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The Process of Metathesis in English and Kurdish: A Phonological Study

ABSTRACT

Metathesis is a phonological process whereby a sound hops out of its proper place and appears in another position within a word or words. Different views have been proposed about the nature of metathesis. Some believe it to be a minor sound change that affects a small portion of sounds; others claim that it is a common linguistic process that is found in almost all languages, hence, a universal process. The present paper is concerned with investigating metathesis in both English and Kurdish so as to uncover the points of similarities and differences between the two languages. The study tries to follow a specific typology that can be applied to both languages so as to gain scientific objective results. The comparative analysis findings show that metathesis is more flexible in Kurdish than it is in English. What is more enthralling is the process productivity. In both languages, the borders for the process have no limits

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عملية الانقلاب في اللغتين الانكليزية والكردية: دراسة صوتية

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الخلاصة:

الإبدال هو عملية صوتية حيث يقفز الصوت من مكانه الصحيح ويظهر في موضع آخر داخل الكلمة أو الكلمات. لقد تم اقتراح وجهات نظر مختلفة حول طبيعة الإبدال. يعتقد البعض أنه تغيير بسيط في الصوت يؤثر على جزء صغير من الأصوات؛ ويدعي آخرون أنها عملية لغوية مشتركة توجد في جميع اللغات تقريباً، وبالتالي فهي عملية عالمية. يهتم هذا البحث بدراسة الاستبدال في اللغتين الانكليزية والكردية لكشف نقاط التشابه والاختلاف بين اللغتين. وتحاول الدراسة اتباع تصنيف محدد يمكن تطبيقه على اللغتين للحصول على نتائج علمية موضوعية. تظهر نتائج التحليل المقارن أن الإبدال أكثر مرونة في اللغة الكردية منه في اللغة الإنجليزية. ما هو أكثر إثارة للاهتمام هو إنتاجية العملية. في كلتا اللغتين، حدود العملية ليس لها حدود الكلمات المفتاحية: استبدال، تغير الصوت، العملية الصوتية، معايير، سهولة النطق

1.Introduction

Linguistics, the study of language, includes anything from recognizing a language's phonemes to establishing rules around language usage. Knowing how language works and all the information it contains can help us comprehend a lot of other things because language is so fundamental to who we are and how we identify ourselves among others (Al-Jaf, 2017: 15). Phonology is the branch of linguistics that is dedicated to the study of language sound systems. It looks at the arrangement, patterns, and usage of sounds in various languages. When words are uttered together in natural, fluid speech, the sounds alter or interact within a phenomenon known as connected speech. Hence, one has to bear in mind the difference between the way humans speak (Roach, 2005:107). In contrast to mechanical speech (or the isolated word pronunciation), processes like rhythm, assimilation, elision, juncture etc. can have a great impact on the way speech flows and the way it is interpreted by its interlocutors (ibid). One important process within connected speech is the process of metathesis. Metathesis, from the Greek words meta (change) and thesis (position), refers to the transposition of the normal sequence of sounds in a word or among words. Thus, two sounds that appear in a particular order in one form of a word 'xy order' occur in an opposite order in a related form of the word 'yx order' (Campbell, 1998: 58). This reordering of sounds usually affects the words phonologically rather than semantically. That is, the original and the metathesized forms of the word do not change their meanings (Fatah,

2013: 220). Words like desk→ ‘dek-s’, waps → ‘was-p’, tarza‘ → تـمـرـزـه tazra l تـمـرـزـه ‘can show how sounds swap with each other producing a new metathesized form of the word which may be of different kinds.

Throughout history, metathesis has been treated differently by different scholars and in different theories. Some scholars consider metathesis as a grammatical process that is often used as a means of distinguishing between morphological classes. As such, metathesis lies outside the realm of phonology and, consequently, phonological theories need not provide an account of it (Hume,1998: 147). A good example to support this view can be found in Rotuman, a Malayo-Polynesian language of the Central Pacific. Metathesis in this language marks the distinction between definite and indefinite nouns, hence, serves a grammatical function as in the example ‘hosa’ 'the flower' vs. ‘hoas’ 'some (unspecified) flower' (Strazny,2005: 679). Another view accounts for the importance of explaining morphological metathesis within the phonological processes. McCarthy (1995: 54) conducted a reanalysis of Rotuman and found that even in cases of metathesis which serve to distinguish morphological classes; prosodic requirements play a central role in determining the particular shape of the metathesis alternant. The perspective that the current study falls in is the one that confines metathesis to phonology, namely phonological metathesis. According to this view, metathesis is a sound change that is driven by purely phonological considerations (Hume,1997: 294). Treated phonologically, metathesis has been looked at from two different viewpoints. One sees it as a minor sound change that is often acoustically driven, hence, affecting only a restricted portion of a given phonological system (Kiparsky,1995: 642). Others see it as a common intriguing process that has no end as language always welcomes periodic additions (the American Heritage,2005: 41). The current study is arguing for the latter view trying to prove the universality of the process and its endless effects .

2.Different Views about Metathesis

Scholars vary in their consideration of metathesis concerning the regular- irregular spectrum. Some believe that metathesis is a process that is sporadic, irregular and restricted to performance errors (Powell,1985: 106). Spencer (1996: 68) claims that "metathesis frequently occurs in all languages as a type of speech error and is a common feature of child phonology". Proponents of this view (Webb 1974; Montreuil 1981; Powell 1985 and Kiparsky 1995) believe that the process is uncommon and marginal because it seemed to contradict standard doctrines. Synchronically, metathesis is viewed more as a performance factor responsible for spoonerisms and other erratic surface deviations (Montreuil,1981: 67). On the other hand of the spectrum,

there exists the view that sees metathesis as a regular phonological operation. A unified account of the process with its seemingly different types can be made if one gets information about the full range of metatheses that are possible in language and under what conditions (Hume, 2001: 2). Proponents of this view (Blevins & Garrett 1998, 2004; McCarthy & Prince 1995; The American Heritage 2005) believe that metathesis is a common regular process that does not arise from a defect in speaking since it is completely different from what is called spoonerism. It is an internally principled and free from arbitrariness process. Unlike spoonerism, which is normally a performance phenomenon and hence a random deviation from the norm, metathesis is related to linguistic competence and as such systematic and rule-governed (ibid: 17.)

