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Vowel adaptation patterns within English loanwords in Iraqi Arabic

Abstract. This research examines the phonological adaptation of pure vowels in English loanwords in Iraqi Arabic (IA). Unlike previous small-scale studies, the present study collected 346 loanwords through document review and self-observation, and then analyzed them using quantitative content analysis to identify the patterns of pure vowel adaptation involved in incorporating English loanwords into IA. The content analysis findings showed that most pure vowel adaptations in English loanwords in IA follow systematic patterns and may thus be attributed to specific characteristics of both L1 and L2 phonological systems. Specifically, the findings suggest that the IA output forms typically preserve the features of the input pure vowel to the maximum degree feasible by either converting input pure vowels to their direct IA counterparts or replacing them with their closest IA match.

Keywords: Iraqi Arabic, Baghdadi Arabic, loanwords, borrowing, vowel adaptation, vocalic adaptation

1 Introduction

1.1 The research problem

It is common practice for speakers of a language to borrow terms from another to make up for inadequacies in their vocabulary. The popularity of borrowed words and phrases might be attributable to the prestige of the source language, cultural innovations, or other causes. Numerous such terms have been incorporated from English into Iraqi

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Arabic (IA), and with the rise of globalization, social media, technology, and other platforms that use English as their major medium, many more are likely to be borrowed.

The sounds and syllable patterns of borrowed foreign words are sometimes forbidden in the target language, and accordingly, several phonological alterations are imposed on these loanwords as they become part of the target language. Within the last two decades, a number of studies have been done to investigate English loanwords in IA and the modifications they experienced as they were absorbed into IA. Yet, these research studies not only dealt with a restricted quantity of data, but also failed to provide any quantitative data that could help discover the recurring patterns in the aforementioned changes.

1.2 Purpose of the study

Given the scarcity of research on English loanword adaptation in IA, the current study seeks to identify and characterize the pure vowel adaption patterns involved in nativizing English loanwords by native speakers of IA.

1.3 The research question

The research question for this study is:

- What types of vocalic adaptation patterns are evident in the nativization of English words by native speakers of IA?

1.4 The value of the study

The continual absorption of a significant number of English loanwords into IA necessitates a thorough phonological analysis that will lead to a deeper understanding of IA phonology and phonological theory in general. Unfortunately, the few research studies on English loanwords in IA that are presently accessible have failed to give such a complete study. As a result, there is a gap in the literature on IA loanword phonology. By examining how English pure vowels are modified in IA, the current study bridges the gap and makes up for the lack of research in this area.

1.5 Delimitations of the study

This research is confined to investigating the pure vowel modifications that English loanwords in IA have undergone. Consonantal, suprasegmental, and diphthong changes are outside the scope of the current study.

In addition, the scope of this study is confined to investigating the following two language varieties:

a. Iraqi Arabic (IA), also known as Muslim Baghdadi Arabic or gilit-dialect, is the "dominant, both numerically and in prestige," dialect of the Arabic language spoken in Iraq (Blanc, 1959, p. 449).

b. British English, or General British (GB), is the standard English language dialect spoken and written in the United Kingdom (Cruttenden 2014: 80).

Words from both British and American English have been borrowed into IA. Before 2003, British English was the dominant language in Iraq for various social and political reasons. As a result, it is considered that British English is the source of the vast majority of loanwords found in the corpus, notably those drawn from books and printed dictionaries. Since it is impossible to pinpoint the origin of every borrowing made after 2003, and for purposes of analytical consistency, the researcher will presume that these loanwords also originate from British English.

2. Review of the literature

2.1. Borrowing and loanword adaptation

Linguistic borrowing refers to the process through which a group of speakers incorporates certain foreign linguistic components into their own language (Thomason & Kaufman 1988: 37; Malmkjaer 2002: 238). When studying any changes that occur during loanword adaptation, it is important to understand the difference between two kinds of loanwords: established borrowings and nonce borrowings.

Nonce borrowings, also known as single-word codeswitching, are words that are borrowed from another language and used in the primary language of an utterance to describe a specific event or scenario for which a term does not already exist. Nonce borrowings are distinct from established borrowings in that they do not satisfy the requirements for the level of acceptability or the frequency with which they are used (Poplack 2001: 2063).

In contrast, established borrowings, which are the focus of this research, are foreign words that have entered the vocabulary of the borrowing language. These loanwords are the outcome of "a completed language change, a diachronic process that once started as an individual innovation but has been propagated throughout the speech community" (Haspelmath 2009: 38).

According to Poplack (2001: 2063), there are three ways to identify established loanwords:

1. Established Loanwords take on the morphological, syntactic, and, frequently, phonological characteristics of the language into which they have been incorporated.
2. They are frequent in the person's speech and common in the society at large.
3. These words become part of the recipient language's lexicon and are available to monolingual speakers as part of the usual lexical repertoire.

