a state of great confusion whereas the pragmatic meaning of the

reduplicative word in (b) indicates destruction and demolition. However, Arabic reduplicatives do not have pragmatic meaning.

3.9. Uses

English and Arabic reduplicatives share the similarity in their use. The most common uses of reduplicatives in English and Arabic can be discussed as follows:

3.9.1. Imitation

Both English and Arabic reduplicatives are used for imitation of some natural sound associated with the object or action, for instance, *tick-tack* 'sound of a clock', *ha-ha* 'sound of laughter' and *bow-wow* 'sound of dog'. Similarly, there are many Arabic reduplicatives that imitate sounds such as صرصر *şarşar* 'furious; describing the wind' and زقزق *zaqzaq* 'to chirp'.

3.9.2. Baby Talk

English and Arabic reduplicatives play a role in first language acquisition, since they are widely presented in baby talk in the form of words such as بابا *baba* 'father' and ماما *mama* 'mother' in Arabic, and *papa*, *mama*, and *poo-poo* in English. The repetition of simple syllables seems to be a universal phenomenon in the process of acquiring meaningful words, as it enables children to produce polysyllabic utterances without the need of articulating complex structures (Hurch et al., 2008).

3.9.3. Intensity

An intensifying is presented in some English reduplicative words such as *easy-peasy* 'really simple', *superduper* 'extremely good' and *tip-top* 'very good'. Likewise in Arabic, reduplicatives are also used to intensify as in the examples below:

a.   لفلف *laflaf'* 'to wrap'

b.   عضعض *ʕaḍʕaḍ* 'to bite repeatedly or in more than one place'

c.   هزهز *hazhaz* 'to shake more frequently or intensely'

(Ibrahim, 1982,85-86).

3.8.4. Movement

English reduplicatives are used to express alternating movements as in *seesaw, flip-flop* and *ping-pong* (Quirk et al., 1985). Similarly, Arabic reduplicatives are used to express movements as in زلزل *zalzal* 'to shake' and زحزح *zaħzaħ* 'to move'.

3.9.5. Diminution

Both English and Arabic reduplicatives are used to express smallness. For example, *teeny weeny, bitsy-witsy* and *itty-bitty* 'very small' in English (Mattiello, 2013); and ذرذر *ðarðar* 'to sprinkle small amounts of flour or sand' and صبصب *şabşab* 'to pour small amounts of water' and فتفت *fatfat* 'to break into tiny pieces' in Arabic.

3.9.6. Rhyming

English reduplicatives are used for rhyming in which the reduplicant copies the base with a change in certain component of the base, such as the consonants, syllables, or vowels, to create harmonizing sounds in pronunciation (Sharum et al., 2010). Some instances of rhyming reduplicatives have been lexicalized in the language like *walkie-talkie, superduper, willy-nilly* and *hanky-panky* in English. Arabic reduplicatives are also used for rhyming. Ibn Faris (1993) views that reduplicant is rhymed with the base to reinforce meaning and create an expressive harmony. In other words, the two components of the reduplicative word are rhymed to make the harmonic expression because they end with the same sound as in the following examples: عفريت نفريت *ʕifriit nifriit* 'troublemaker' and خفوت لفوت, ربحل سبحل *rabhal sabhal* 'huge', *xafawat lafawat* 'quiet', etc.

3.10. Universality

For the universal features of reduplication, Moravcsik (1978) points that reduplication is a potential universal language expression across many languages. From the concept of universality, reduplication is very common in many languages of the world like Tagalog, Italian, French, Turkish, Persian, English, Arabic, etc. The following Table 7

shows the reduplicatives in different languages.

Table (7): The Reduplicative Words in Different Languages

Languages	Examples of Reduplicatives	Meaning in English
English	*bye-bye*	good-bye, greeting
French	*malin malin*	really clever
Turkish	*yavaş yavaş*	slowly
Vietnamese	*mau-mau*	very rapidly
Japanese	*mura-mura*	villages
Arabic	شذر مذر *šaðara maðara*	scattering
Hindi	*pani -wani*	water
Spanish	*perro perro*	real dog
Italian	*bella bella*	very beautiful

4. Conclusion

This study has found that reduplication is a morphological process that is found in many languages of the world including English and Arabic languages. Reduplication is a productive process in English and Arabic, because it leads to create new words. Unlike other types of word processes, reduplication is less productive process in English and Arabic. It has shown that there are similarities and differences between English and Arabic reduplicatives in terms of definition, classification, productivity, aspects, uses and universality. It can be noticed that, the classifications of reduplicative words in English and Arabic are similar to each other to a high extent. English and Arabic reduplicatives can be classified on the basis of their structures into: complete and partial reduplicatives.

From the perspective of structure reduplicatives words in English correspond to reduplicative words in Arabic in terms of form, laws of construction and method of use. For example, the reduplicatives in English and Arabic have binary structure. They consist of two components: the first component is called base and the second component is known as reduplicant; they differ in a vowel or consonant. From the perspective of semantic properties, both Arabic and English reduplicatives have meaningful components or one component is meaningful and the second component is meaningless. However, some reduplicatives in English have meaningless components. In addition, the most of reduplicatives in both English and Arabic are nouns, adjectives, verbs adverbs and interjections. Likewise, Arabic reduplicatives can be nouns, adjectives and verbs. However, Arabic reduplicatives cannot be classified as interjections and adverbs. In terms of pragmatic meaning, English reduplicatives only have pragmatic meaning. Both English and Arabic reduplicatives are used for intensity, imitation, movement, diminution, etc.

Since there are similarities and differences between English and Arabic reduplicative words, this study supports the Principles and Parameters Theory of Generative Grammar (Chomsky, 1981). According to this theory, reduplication is a universal principle that is found in all languages of the world including English and Arabic whereas reduplicatives are considered as a parameter, which differs from one language to another. So, English and Arabic reduplicatives have their similarities to the same principle of the UG and their differences to the difference in their parametric settings. Finally, the researcher suggests that more studies can be done in the field of Arabic reduplication, especially in Yemeni-Arabic reduplicatives.

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