Between these two different views, the present study tries to investigate the process of metathesis in both English and Kurdish languages with the aim of substantiating its existence as a phonological phenomenon so as to validate the empirical basis that sets the ground for the process to be considered universal and existing in most of the languages (Blevins & Garrett 1998, 2000, Mielke & Hume 2001; The American Heritage 2005). Examples of metathesis from both English and Kurdish will be presented and described to find out points of similarities and differences between the two languages regarding their metathesis behavior. Moreover, it is hypothesized that both languages exhibit similar behavior and in both of them metathesis is considered sporadic and irregular. The model that will be adopted to categorize metathesis in the two languages under study is that of Stranzy (2005) since it is an updated, logical and easily applicable model. According to Stranzy's (ibid) classification, metathesis process can be examined typologically along with four parameters: Adjacent vs. non- adjacent parameters (sound location), Synchronic vs. diachronic parameters (history), Abrupt vs. gradual parameters (ways of sound production) as well as the Sporadic vs. regular parameters (types of sound production). These parameters form the basis for the current study and according to them examples from the two languages under study will be investigated to see which types prevail in each language and under what conditions. The policy followed in showing the words will be using the Latin script (provided in appendix 2). The use of this script is needed to show how sounds in words pop up over each other and hyphens will be used to separate the sounds and give more focus on the metathesized sounds, the metathesized words will be put into quotation marks. Moreover, IPA transcriptions will be used wherever necessary putting them into slashes.

.3 Metathesis in English Language

Metathesis in English has been investigated by different scholars. Most of whom prove that it is partly sporadic and partly regular. That is, the process is mainly random and sporadic, however, when it comes to certain examples, the process becomes regular and follows rules (Ultan 1978; Hock 1985; Fromkin et al 2003). Phonologists concern themselves with devising notations that can be used as rules according to which sounds can be metathesized (Ahmadkhani,2010: 5). However, these people found that whenever they come up with certain notations that can govern the whole process, examples of different kinds pop up and violate the assigned rules. This distinct behavior of the process tempts recent phonological theorists to focus more on the process productive nature maintaining that more emphasis on the fundamental role that metathesis plays in the language's phonological system should be displayed by giving it more attention and space in the phonological literature, along with other widespread phonological processes such as assimilation and elision (Canfield, 2015: 265). Some examples according to Stranzy's (2005) parameters are surveyed below .

3.1English Adjacent vs. non-Adjacent Metathesis

Adjacent metathesis in English occurs when two contiguous sounds (adjacent) are transposed. It is also known as local metathesis (Stranzy,2005: 679). The transposition may be between two consonants CC as in examples (1,2 & 3) in the table below2. Example (1) shows how the /rp/ got metathesized to /pr/ producing the well-known name (Oprah). Examples (2) and (3) undergo the same kind of change (a consonant exchanges place with another consonant). While examples (4, 5 & 6) exhibit exchanges between consonant and vowel segments with CV order metathesized to VC (Example 4 &5) and VC order metathesized to CV (Example 6) as shown in table (1/a)3:

Table (1/a) Adjacent Metathesis in English

No	Original Word	Metathesized Word
1	orpah	op-rah
2	aks	as-k
3	waps	was-p
4	brid	bi-rd
5	foliage	foi-lage
6	modern	modr-en

The other
dichotomy
adjacent

part of this
is the non-
metathesis.

That is, the long distance non-local metathesis, also called hyperthesis (<https://gadhuli.blogspot.com/2013/05/phonological-process.html>). This type has some intervening sounds (usually vowels), between the transposed sounds (usually consonants). Thus, switching non-contiguous sounds of example (1) in the table below exhibits that v-l → l-v (that is, /v/ sound has changed position with /l/ sound) despite the intervening /e/ vowel (Strazny, 2005: 680). The same is true with example (2 & 3) in the table as they show the intervening of /e & a / sounds between the / t & r; p & s/ respectively producing words like comfterble and pasketti which may be counted as speech errors or children's speech

Table (1/b) Non-Adjacent Metathesis in English

No	Original Word	Metathesized Word
1	irre <u>vel</u> ant	irrel-e-vant
2	comf <u>or</u> table	comft-e-rble
3	sp <u>ag</u> hetti	p-a-sketti

All
the table

examples in
above show

the intervening of a vowel between two consonants and this validates the existence of such a parameter in English language. However, words differ in their behaviors when metathesized. Examples (2 & 3) differ from example (1) in that these two examples have their vowel before (example 2) or after (example 3) the two consonants in the original word but intervened between these two sounds in the metathesized version of the word. That is, the vowel intervenes the two consonants when transposed .

3.2English Synchronic vs. Diachronic Metathesis

The term metathesis is used with two different, yet related, meanings in linguistics. The first is descriptive in nature, denoting a sound pattern in which a sequence of sounds is observed in one order in one context but in the opposite order in another context. This is the synchronic type that is usually ascribed to phonological rules than to other factors. Speakers tend to interchange segments to achieve a kind of 'ease of articulation' (Fromkin et al, 2003:311). Accordingly, this type of change occurs within one chronological period. In current English, for example, metathesis can be found in such alternations as those found in the table (2/a) below. Examples (1,2,3 & 4) clarify that the exchange occurs between nasal sounds that are either contiguous to each other (example 1) or even located in the same word (examples 2,3,4). Although the shift between nasal sounds is believed to be the commonest among the synchronic parameter

(Canfield,2015: 265), other examples can be found in present English as when the English /r/ sound frequently metathesizes with an unstressed vowel. For instance, example (5) in the table shows how the /pro/ of produce has been metathesized to /per/ to get the word perduce usually transcribed as /pərdju:s/. The same, but with a reversed ordering, is found in example (6) that is transcribed as 'pr-əfo:m' but now with a VC transposed to a CV order under the influence of the unstressed schwa /ə/ vowel (Pyles & Algeo,1993: 38). Other regular synchronic metathesis can be found in English in phrases like keep still which does not change to (*teep kill), but either (steep kill) or (skeep till), showing that metathesis is not random and, in this case, it has to attest to the cohesiveness of the clusters /sk/, /st/ besides the salience of the /s/ sound (Minkova, 2003: 208). Speaker variation between the metathesized and unmetathesized forms is nothing more than variation in the pronunciation of a word during an earlier chronological stage of the language. It is generally the product of a previous diachronic type (ibid.)