According to Peperkamp (2005), phonological analysis of established loanwords must be diachronic since it explains the alterations made by the speakers who first

introduced these items. Furthermore, depending on the sound changes that happened during adaptation and those that occurred afterward, borrowings may take on distinct phonological structures. It may be difficult to determine how an item reached a target language and if characteristics such as orthography were relevant (Haunz 2007).

2.2 GB and IA phonological systems

A total of 44 phonemes make up the GB phonemic inventory, including 20 vowels and 24 consonants. Of these 20 vowels, there are twelve pure vowels and eight diphthongs (Roach 2009:17). The 12 GB pure vowels are further categorized as follows:

- Short vowels: /ɪ/, /ʊ/, /e/, /ə/, /ʌ/, /æ/, and /ɒ/
- Long vowels: /i:/, /u:/, /ɜ/, /ɔ:/, and /ɑ:/

In IA, on the other hand, there are 39 phonemes: 8 vowels and 31 consonants. All vowels in IA are pure vowels. The 8 IA pure vowels are further categorized as follows:

- Short vowels: /ɪ/, /ʊ/, and /a/
- Long vowels: /i:/, /u:/, /e:/, /ɔ:/, and /a:/

2.3 Past studies of the adaptation of English loanwords in IA

Although several studies have been conducted within the last two decades on the topic of English loanwords in IA and the adaptations these words underwent (for example, Abdullah & Daffar 2006, Mohammed 2009, Salman & Mansour 2017, Mubarak & Kadhim 2019, and Al-Quraishi & Mansour 2020), the majority of these studies were conducted on a small scale and focused on the sociolinguistic or morphological aspects of those adaptations. So far, only two researchers have attempted to characterize adaptations in terms of phonological properties: As-Sammer (2015), who characterized adaptations in terms of vowel quality vs. vowel length, and Salman (2020), who classified these adaptations in terms of the phonological processes involved in them.

As-Sammer (2015) examined 150 loanwords that he accumulated over time as a result of his own everyday communication in an attempt to explore the adaptation processes that occurred when these English loanwords were incorporated into IA. In terms of vowel quality, As-Sammer explained how the three English pure vowels /ɪ/, /e/, and /ɒ/ changed their vowel backness, vowel height, and lip rounding when borrowed into IA. As for vowel length, As-Sammer listed six English pure vowels, /ɪ, e, æ, ə, ʌ, ɒ/, which were lengthened when adapted to IA, and only one vowel, /u:/, which got shortened when incorporated into IA.

Salman (2020) examined an unspecified number of English loanwords in IA that she collected by systematically searching for loanwords in two dictionaries, and also through a self-observation technique that she used herself, being a native speaker of IA. The researcher did not attempt to identify vowel adaptation patterns, and her research principally focused on the phonological processes involved in adapting these words. In

connection to the adaptation of pure vowels, the researcher listed five processes: addition, deletion, lengthening, shortening, and substitution. She then provided a few example words for each of these adaptation processes.

Though containing several useful examples and tendencies of vowel adaptations, neither of these two last studies offered any adaptation patterns. Actually, As-Sammer concluded his study by stating that these modifications provided "no default patterns" (As-Sammer 2015: 1). What I found more regrettable was that neither of the two studies provided any quantitative information (numbers, frequencies, etc.) that could be utilized in determining and verifying adaptation patterns.

3 Method

3.1 Research design

A descriptive, non-experimental, quantitative approach using content analysis was used to fulfill the study's aim of determining the vocalic adaption patterns of English loanwords in IA. Krippendorff (2004: 18) defines content analysis as "a technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use." Different scholars have offered varying classifications of content analysis. Thus, while Ahuvia (2001: 139) distinguishes three unique types of content analysis: traditional, interpretive, and reception based, it has been proposed by other scholars that content analysis may be broken down into "latent (subjective and qualitative) and manifest (objective and quantitative) categories of analysis," as described by Babbie (2007: 356) and Holsti (1969: 12–14). The present research uses traditional manifest content analysis, which involves being objective and using highly systematic procedures to compile numerical summaries and tally-ups of manifest content (Holsti 1969: 3–14; Ahuvia 2001: 139; Krippendorff 2004).

Validity is the extent to which an instrument accurately measures what it is intended to measure (Mackey & Gass 2016: 158). Typically, this relies on how well the sample reflects the population. Using the whole available population as the research sample strengthened the validity of this study by ensuring that every loanword in the research population had an equal chance of being included in the sample.

Interrater reliability is the degree of agreement between two or more independent observers using the same instrument. The researcher interviewed two more IA native speakers to verify the presence of the 346 loanwords list in IA. Both informants were born and raised in Baghdad, where they continue to reside, and their English proficiency was elementary. In addition, triangulation, or the use of several data-gathering techniques (self-observation, document review), was used to improve the reliability and internal validity of the study (Merriam & Grenier 2019: 14).

3.2 Data collection

An etymological dictionary of loanwords in IA (Albazarkan 2000) that included 351 English loanwords in IA served as the primary source for the corpus making up the majority of the data for the present research. All of the English loanwords in IA described in the following four academic publications (Abdullah & Daffar 2006), (Mohammed 2009), (As-Sammer 2015), and (Salman 2020) were also included in the corpus. Finally, the researcher, a native speaker of IA, relied on a self-observation method to accumulate more loanwords over the course of almost a year (from March 2021 to February 2022). To do this, the researcher consulted a number of monolingual English dictionaries and took notes on the loanwords used by the Iraqi population in everyday situations (e.g., on TV, on social media, etc.).

The investigation uncovered a total of 590 English loanwords in IA. The researcher and his dissertation supervisor verified that these words met the requirements for inclusion in accordance with Poplack's (2001: 2063) definition of well-established loanwords. During this cross-examination, only those words that met the aforementioned criteria were included in the research, hence forming the accessible population. Words that did not meet these criteria were eliminated. All 346 words (the population with access to the research) formed the data for the current investigation (see Appendix A).

3.3 Data analysis

Soon after the corpus loanwords were assembled, IPA symbols were used to record the IA pronunciation of these words and the GB pronunciation of their English source terms (see Appendix A). A valuable tool in determining how the English words were transcribed into their GB phonemic form was the online Cambridge Dictionary, available at `https://dictionary.cambridge.org/`. Note that the present study agrees with the editors of the Cambridge English Pronouncing Dictionary that "It is necessary to show, in British English entries, cases of potential pronunciation of /r/, mainly in word-final position" (Roach et al. 2006: xiv) and thus includes the /r/ within the transcription of these words to indicate the potential for pronunciation.

As previously indicated, most loanwords used in IA come straight from dictionaries and word lists culled from other scholarly works, where their pronunciation is already provided. To guarantee the correctness of the IA phonemic transcriptions in the loanword corpus, the researcher, his dissertation supervisor, and two additional native speakers of IA double-checked the pronunciations.

Following this step, loanwords were analyzed one by one, comparing GB and IA pronunciation, and noting any vocalic adaptations. To address the study question, the phonological adaptations of each GB vowel as it was incorporated into the IA lexicon were then detected and tallied in order to ascertain the patterns of English loanword vowel adaptations in IA and answer the study question (see the tables in Section 4).

4 Results

As noted in Section 2, there are 12 pure vowels in the GB phonemic inventory, namely /iː/, /ɪ/, /ʊ/, /uː/, /e/, /ə/, /ɜː/, /ɔː/, /æ/, /ʌ/, /ɑː/ and /ɒ/ (Roach 2009: x). The adaptation patterns of each of these 12 pure vowels are presented in the following subsections.

4.1 Adaptation of GB /iː/

The high front unrounded tense vowel /iː/ exists in the IA phonemic inventory. Therefore, the GB vowel /iː/ in English loanwords in IA is typically perceived faithfully and is regularly mapped to its direct IA counterpart (in 23/28 cases, 82.5%). Nevertheless, some instances of this vowel in the corpus exhibit irregular behavior, surfacing as the pure vowels /a/, /eː/, /ɪ/, or the semi-vowel /j/, as illustrated in Table 1.

Table 1. Adaptation of the GB high front long vowel /iː/ in IA

GB input			IA output		Frequency		Total
iː	cream	kriːm	iː	kriːm	23	82.5%	28
	kilo	kiːləʊ	eː	keːlu	2	7%	
	meter	miːtər	a	matɪr	1	3.5%	
	guarantee	gærənti:	ɪ	garanti	1	3.5%	
	neon	niːɒn	j	njɔːn	1	3.5%	

4.2 Adaptation of GB /ɪ/

Since the near-high near-front unrounded lax vowel /ɪ/ is available in IA, the GB vowel /ɪ/ is mostly perceived faithfully and regularly mapped to its direct IA counterpart (in 74/108 cases, 69%). Some instances of this vowel in the corpus, however, exhibit irregular behavior, surfacing as the pure vowels /iː/, a/, /eː/, or the semi-vowel /j/, as illustrated in Table 2.