Synchronic metathesis can also be sporadic as when different examples are produced through the spoonerism phenomenon as well as through examples in children's speech (Chalker & Weiner,1998: 329). Words like irrelevant→ 'irrev-e-lant', spaghetti→ 'p-a-sketti' (table 1/b above) and kitchen→ 'ch-it-ken' (table 3/a below) can be good representatives for the sporadic synchronic metathesis as they follow no constraint and cannot be regularized as no structural motivation rules will be applied to them (Stranzy,2005: 678). Another enthralling example can be found when metathesis occurs between a sound and a syllable boundary as what happens in example (7) in the table below in which the word 'another' with the original an other is reinterpreted as 'a nother', especially in the expression "a whole nother thing" ((Pyles & Algeo,1993: 38). In this case, metathesis is considered sporadic as well as abrupt as it has been produced without any structural motivation (ibid.)

Table (2/a) Synchronic Metathesis in English

No	Original Word	Metathesized Word
1	en <u>m</u> ity	em-nity
2	En <u>e</u> my	eme-ny
3	An <u>e</u> mone	ame-none
4	re <u>m</u> uneration	renu-meration
5	pr <u>o</u> duce	pe-rduce
6	per <u>f</u> orm	pr-eform

7	an other	a-nother
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The second meaning of metathesis in this parameter is the historical (diachronic) one. Metathesis is usually discussed in historical linguistics as a kind of phonetic change. Many words in Old English (OE) or even Middle English (ME) have been reproduced in Modern English by undergoing metathesis. Diachronic metathesis accounts for such correspondences as three and third (ME thridde) and work -wrought (OE worhte), and for some doublets such as curd and crud (Chalker & Weiner, 1998: 392). This shows that a word might undergo different changes until it reaches its status (see section 3.4). Diachronic metathesis in English may be sporadic with the inversion of two sounds as in examples (1,2,3,4 & 5) in the table below, i.e. a word like crud becomes 'curd' in Modern English sporadically, that is, following no rule or constraint. However, this sporadic diachronic metathesis may become regular (permanently invert the same two sounds in many different words) if it fulfills a specific structural purpose (Stranzy, 2005: 679). For example OE 'hros', 'frist', 'thridde', and 'brid' (examples 6,7,8 & 9) became Modern English 'horse, first, third, and bird' respectively. In these words, a (consonant - /r/ - vowel – consonant) sequence changed to a (consonant- vowel - /r/ - consonant) sequence, with the vowel and /r/ sounds switching places. This is a conditioned sound change; it is not just any (/r/-vowel) sequence that metathesizes, but rather only those both preceded and followed by a consonant .

Examples like 'rude and brew' did not undergo this change as they do not follow the claimed sequence (Dawson & Phelan, 2011: 845). Other examples can be found in the less favored consonant sequences /ks/ which had been previously metathesized in order to locate the more sonorant (vowel-like) sound in the syllable-final position and the less sonorant sound near the nucleus (Stranzy, 2005: 679). Words like tax and task (example 10) are considered as variant development of a single form, with the /ks/ represented by the /x/ metathesized in the second word to /sk/. That is, the /x/ represents /ks/, the flipped version of /sk/. The same process has been undergone in example (11) in the table (Ohala, 2001: 398) (see section 4.3 for more details about these two last examples). Regular diachronic metathesis is often the result of a series of

interrelated sound changes over time, a gradual chain reaction of regular changes whose last stage creates a transposed version of the original sequence which is considered standard. Metathesis has altered the shape of many English words. Numerous words acquired their present forms by way of metathesis and even some of these word forms have gradually become a linguistic mark for language change (Stranzy,2005: 679 .(

Table (2/b) Diachronic Metathesis in English

No	Original Word	Metathesized Word
1	Cr <u>u</u> d	cu-rd
2	Cav <u>a</u> lry	cal-vary
3	Kirsten	Chr-istian
4	Th <u>u</u> rh	thr-ough
5	Wap <u>s</u>	was-p
6	H <u>r</u> os	ho-rse
7	Fri <u>s</u> t	fi-rst
8	Thri <u>d</u> de	thi-rd
9	br <u>i</u> dd	bi-rd
10	tax- <u>taks</u>	tas-k
11	axe - <u>aks</u>	as-k

What is the table the original one used. Over

intriguing in above is that word is the historically time the

metathesized pronunciations became standard and prevailing, and the spellings were changed to conform to the new pronunciations (e.g: axe→ aks → ask). The original (diachronic) word has been substandardized that even dictionaries do not enter them as standard variants (Minkova, 2003:34). While writing the current paper, it was very much easier to check the word by looking at whether the word needs correction (the original) or not (metathesized) since the dictionary only recognizes the metathesized version of the word and asks for no correction when it is written .

3.3 English Abrupt vs. Gradual Metathesis

Abrupt metathesis completely transposes sounds in a single step. Usually, synchronic metathesis is described as being abrupt, motivated by making sequence of phones easier to articulate. It is common to hear metathesis in the speech of children, who often cannot pronounce

all the consonant sequences that adults can, hence adhere to easy pronunciation by transposing segments. For example, some English-speaking children pronounce spaghetti as 'pasghetti' (example 1) in which the former has the initial sequence /spa/, which is often difficult for children to pronounce. Other examples can be found in the table below:

Table (3/a) Abrupt Metathesis in English

No	Original Word	Metathesized Word
1	<u>S</u> paghetti	p-a-sghetti
2	<u>K</u> itchen	ch-it-ken
3	Nuc <u>e</u> ar	nucu-lar
4	<u>P</u> rescription	p-e-rscription
5	De <u>s</u> k	dek-s
6	Intro <u>d</u> uce	inte-rduce
7	Asteri <u>s</u> k	asterik-s
8	Ca <u>s</u> t	cat-s

The other type within this parameter is the gradual metathesis which can best be understood as a type of chain reaction, a series of sound changes over time. Gradual metathesis therefore uses one or more intermediate stages between the original order and the final transposed order. Usually diachronic metathesis is described as being gradual in English it can be found in examples like wolf (example (1) in table 3/b below) which has been developed from the Indo-European root 'lup'. The process then goes from lup → ulp then to 'ulf' until it reaches the present 'wolf'. The first sound change is metathesis of /u/ and /l/, the second is changing /p/ to /f/ and the last change /u/ to /wo/ in the spelling of the word (<https://gadhuli.blogspot.com/2013/05/phonological-process.html>). The same is with example (2) 'burn' which has undergone early metathesis of the initial consonant and vowel to become 'birnan' after which the word underwent diphthongnasition to be 'bearn' whose vowel has been changed under the influence of the nasal sound to an /u/ vowel (Quirk & Wernn:1960:140-1). Example (3) in the table exhibits the word 'foliage' which was originally from a Latin root, called 'folium', meaning, leaf. Undergoing metathesis, the word later changed to 'foillage', which later became the present

No	Original Word	Metathesized Word
1	<u>l</u> up- ulf	wo-lf
2	Br <u>inn</u> an	bu-rn
3	Fo <u>ill</u> age	fol-iage
4	<u>a</u> ks	as-k
5	waxan- wak <u>s</u> an	was-can

table above
metathesis is

related to historical one. So words, historically speaking, undergo many processes until they reach their current status (ibid .(

According to the first part of this parameter, metathesis is considered sporadic and haphazard. As such, examples of metathesis are often treated as if labeling it were explaining it (Powell, 1985: 106). One type of sporadic metathesis is spoonerism which is a phrase in which the initial consonants of two words swap over each other creating an amusing new expression. The following examples can clarify the phenomenon of spoonerism (the underlined sounds are the ones transposed):

Marden me, Padam for Pardon me, Madam -
?May I sew you another sheet? for May I show you another seat -
you have hissed all my mystery lectures for you have missed all my history lectures -
fool the pill for fill the pool -

(Montreuil, 1981:68)

Other types of sporadic metathesis may be ascribed to performance errors and to child language. As far as the former, many of the synchronic metathesis types can represent the sporadic nature of metathesis (see section 3.2 above). More examples can be seen in table (4/a) below. Example (1) shows how in adult's speech the abbreviated written form 'etc.' may be pronounced as 'excetera' with /k/ before /t/ sound, while it is in fact 'et cetera', as suggested by its abbreviated form e-t-c. with /t/ before /k/ (<http://blong.Annettelyon.com/> 2001/07/ wnw-metathesis). Other examples in the table below may be good representatives of child speech (or even adults) and this diversity gives metathesis its limitless nature (Campbell, 1998: 167.)

Table (4/a) Sporadic Metathesis in English

No	Original Word	Metathesized Word
1	et cetera	ex-ce-tera
2	Animal	am-inal
3	Spaghetti	pa-sghetti
4	Whisper	whip-ser
5	Cannibal	cal-iba-n

The
view

other
within

this dichotomy is the one that considers metathesis as a regular process. Regularity means following certain rules and the process is to be undergone according to these rules. Scholars were so much concerned with formulating rules that can govern metathesis. Ultan (1978, 383-90) mentioned some conditions for occurrence of metathesis in English. He found that metathesis may occur when the phonetic constraint eliminates initial or final clusters with liquids as when OE 'setl' changes to 'seld'. Another sound change may be found in clusters with /r/ as in ME 'drit' and 'brid' changing to present English 'dirt' and 'bird' respectively in which the post-vocalic dentals exert a strong attraction on the /r/ sound (ibid). Grammont (1923) argued for specific types of CC metathesis in order to avoid unpronounceable clusters as what happens in synchronic abrupt and sporadic metathesis (see above). Hock (1985: 534) suggested that regular metathesis serves to eliminate clusters when it fails to conform to the preferred syllable structure according to which sonority increases in the onset and decreases in the coda. That is, less sonorous consonants (those with smaller 'aperture') are always positioned closer to a syllable boundary and more sonorous consonants closer to the syllable nucleus (Grammont, 1923 Cited in Blevins & Garrett, 2004: 120). Accordingly, the stop-sibilant clusters /ks/ usually change to

sibilant-stop sequence /sk/ so as to conform to the previous rule as in tuks→ tusk; maks→ mask; huks →husk; waksan →wascan; muksle →maskle (Blevins & Garrett, 2004: 139). Other rules may be ascribed to having a heavy coda prohibition which led to metathesizing the vowel with the consonant so as to avoid the (r-consonant) sequence in the coda. Examples (1,2 & 3) clarify this case. Such a sequence is also prohibited in the word onsets having a (consonant- r) sequence as in examples (4 & 5) in the table below. In these cases, whether in the coda or the onset, metathesis appears to facilitate the pronunciation of two successive (consonant- r) or (r-consonant) sequences in each word (ibid.).

Table (4/b) Regular Metathesis in English

No.	Original Word	Metathesized Word
1	mod <u>er</u> n	modr-en
2	pat <u>ter</u> n	patr-en
3	pe <u>r</u> vade	pr-evade
4	pre <u>s</u> cribe	pe-rscribe
5	pre <u>s</u> cription	pe-rscription

All in
despite
attempts

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rules and notations to govern the metathesis process as a regular phonological phenomenon, they proved to be rarely productive and any unified and explanatory theory to the process proved to be limited and unsuccessful. This has been ascribed to the distinct nature of the process and its limitless diversity (Montreuil, 1981: 67).