Table 2. Adaptation of the GB high front short vowel /ɪ/ in IA

GB input			IA output		Frequency		Total
ɪ	dish	dɪʃ	ɪ	dɪʃ	74	69%	108
	bonnet	bɒnɪt	iː	baniːd	17	16%	
	video	vɪdiəʊ	j	vɪdjɔː	9	8%	
	bracket	brækɪt	eː	braːkeːt	6	5%	
	sausage	sɒsɪʤ	a	sˁɔːsˁaʤ	2	2%	

As mentioned above, instances of GB /ɪ/ in the corpus have surfaced as /j/ (in 9/108 cases, 8%) as a strategy for avoiding vowel hiatus. Vowel hiatus is disallowed in IA because the occurrence of two successive vowels in two different syllables necessitates having a vowel-initial syllable, which is prohibited in IA. Several methods, such as coalescence, vowel apocope, and glide formation, have been suggested cross-linguistically to eliminate vowel hiatus (Carr 2008: 71).

Corpus data analysis revealed that vowel hiatus in English loanwords in IA is typically resolved using glide formation whereby the first vowel, i.e., /i/ is changed to its closest glide counterpart /j/ as in adapting GB /ə.kɔ:.di.ən/ accordion to IA /ʔakɔ:rdjɔ:n/, GB /æl.jə.mɪn.i.əm/ aluminium to IA /ʔalamɪnjɔ:m/, GB /bɪl.i.ədz/ billiards to IA /bɪlja:rd/, GB /ˈreɪ.di.əʊ/ radio to IA /ra:djɔ:/, GB /stju:.di.əʊ/ studio to IA /stɔ:djɔ:/, GB /vɪd.i.əʊ/ video to IA /vɪdjɔ:/, etc.

4.3 Adaptation of GB /ʊ/

The near-high near-back rounded lax vowel /ʊ/, which already exists in IA, is the least common vowel, appearing only three times within the loan corpus. In all three instances, the GB vowel /ʊ/ in English loanwords in IA, this vowel is perceived faithfully and is regularly mapped to its direct IA counterpart (in 3/3 cases, 100%), as illustrated in Table 3.

Table 3. Adaptation of the GB high back short vowel /ʊ/ in IA

GB input			IA output		Frequency		Total
ʊ	cushion	kʊʃən	ʊ	kʊʃɪn	3	100%	3

4.4 Adaptation of GB /u:/

Despite its presence in the IA phonemic inventory, the high back rounded tense vowel /u:/ has two common realizations in IA. On the one hand, the GB vowel /u:/ seems to be perceived faithfully and is regularly mapped to its direct IA counterpart (in 11/21 cases, 52%). Loanwords in the corpus where GB /u:/ is adapted regularly into IA /u:/, e.g., boot, fuse, group, soup, stool, etc., are mostly monosyllabic. The adapted IA vowel sound /u:/ in the only two multisyllabic words, tracksuit and parachute, occurs in syllables where it is preceded by a fricative and followed by a plosive consonant.

On the other hand, in many loanwords in the corpus, the GB vowel /u:/ is adapted into IA /ɔ:/, e.g., *balloon, cartoon, coupon, shampoo,* etc., as shown in Table 4. Note that these loanwords are all multisyllabic words and that the adapted IA vowel sound /ɔ:/ in these words occurs mostly in syllable-final position or, in two instances, followed by nasal /n/.

Table 4. Adaptation of the GB high back vowel /u:/ in IA

GB input			IA output		Frequency		Total
u:	fuse	fju:z	u:	fju:z	11	52%	21
	cartoon	kɑ:tu:n	ɔ:	ka:rtɔ:n	10	48%	

4.5 Adaptation of GB /e/

The GB mid front unrounded lax vowel /e/ does not exist in the IA phonemic inventory. It is regularly mapped in English loanwords to its closest phonological match, IA /a/ (in 18/34 cases, 53%). Nevertheless, some instances of this vowel in the corpus exhibit irregular behavior surfacing as the pure vowels /ɪ/ and /e:/, as shown in Table 5.

Table 5. Adaptation of the GB mid front vowel /e/ in IA

GB input			IA output		Frequency		Total
e	tennis	tenɪs	a	tanɪs	18	53%	34
	Pepsi	pepsi	ɪ	bɪbsi	9	27%	
	set	set	e:	se:t	7	20%	

4.6 Adaptation of GB /ə/

The GB mid front unrounded lax vowel /ə/ does not exist in the IA phonemic inventory. Loan corpus data show that, when integrated into IA, the GB vowel /ə/ exhibits one of four regular realizations. The most common of these is when the vowel is mapped to its closest phonological match, IA /a/ (in 18/34 cases, 53%). In the three other, less common realizations, the vowel surfaces as the IA vowels /ɔ:/, /ɪ/ and /a:/, respectively, as shown in Table 6.