4. Metathesis in Kurdish Language

In Kurdish language, the sound exchange is a phenomenon by which two phonemes change places, and sometimes the word is observed in two different phonological forms in two dialects of the same language (while sometimes within only one). Some theories have been proposed to account for metathesis in Kurdish. The most common is that of Dzay and Mohamed (2001). These scholars looked at the phonetic exchange as a phenomenon in which a word from a neighboring environment is used improperly by the country which took the word. This state happens when a word is taken from a different country and used in another country. The focus here is, then, on borrowing a word from another language then using it incorrectly so as to be harmonized within the indigenous language (Fatah, 2013: 220). The definition of metathesis in

Kurdish does not differ from that in English. It is a process of exchanging places between phonemes. A major concern in Kurdish is the distinction between *exchanging sound positions* which is the core of the process and the other is the *phonological replacement* which is the replacement of one phoneme to another, hence; one sound will be replaced (rather than exchanged) with another. In both cases, the words do not change their meanings. The words /tarza/ تەرزە → /tazra/ تەزەرە may be used to exhibit the first case while examples like /asman/ ئاسمان → /ʔasman/ عاسمان and /qurʔan/ قورئان → /qurʕan/ قورعان may be used for the latter case (ibid). This latter issue can also be found in English in which sound replacement is considered as part of metathesis. Words like *pit, pat, pet, pot, put* are all learned with initial /p/ and final /t/. The change of one phoneme to another may be applied to most examples that contain the same phonetic category. For example, in an English dialect where final /t/ is realized as /ʔt/, the phonetic properties of this realization may allow reinterpretation as /ʔ/ and thus a /t/ → /ʔ/ shift will occur producing words like *piʔ, paʔ, peʔ, poʔ, puʔ* respectively (Blevins & Garrett, 2004: 119). In a nutshell, metathesis is the reordering of segments within the phonological string that may be represented by either sound shift or sound replacement (Fatah, 2013: 220). The following sections survey Kurdish examples according to Stanzy's (2005) model.

4.1 Kurdish Adjacent vs. non-Adjacent Metathesis

In Kurdish, **adjacent** segments may swap with each other having the structure of two CCs exchanging places with each other as in examples (1, 2, 3, 4 & 5) in table (5/a) below⁴. In example (5), for instance, one can see how the /fr/ segments of the word *befr* has been metathesized to be pronounced as *berf*, usually in children's or in adult's rapid speech. The other possibility is to metathesize a C with a V sound in the CV structure as what happens in examples (6 & 7), or the opposite case in which a V exchanges places with a C sound in VC structure as in examples (8 & 9) exhibited in the table below⁵:

All in all, despite the attempts of these rules and notations to govern the metathesis process as a regular phonological phenomenon, they proved to be rarely productive and any unified

and explanatory theory to the process proved to be limited and unsuccessful. This has been ascribed to the distinct nature of the process and its limitless diversity (Montreuil, 1981: 67.)

4. Metathesis in Kurdish Language

In Kurdish language, the sound exchange is a phenomenon by which two phonemes change places, and sometimes the word is observed in two different phonological forms in two dialects of the same language (while sometimes within only one). Some theories have been proposed to account for metathesis in Kurdish. The most common is that of Dzay and Mohamed (2001). These scholars looked at the phonetic exchange as a phenomenon in which a word from a neighboring environment is used improperly by the country which took the word. This state happens when a word is taken from a different country and used in another country. The focus here is, then, on borrowing a word from another language then using it incorrectly so as to be harmonized within the indigenous language (Fatah, 2013: 220). The definition of metathesis in Kurdish does not differ from that in English. It is a process of exchanging places between phonemes. A major concern in Kurdish is the distinction between exchanging sound positions which is the core of the process and the other is the phonological replacement which is the replacement of one phoneme to another, hence; one sound will be replaced (rather than exchanged) with another. In both cases, the words do not change their meanings. The words /tarza/ → تەرزە /tazra/ may be used to exhibit the first case while examples like /asman/ → ئاسمان /ʔasman/ and /qurʔan/ → قورعان /qurʔan/ may be used for the latter case (ibid). This latter issue can also be found in English in which sound replacement is considered as part of metathesis. Words like pit, pat, pet, pot, put are all learned with initial /p/ and final /t/. The change of one phoneme to another may be applied to most examples that contain the same phonetic category. For example, in an English dialect where final /t/ is realized as /ʔt/, the phonetic properties of this realization may allow reinterpretation as /ʔ/ and thus a /t/ → /ʔ/ shift will occur producing words like piʔ, paʔ, peʔ, poʔ, puʔ respectively (Blevins & Garrett, 2004: 119). In a nutshell, metathesis is the reordering of segments within the phonological string that may be represented by either sound shift or sound replacement (Fatah, 2013: 220). The following sections survey Kurdish examples according to Stanzy's (2005) model.

4.1 Kurdish Adjacent vs. non-Adjacent Metathesis

In Kurdish, adjacent segments may swap with each other having the structure of two CCs exchanging places with each other as in examples (1, 2, 3, 4 & 5) in table (5/a) below⁴. In example (5), for instance, one can see how the /fr/ segments of the word befr has been metathesized to be pronounced as berf, usually in children's or in adult's rapid speech. The other possibility is to metathesize a C with a V sound in the CV structure as what happens in examples (6 & 7), or the opposite case in which a V exchanges places with a C sound in VC structure as in examples (8 & 9) exhibited in the table below⁵:

Table (5/a) Adjacent Metathesis in Kurdish

Original word			Metathesized word	
No	Kurdish	Latin Transcription	Kurdish	Latin Transcription
1	تەرزە	tarza	تەرزە	taz-ra
2	جومە	jum3a /dʒumʔə/	جومە	ju3-ma
3	قوچە	qopche	قوچە	qoch-pe
4	سووبەت	sub3at /suʔbət/	سووبەت	su3-bat
5	بەفر	befr /bʌfr/	بەرف	ber-f

Non-adjacent metathesis is also found in Kurdish. Having some segments intervening between the metathesized sounds can be easily detected as what happens in examples (1,2,3,4, & 5) in table (5/b) below. For instance, the /r & l/ of sherwal (example 1) has been metathesized although they have been separated by /wa/ vowels. Example (6) shows the swapping of vowels with each other within the same word; however, they are non-adjacent being intervened by a consonant. A case that is rarely found in English language. Example (7), much rarer in English almost no example found for it, shows the intervening of both V and C between the exchanged sounds.

Table (5/b) Non-Adjacent metathesis in Kurdish

Original word			Metathesized word	
No.	Kurdish	Latin	Kurdish	Latin
1	شەروال	Sherwal	شەلوار	shel-wa-r

2	فاتيحة	Fatīḥa	فاحتة	fah-i-ta
3	مروقة	merwle /meru:lə/	مل وقرة	mel-w-re
4	فانيلة	faniḷa /fa:ni:lə/	فالينة	fal-i-na
5	ناسايش	asaish /æsa:iʃ/	ناشايس	ash-ai-s
6	تينو	tenw /ti:nu:/	توني	tw-n-i /tu:ni/
7	ليم تيكجوو	lemtekchw /lemtekʃu/	تيم ليكجوو	t-em-lekchw

4.2Kurdish Synchronic Vs. Diachronic Metathesis

Synchronic metathesis in Kurdish language is more common than the other part of this dichotomy, that is, the diachronic type. Language borrowing plays a crucial role, here, as when a word like ‘jum3a جومعه’ or ‘rub? روبع’ are borrowed from Arabic, they would be pronounced as ‘ju3-ma جومعه’ and ‘ru?b رعب’ respectively (Farag, 2000:134). What is enthralling within this type is the fact that the new metathesized version of the word becomes a standard and the original word is forgotten. Thus, the metathesized word is the one commonly used among the Kurdish people giving it a level of standardization, although tracing it shows that it is nothing more than a wrong pronunciation on the part of the speakers. Example No. (5) in the table below exhibits the change of /ʃ/ to /z/ peshmarga ‘peʃmargə’ from the original pezhmarga ‘peʒmargə’, hence a type of sound replacement rather than sound exchange .

Table (6/a) Synchronic Metathesis in Kurdish

Original word			Metathesized word	
No	Kurdish	Latin	Kurdish	Latin
1	مة كتب	maktab /maktəb/	مة تكب	matkab /matkəb/
2	جومعه	jum3a /dʒumʔə/	جوعمه	ju3-na
3	روبع	rub?	رعب	ru?b
4	بيز متركه	pezhmarga /peʒmargə/	بيش متركه	pe-sh-marga

As far as the second meaning of metathesis in this parameter, that is, the historical type, it has been found very rare and most of the sources lack giving good examples for this type

4.3Kurdish Abrupt vs. Gradual Metathesis

In Kurdish language, metathesis may occur at any time and during any occasion especially in rapid speech. Words like those in the table (7/a) below can show the kinds of exchanges that some words may undergo. This kind of exchange known as the abrupt metathesis is sudden and unexpected as it may be heard from any person due to different reasons. Children's speech is full of this kind of metathesis as when they pronounce words like example (1,2 & 3) in the table below. Adults' speech is not devoid of this type. In adults' speech, usually when speaking rapidly, words like example (4) may be heard exhibiting the exchange of *lemtekchw* to the more ridiculing *temlekchw* (Fatah, 2013: 79). These examples are shown in the table :

Table (7/a) Abrupt Metathesis in Kurdish

Original word			Metathesized word	
No	Kurdish	Latin	Kurdish	Latin
1	مة كتب	Maktab	مة تكب	mat-kab
2	تة سبيع	Tasbih	تة بسيع	tab-sih
3	تة لة فون	Talafun	تة فة لون	taf-a-lun
4	ليم تيكجوو	lemtekchw /lemtektfu/	نيم ليكجوو	t-em-lekchw

Just like the Kurdish historical metathesis, gradual metathesis is also rare in Kurdish. Since the two (historical and gradual) are so much connected, it would not be surprising to find very few examples for this kind of parameter. The only word that could be found and agreed upon by native speakers to exhibit this type of metathesis is the word ‘پرتقالprtaqal’.

4.4Kurdish Sporadic vs. Regular Metathesis

Sporadic means not regular, that is, it occurs in various ways. This type of metathesis can be found in Kurdish as in spoonerism (see 3.4 above), in children's speech as well as in rapid speech that is undergoing metathesis. As far as these last two types, they can be found in the

table above (7/a) of the abrupt type. As far as the spoonerism, examples like the following can be good representative for this phenomenon

-dastmi la paraka rfand for parakai la dastm rfand

)

Farag, 2000 .(

The other part of this parameter is the regular type. In Kurdish no example has been found according to which sounds exchange places and this, in turn, clarifies the claim that metathesis in Kurdish is sporadic and irregular (Farage,2000.(

5.Reasons behind Using Metathesis

Metathesis is a phenomenon where two sounds in a given word or phrase exchange places. This process happens due to a variety of reasons. One reason has been ascribed to language borrowing when a word makes its way from one language to another. For example, when German words are used in English, they may undergo metathesis as in the example of wolf (section 4.3) or when Arabic words are used in Kurdish as in the example of quran which changed to 'quraʔn', this is caused by the close phonological properties between (a) and (ʔ) and when the sound (ʔ) is used then a true phonological exchange has been placed in this word to produce 'qurʔan' (section 4 .(

Other causes look at the speaker and/or the listener as their point of departure. That is, consideration of sound articulation as well as sound perception were given priority in formulating patterns of metathesis. As far as articulation, articulatory considerations are said to influence patterns of metathesis as when the articulatory signals are ambiguous or otherwise present difficulties in pronunciation. Hence, the main issue within this reason is 'the ease of articulation'. As far as perception, it is claimed that speech perception influences metathesis patterns when considering word recognition. With respect to this, it has been maintained that the left edge of the root or word is special for word recognition since lexical access is generally achieved on the basis of the initial part of the word. Hence, salient information tends to occur at the beginnings of words, and this location tends to resist phonological processes .

Historical, social and cultural factors also play an important role in shaping language sound structure. It is believed that metathesis patterns are merely artifacts of historical change, and do not represent the linguistic knowledge of the speaker (Blevins & Garrett, 1998). It was traditionally claimed that metathesis yields sequences that are in some way better formed than the input ordering, mainly due to the issue of 'ease of articulation' or satisfying a language's

phonotactic constraints. This reason is mainly applied to the English language. However, for the Kurdish language, the social paradigm plays a vital role. Therefore; the need to conform to a linguistic norm can exert influence over an individual's cognitive language sound patterns. The environment in which the language was impacted by society, culture or a clan getting used to using a certain word or words in a certain phonological manner plays a crucial role in spreading the metathesized versions of the words. Thus, the need to use forms that others will identify and accept influences one's sound system (Fakhri 1985; Hume 2001). Along a similar vein, phonological errors within words may be ascribed to the low intellect or insufficient education. Individual educational background plays a vital role. For instance, those who live in villages and countryside, which are far from educational centers, might be weak at uttering words. This implies the weak education against their language, and because of this they unintentionally alter the sound of the words and expressions and sometimes the new word, or term, replaces the original one. Getting used to saying certain words in some specified phonological manner in childhood or adulthood is another reason of these phonological errors. If one takes a closer look, one can notice that there are some people who got used to pronouncing words that underwent voice-change in the childhood. Children often cannot express and pronounce the words clearly and correctly and this is due to the immaturity of articulation. From that age on, they got used to pronouncing words with their sound altered and this will remain with them until they become adults. This is clearly manifested in the Kurdish society and their behavior in constructing metathesized forms of the words.