Table 6. Adaptation of the GB mid central vowel /ə/ in IA

GB input			IA output		Frequency		Total
ə	filter	fɪltər	a	fɪltar	86	57%	149
	doctor	dɒktər	ɔ:	dɪktɔ:r	26	17.5%	
	oven	ʌvən	ɪ	ʔɔ:vɪn	21	14%	
	balloon	bəlu:n	a:	ba:lɔ:n	10	7%	
	model	mɒdəl	e:	mɔ:de:l	2	1.5%	
	oxygen	ɒksɪʤən	i:	ʔɔ:ksɪʤi:n	2	1.5%	
	diplomat	dɪpləmæt	ʊ	dɪblʊma:si	2	1.5%	

4.7 Adaptation of GB /ɜ:/

The GB mid central unrounded tense vowel /ɜ:/ is not available in the IA phonemic inventory and is regularly mapped in English loanwords to its closest phonological match, IA /e:/, (in 4/6 cases, 66%). Only two instances of this vowel in the corpus exhibit irregular behavior surfacing as the pure vowels /ɪ/ and /a/, as shown in Table 7.

Table 7. Adaptation of the GB mid central vowel /ɜ:/ in IA

GB input			IA output		Frequency		Total
ɜ:	T-shirt	ti:ʃɜ:t	e:	ti:ʃe:rt	4	66%	6
	thermos	θɜ:məs	ɪ	tırmız	1	17%	
	hamburger	hæmbɜ:gər	a	hambargar	1	17%	

4.8 Adaptation of GB /ɔ:/

A total of 15 occurrences of the GB mid back rounded tense vowel /ɔ:/ were observed in the loan corpus. In the majority of these instances (in 13/15 cases, 86%), this GB vowel is perceived faithfully and regularly mapped in English loanwords to its direct IA counterpart due to the fact that the vowel already exists in the IA phonemic inventory. The only two occurrences where this vowel shows irregular realizations are in the words *dashboard* and *sauna,* where the vowel is mapped into the pure vowel /a/ and the vowel-plus-glide sequence/a:w/, respectively, as illustrated in Table 8.

Table 8. Adaptation of the GB back rounded vowel /ɔ:/ in IA

GB input			IA output		Frequency		Total
ɔ:	hall	hɔ:l	ɔ:	hɔ:l	13	86%	15
	dashboard	dæʃbɔ:d	u:	daʃbu:l	1	7%	
	sauna	sɔ:nə	a:w	sa:wna	1	7%	

4.9 Adaptation of GB /æ/

According to Cruttenden (2014: 120), the GB low front unrounded lax vowel /æ/, which does not exist in IA, is "generally longer in GB than the other short vowels /ɪ, e, ʌ, ɒ, ʊ/," and that when occurring before voiced consonants, its length becomes almost the same as that of long vowels.

This vowel is regularly mapped in English loanwords to its two closest IA phonological matches:

1. low central unrounded tense vowel /a:/ (in 40/82 cases, 48%)
2. near low front unrounded lax vowel /a/ (in 40/82 cases, 48%)

In addition, two instances of GB /æ/ in the corpus have also been mapped to /ɪ/, as illustrated in Table 9.

Table 9. Adaptation of the GB low front vowel /æ/ in IA

GB input			IA output		Frequency		Total
ɔ:	cash	kæʃ	a:	ka:ʃ	40	48%	82
	jack	ʤæk	a	ʤag	40	48%	
	racket	rækɪt	ɪ	/rɪkɪt	2	4%	

This variation in the mapping of the GB low front vowel /æ/ in IA may probably be attributed to the variation in duration that this vowel exhibits in different contexts, causing IA listeners to perceive it as the short vowel /a/ in contexts where it has a short duration, and as the long vowel /a:/ in those where it exhibits long duration.

4.10 Adaptation of GB /ʌ/

Due to the absence of the near-low central unrounded lax vowel /ʌ/ in the IA phonemic inventory, the GB vowel /ʌ/ is regularly mapped (in 16/22 cases, 72%) to its closest phonological match IA /a/ when it appears in English loanwords in IA. The corpus, however, also shows six words where the vowel surfaces as the pure vowels /a:/, /ɪ/, /u:/, and /ɔ:/, respectively, as shown in Table 10.

Table 10. Adaptation of the GB low central vowel /ʌ /in IA

GB input			IA output		Frequency		Total
ʌ	bug	bʌg	a	bag	16	72%	22
	bus	bʌs	a:	ba:sˢ	2	9%	
	subbase	sʌb.beɪs	ɪ	sɪb.be:s	2	9%	
	cup	kʌp	u:	ku:b	1	5%	
	oven	ʌvən	ɔ:	ʔɔ:vɪn	1	5%	

4.11 Adaptation of GB /ɑ:/

Since the near-low central unrounded lax vowel /ɑ:/ does not exist in the IA phonemic inventory, the GB vowel /ɑ:/ is almost always (in 18/20 cases, 90%) mapped to its closest

phonological match, IA /a:/, when integrated into IA within English loanwords. The only exceptions to this are two words where the vowel surfaces as the pure vowel /a/, as shown in Table 11.

Table 11. Adaptation of the GB low back vowel /ɑ:/ in IA

GB input			IA output		Frequency		Total
ɑ:	mask	mɑ:sk	a:	ma:sk	18	90%	20
	chance	ʧɑ:ns	a	ʧansˁ	2	10%	

4.12 Adaptation of GB /ɒ/

The IA phonemic inventory lacks the low back rounded lax vowel /ɒ/. Accordingly, the GB low back rounded lax vowel /ɒ/ is regularly mapped (in 28/36 cases, 78%) in English loanwords to its closest phonological match, the IA vowel /ɔ:/. In addition to this regular mapping, some instances of this vowel in the corpus exhibit irregular behavior surfacing as the pure vowels /a/, /a:/, /ʊ/, /u:/, and /ɪ/, as shown in Table 29. The mapping of the GB vowel sound /ɒ/ into IA /a/ in the IA words /watsap/ (*WhatsApp*) and /jaxɪt/ (*yacht*) may be explained by referring to the fact that the source form of these two words has the vowel sound spelled with the letter "a" so it can be argued that English orthography might have played a role in IA speakers' decision to make this mapping.

Table 12. Adaptation of the GB low back short vowel /ɒ/ in IA

GB input			IA output		Frequency		Total
ɒ	block	blɒk	ɔ:	blɔ:k	28	78%	36
	yacht	jɒt	a	jaxɪt	4	12%	
	washer	wɒʃər	a:	wa:ʃar	1	2.5%	
	doctor	dɒktər	ɪ	dɪktɔ:r	1	2.5%	
	bottle	bɒtl	ʊ	bʊtˁʊl	1	2.5%	
	dollar	dɒlər	u:	du:la:r	1	2.5%	

5 Discussion

This research study sought to shed light on how GB pure vowels were adapted in English loanwords in IA to determine the phonological patterns in the IA adaptation of English vowels and how the closest IA matches for GB vowels were selected. Analysis of the data showed that most GB vocalic adaptations in English loanwords in IA follow predictable

patterns that can be attributed to features of both the L1 and L2 phonological systems. Nonetheless, several vocalic changes were not determined by phonological considerations, and the spelling of the words seemed to have a role.

As mentioned earlier in this study, out of the 12 GB pure vowels, five vowels, namely, /iː/, /ɪ/, /uː/, /ʊ/, and /ɔː/, have direct counterparts in IA, while the other seven pure vowels, namely, /e/, /ə/, /ɜː/, /æ/, /ʌ/, /ɑː/, and /ɒ/ do not have any direct counterparts in IA, and thus need to undergo phonological changes to be accepted in it.

Loan corpus data analysis showed that the output forms tend to maintain the features of the GB input vowels to the greatest extent possible. This is done by either mapping GB input vowels to their direct IA counterparts or replacing them with their closest IA match, as illustrated in Table 13 and Table 14.

Table 13. Adaptations of GB pure vowels which are available in IA

	GB Vowel	Typical IA mapping	Other IA mappings
1	iː	iː	eː, a, ɪ, j
2	ɪ	ɪ, iː, j, eː	a
3	ʊ	ʊ	
4	uː	uː, ɔː	
5	ɔː	ɔː, uː	a:w

Table 14. Adaptation of GB pure vowels which are not available in IA

	GB Vowels	Typical IA mapping	Other IA mappings
1	e	a, ɪ, eː	
2	ə	a, ɔː, ɪ, aː	eː, iː, ʊ
3	ɜː	eː	ɪ, a
4	æ	a, aː	ɪ
5	ʌ	a	aː, ɪ, uː, ɔː
6	ɑː	aː	a
7	ɒ	ɔː	a, aː, ɪ, ʊ, uː

5.1 GB Vowels With Direct IA Counterparts

When it comes to the GB vowels /iː/, /ɪ/, /uː/, /ʊ/, and /ɔː/, which are available in IA, data analysis showed that these vowels are typically mapped faithfully to their IA counterparts, as shown in Table 15.

Table 15. Typical adaptation patterns of most GB pure vowels which are available in IA

GB input			**IA output**		**Frequency**	
iː	cream	krіːm	iː	krіːm	23/28	82.5%
ʊ	cushion	kʊʃən	ʊ	kʊʃɪn	3/3	100%
ɔː	hall	hɔːl	ɔː	hɔːl	13/15	86%

There are two exceptions, however, where a pure vowel with a direct counterpart in IA may show more than one typical adaptation pattern. The first exception is the adaptation of the GB vowel /ɪ/ into IA /iː/, typically when the vowel is followed by a voiceless affricate, e.g., IA /sandawiːʧ/ *sandwich*, IA /swiːʧ/ *switch*, etc., or when the lengthened vowel receives the stress, as in IA /baʼniːd/ *bonnet*, /fiːtaːʼmiːn/ *vitamin*, etc. Alternatively, the vowel may be adapted into IA /eː/, usually when the lengthened vowel receives the stress, as in /braːʼkeːt/ *bracket*, /gaːzʼgeːt/ *gasket*, /ʧaːʼkeːt/ *jacket*, etc., or it may be adapted into the semi-vowel /j/ as a strategy for avoiding vowel hiatus, as in /vɪdjɔ/ *video,* as shown in Table 16.