All in all, most of the cases of metathesis are ascribed either to ease of articulation or to a lack of knowledge and acquaintance with certain sound production.

.6Comparative Analysis Results

Comparing the two languages (English & Kurdish) concerning the phenomenon of phonological metathesis prove that both languages exhibit similar contexts and parameters in displaying the exchange of sounds. For example, for adjacent and non-adjacent parameters, Kurdish and English are found similar in this type of classification. Both of them have segments that exchange positions whether those segments are adjacent to each other or they are having intervening sounds between them. Despite the existence of this parameter in both languages, it has been found that adjacent metathesis is more common in English than the other type, while non-adjacent is more common in Kurdish than the other part of the parameter .

Synchronic and Diachronic parameters can be easily found in English language. But the latter type of this parameter is almost difficult to find in Kurdish. Kurdish language has both parameters, but the examples to prove these types of metathesis are very few. Synchronic metathesis in Kurdish is having the segment replacement as a specific type of metathesis. The diachronic type is almost prevailing within the English language, and it is maintained that the process of metathesis has shaped many English words; however, this type of metathesis is almost few in Kurdish hinting at the fact that metathesis is more sudden and abrupt in Kurdish .

For abrupt and gradual parameters, both Kurdish and English languages exhibit similar contexts. It is found in children's and adults' speech. Gradual metathesis can be found in many examples in English language showing the processes through which words pass, but it is rare in Kurdish being usually connected to the diachronic parameter, which is already rare in the aforementioned language .

Sporadic metathesis in Kurdish language is just like in English. Spoonerism is a group in which the initial sounds of two or more words have been swapped over creating a new expression. There are different examples to meet this type of metathesis in both languages. It is a parameter that has been easily detected in both languages. The other part of this parameter, the regular metathesis, has many debates that have not settled yet. In English the attempts to regularize the process is still paving its way, nevertheless, still unsettled. In Kurdish language there isn't any criterion for the sounds to change over, even those sounds that could be substituted are various. Accordingly, no attempts have been made to devise rules that may govern the process. So, the inclination is more for the sporadic type .

One can conclude, then, that both English and Kurdish languages are similar in undergoing metathesis and also sometimes both languages are similar in exchanging sounds, even though they are different from each other in some respects. Despite differences and varieties of rules for creating sounds still there are many situations that connect Kurdish and English languages. Although English is more rule-governed in metathesizing sounds than Kurdish, the two languages exhibit similar contexts and environments for the process of metathesis. Metathesis is the situation of changing sound individuals in different ages and levels for different reasons. Metathesis occurs with just changing the sound not the meaning. This result analysis validates the study's hypothesis in that metathesis is a common process in both English and Kurdish and both languages have similar behaviors in manifesting this kind of sound change .

.7Conclusions

Metathesis, the transposition of segments within specific phonological strings, is not always a sporadic irregular process as it is always assumed. When it comes to articulation and perception, a general phonological structure constraint must be followed. While when it comes to history, society and culture, as main reasons for metathesis, the process becomes more flexible in establishing new easier-to-pronounce structures. The main motivation for metathesis in both English and Kurdish has been ascribed to the issue of ease of articulation. In both languages, speakers resort to the easy version of the word. Accordingly, metathesis is considered as an end rather than as a means for ease of perception and production. Comparing the process in the two languages under study shows that the process is more flexible in Kurdish than it is in English. Kurdish exploits different segment combinations and produce different versions of metathesized words, specifically of the synchronic metathesis type. Nevertheless, the whole issue is reversed when it comes to the diachronic metathesis, as it, here, shows more impact on the English language than that on Kurdish. Metathesis shaped many English words throughout history .

As far as the issue of regularity, the results in both languages are still fuzzy. One can conclude that in both languages, metathesis is both regular and irregular. However, in English, it is inclined more with the former (being more rule-governed) while in Kurdish it is more with the latter (being more sporadic). Each example of metathesis, in both languages, is peculiar per se as one cannot propose a rule and apply it to all examples of metathesis. Metathesis standard formulation is still fudge .

Notes

¹ The words are given according to (original → metathesized). The arrow (→) means 'changed to'. The first two examples are English examples; the last is from the Kurdish language.

² For easy recognition, examples will be shown in tables with their metathesized versions. In the metathesized version of the word, a hyphen will be used to separate the metathesized segments so that they can be easily noticed.

³ Most of the examples (weather in this table or other ones) have been collected mainly from: Pyles & Alego 1993; Chalker & Weiner 1998; Stranzky 2005; and other reliable online website, (see online references)

⁴ Tables for Kurdish sounds will include the Latin version of the sound as it is commonly used in the language. Within the same column of the Latin transcription, some words will be transcribed according to the IPA system so as to provide more clarity for the pronunciation of the word (see the appendix).

⁵ The Kurdish examples have been collected from reliable sources besides examples of educated native speaker of Kurdish for which a jury has been designed to check the suitability of the examples (see appendix 1)

⁶ This type has got no table as its examples have been referred to in the previous table and other examples (of the spoonerism type) have been given within the text

References

Ahmadkhani, R. (2010) "Phonological metathesis in Persian: Synchronic, Diachronic, and the Optimality Theory". *Pazhuhesh-e Zabanha-ye Khareji Journal*, Vol.56 pp.5-24.

Al-Jaf A. I. (2017) "New Insights and Interdisciplinary Approaches to Study Linguistics". *Lark Journal*. Vol.24 <https://doi.org/10.31185/lark.Vol1.Iss24.531> [accessed 10 Nov. 2024]

The American Heritage (2005) *Guide to Contemporary Usage and Style*. Boston: Houghton Mifflin Company.

Blevins, J. and Garrett, A. (2004) "The evolution of Metathesis" In *Phonetically Based Phonology*, edited by B. Hayes, R. Kirchner and D. Steriade. Cambridge: Cambridge University Press.

Campbell, L. (1998) *Historical Linguistics: An Introduction*. Edinburgh: Edinburgh University Press.

Canfield, T. (2015) *Metathesis is Real and it is a Regular Relation*. Washington: Georgetown University Press.

Chalker, S. and Weiner, E. (1998) *The Oxford Dictionary of English Grammar*. Oxford. Oxford University Press.

Dawson, H and Phelan, M. (2011) *Language Files Materials for an Introduction to Language and Linguistics* (12th edition). Columbus. Ohio State University Press.

Fromkin, V; Rodman, R. and Hyams, N. (2003) *An Introduction to Language*. Los Angeles: Heinle.

Hock, Hans (1985). "Regular metathesis". *Linguistics* Vol.(23) pp.529–546.

Hume, E. (1997) "The Role of Perceptibility in Consonant/Consonant Metathesis". *WCCFL* Vol.17: pp. 293–307.

----- (1998) Metathesis in Phonological Theory: the Case of Leti. *Lingua* 104, pp.147-186.

----- (2001) "Metathesis: Formal and Functional Considerations". In E. Hume, N. Smith and J. Van de Wijer (eds.) *Surface Syllable Structure and Segment Sequencing*. Leiden, NL: HIL.

Kiparsky, P. (1995) "Phonological Basis of Sound Change". In J. Goldsmith (ed.), *Handbook of Phonological Theory*, pp. 640-670. Oxford: Blackwell.

McCarthy, J. (1995). *Extensions of Faithfulness: Rotuman Revisited*. Amherst. University of Massachusetts.

Minkova, D. (2003) *Alliteration and Sound Change in Early English*. Cambridge : Cambridge University Press.

Montreuil, Jean-Pierre (1981) "The Romansch Brat". *Papers in Roman*, 31: pp.67-76.

Ohala,J.J (2001) "Sound Change" In R. Mesthrie, (ed.) *Concise Encyclopedia of Sociolinguistics*. New York. Elsevier.

Powell, J.V., (1985) "An occurrence of Metathesis in Chumakuan" In V. Acson & R. Leed. eds., *For Gordon H. Fairbanks*. Honolulu: University of Hawaii Press.

Pyles, Th. and Algeo, J. (1993) *The Origins and Development of the English Language*. New York: Harcourt Brace & Company.

Quirk, R. & Wrenn, C. (1960) *An Old English Grammar*. London: Methuen & CO LTD.

Roach, P. (2009) *English Phonetics and Phonology*. Cambridge: CUP

Spencer, A. (1996) *Phonology*. Oxford: Blackwell.

Strazny, P. (2005) *Encyclopedia of Linguistics*. New York: Taylor and Francis Books.

Ultan, R. (1978) "A typological View of Metathesis". In Joseph H. Greenberg, Charles A. Ferguson & Edith A. Moravcsik (eds.) *Universals of Human Language*, Vol. 2: Phonology, pp.367–402. Stanford: Stanford University Press.

Dzay, A.M (2013) *phonetic and phonology* . 1st ed. Hawler.

Fatah,M.M (2011) *language area* , 3rd ed . Kurdish Journal of Applied Research: Hawler

Fakhry,N,(1985) *study and research about replacing, reversing and commuting the position of sounds in Kurdish language* .

<http://blong.annettelyon.com/2001/07/wnw-metathesis> [accessed 20 Nov. 2024]

<https://gadhuli.blogspot.com/2013/05/phonological-process.htm> [accessed 20 Nov. 2024]

Appendix 1/ Scientific Jury

- 1.Dr. Azad Hassan Fatah College of Languages /Uni of Sulaimani/ English Dept.
2. Dr. Bekhal Muheeldeen College of Languages/ Uni of Sulaimani/ English Dept.
- 3.Dr. Ibrahim Mahmoud College of Humanities/ Uni of Sulaimani
4. Dr. Kordia Ahmed College of Languages/ Uni of Sulaimani/ Arabic Dept.
5. Dr. Muhammad Mahawy College of Languages/ Uni of Sulaimani/ Kurdish Dept.
- 6.Dr. Rauf Mahmoud College of Languages/ Uni of Sulaimani/ English Dept.
- 7.Dr. Sarah Kamal College of Languages/ Uni of Sulaimani/ English Dept.
- 8.Dr. Twana Sa'di College of Languages/ Uni of Sulaimani/ English Dept.
- 9.Dr. Zaki Hamawandi College of Education/ Uni of Kirkuk/ English Dept.

Appendix 2/ Table of Kurdish Alphabet and Phonemic Symbols

International Phonetic Alphabet (IPA)	Yekgirtu (proposed unified Kurdish script)	Northern (Latin Kurmanji script)	Central and Southern dialect (both modified Arabic alphabet)
/a:/	A a	A a	ا
/b/	B b	B b	ب
/tʃ/	C c	Ç ç	چ
/d/	D d	D d	د
/a/	E e	E e	ه
/ʔ/	E 'e	E e	ئ
/e/	E 'e	E é	ه
/f/	F f	F f	ف
/g/	G g	G g	گ
/h/	H h	H h	ه
/h/	H h	H h	ه
/i/	I i	I i	ی
/i:/	I i	I î	ی
/dʒ/	J j	C c	ج
/ʒ/	JH jh	J j	ژ
/k/	K k	K k	ک
/l/	L l	L l	ل
/l/	L l	Ⓛ does not exist	ل
/m/	M m	M m	م
/n/	N n	N n	ن
/o/	O o	O o	و
/p/	P p	P p	پ
/q/	Q q	Q q	ق
/r/	R r	R r	ر
/r/	R r	R r	ر
/s/	S s	S s	س
/ʃ/	Sh sh	S s	ش
/t/	T t	T t	ت
/u/	U u	U u	و
/u:/	U û	U û	و
/v/	V v	V v	ف
/w/	W w	W w	و
/x/	X x	X x	خ
/x/	X x	X x	خ
/s/	E 'e	E e	س
/j/	Y y	Y y	ی
/z/	Z z	Z z	ز