Table 16. Typical adaptation patterns of the GB pure vowel /ɪ/ in IA

GB input			**IA output**		**Frequency**	
ɪ	dish	dɪʃ	ɪ	dɪʃ	74	69%
	bonnet	bɒnɪt	iː	baniːd	17	16%
	video	vɪdiəʊ	j	vɪdjɔː	9	8%
	bracket	brækɪt	eː	braːkeːt	6	5%

The second exception is the adaptation of the GB vowel /uː/ to IA /ɔː/, which occurs mostly in syllable-final position, as in /gaːzɔː/ *cashew* and /taːtɔː/ *tattoo,* or in two instances where the vowel is followed by nasal /n/, as in /baːlɔːn/ *balloon*, and /kaːrtɔːn/ *cartoon*, as shown in Table 17.

Table 17. Typical adaptation patterns of the GB pure vowel /uː/ in IA

GB input			**IA output**		**Frequency**		**Total**
uː	fuse	fjuːz	uː	fjuːz	11	52%	21
	cartoon	kɑːtuːn	ɔː	kaːrtɔːn	10	48%	

5.2 GB Vowels With no Direct IA Counterparts

On the other hand, GB pure vowels, which do not have a direct counterpart in IA, are typically replaced with their closest IA phonetic match, as shown in Table 18. For

instance, the GB mid-front short vowel /e/, mid-central short vowel /ə/, and low central short vowel /ʌ/ are matched with the IA near-low front short vowel /a/.

Table 18. Typical adaptation patterns of most GB pure vowels which are not available in IA

GB input			**IA output**		**Frequency**	
ɜ:	T-shirt	tiːʃɜːt	eː	tiːʃeːrt	4/6	66%
ʌ	bug	bʌg	a	bag	16/22	72%
ɑː	mask	mɑːsk	aː	maːsk	18/20	90%
ɒ	block	blɒk	ɔː	blɔːk	28/36	78%

However, there are three exceptions where a pure vowel with no direct counterpart in IA may show more than one systematic adaptation pattern. First, there is the GB midfront unrounded lax vowel /e/ surfacing as the pure vowels /a, ɪ, eː/, as illustrated in Table 19.

Table 19. Typical adaptation patterns of the GB pure vowel /ə/ in IA

GB input			**IA output**		**Frequency**	
e	tennis	tenɪs	a	tanɪs	18/34	53%
	Pepsi	pepsi	ɪ	bɪbsi	9/34	27%
	set	set	eː	seːt	7/34	20%

The second exception is adapting the GB mid central unrounded lax vowel /ə/ into the pure vowels /a, ɔː, ɪ, aː/, as shown in Table 20. As mentioned earlier, these other adaptation patterns may be ascribed to the influence of orthography since the letters used to represent the vowel in writing in the source language play a critical role in its adaptation.

Table 20. Typical adaptation patterns of the GB pure vowel /æ/ in IA

GB input			**IA output**		**Frequency**	
ə	filter	fɪltər	a	fɪltar	86/149	57%
	doctor	dɒktər	ɔː	dɪktɔːr	26/149	17.5%
	oven	ʌvən	ɪ	ʔɔːvɪn	21/149	14%
	balloon	bəluːn	aː	baːlɔːn	10/149	7%

Finally, there is the adaptation of the GB vowel /æ/ to either IA /a/ or IA /aː/, which could be, at least partly, caused by the vowel length difference exhibited by this vowel in different contexts, causing IA listeners to perceive it as the short vowel /a/ in contexts

where it has a short duration, and as the long vowel /a:/ in those where it exhibits long duration, as shown in Table 21.

Table 21. Typical adaptation patterns of the GB pure vowel /æ/ in IA

GB input			**IA output**		**Frequency**	
æ	cash	kæʃ	a:	ka:ʃ	40	48%
	jack	ʤæk	a	ʤag	40	48%

In conclusion, the findings are consistent with those reported by Galal (2004: 18), Jarrah (2013: 80), As-Sammer (2015: 36), Guba (2016: xiv, 104), Aloufi (2016), and Alhoody (2019: 170), namely that the borrowing language typically mapped source vowels onto their closest target language phonemes, with the exception of cases that can be explained by such factors as spelling, vowel harmony, prosody, etc.

As no earlier research on the adaptation of English terms into IA has sought to uncover adaptation patterns, it is not possible to interpret the findings of this study within the existing literature on IA. Alternatively, two research studies on different Arabic dialects, Guba (2016) and Alhoody (2019), have explored the adaption of vowel sounds in English words when they are borrowed into Ammani Arabic (AA) and Modern Hijazi Arabic (MHA). These three dialects share a vowel sound system consisting of roughly the same eight pure vowels, but due to changes in consonants, syllable structure, and prosodic elements, they display distinctively diverse vocalic adaptation patterns. Thus, while the GB pure vowel /ɒ/ in the loanwords *laptop* and *nylon* is adapted into IA /ɔ:/, the same sound is adapted into AA /u;/ and MHA /u:/ with the words pronounced as /laːbtuːb/ and /naːjluːn/.

6 Conclusion

This study aimed to investigate the vocalic adaption of English loanwords in IA. In particular, the research sought to identify and characterize the pure vowel adaption patterns involved in the nativization of English loanwords by IA native speakers. The findings reveal that the output forms tend to retain as many characteristics of the GB input vowel as feasible.

Further findings indicate that, for pure vowels, features are maintained by either mapping GB input vowels to their direct IA counterparts or by replacing them with their closest IA match. Thus, the GB vowels /i:/, /ɪ/, /u:/, /ʊ/, and /ɔ:/, which are available in IA, are typically mapped faithfully to their IA counterparts. The only two exceptions where a pure vowel with a direct counterpart in IA may show more than one typical adaptation pattern are the adaptation of the GB vowel /ɪ/ into the IA vowels /i:/, /e:/, or the semi-vowel /j/, and the adaptation of the GB vowel /u:/ into the IA vowel /ɔ:/.

In contrast, the GB pure vowels /e/, /ɜ:/, /ʌ/, /ɑ:/, and /ɒ/, which do not have a direct parallel in IA, are usually substituted with their closest equivalent in IA, with only two

exceptions where a pure vowel with no direct parallel in IA may show more than one adaptation pattern: the GB vowel /ə/ surfacing as the pure vowels /a, ɔ:, ɪ, a:/, and the GB vowel /æ/ surfacing as either IA /a/ or IA /a:/.

The current investigation has produced a number of important contributions to both the phonology of IA loanwords and the phonology of loanwords more generally. To begin with, the research has filled a gap in our understanding of the phonology of IA loanwords, providing the first account of this type of pure vowel adaptation based on a systematic quantitative content analysis of the entire accessible population (346 established loanwords). In addition, much-needed documentation of the IA dialect has been supplied as a result of this work. The approach that was taken in this study to collect primary and secondary data, as well as to confirm the pronunciation of loanwords and to make a careful selection of all established loanwords that are accessible to IA speakers, lends credence to the quality of the loan corpus that was collected for the present study. This study not only offers a description of a dialect that is continually developing, but it also offers the potential to be used in investigating various aspects of IA.

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Appendix A: Loanword corpus

The table below contains all the English loanwords in IA that were used in the study. Proper nouns are denoted by capitalization, and a hyphen (-) is used to distinguish the several possible pronunciations.

	Loanword	**Original form (GB)**	**Adapted form (IA)**
1	accordion	əkɔːdiən	ʔakɔːrdjɔːn
2	aerial	eəriəl	ʔarjal
3	airbag	eəbæg	ʔeːrbaːg
4	air conditioner	eəkəndɪʃənər	ʔɔːrkɪndɪʃɪn - ʔeːrkɔːndɪʃɪnar
5	album	ælbəm	ʔalbɔːm
6	aluminium	æljəmɪniəm	ʔalamɪnjɔːm
7	ampere	æmpɪər	ʔampeːr - ʔambeːr
8	android	ændrɔɪd	andrɔːjd
9	aspirin	æspərɪn	ʔaspɪriːn
10	atlas	ætləs	ʔatˁlas
11	automatic	ɔːtəmætɪk	ʔɔːtɔːmaːtiːki
12	axle	æksəl	ʔaksɪl
13	back	bæk	bag
14	bacteria	bæktɪəriə	baktɪrja
15	baking powder	beɪkɪŋ paʊdər	beːkɪn paːwdar
16	balance	bæləns	balansˁ
17	balcony	bælkəni	balakɔːna - baːlkɔːn
18	(Intragastric) balloon	bəluːn	baːlɔːn
19	bandage	bændɪʤ	baːndɪʤ
20	bank	bæŋk	bang
21	bar	bɑː(r)	baːr
22	battery	bætəri	paːtri - baːtri
23	beige	beɪʒ	beːʤ

	Loanword	Original form (GB)	Adapted form (IA)
24	Bermuda (shorts)	bəmjuːdə	bırmɔ:da
25	bicycle	baısıkl	ba:jsıkıl
26	billiards	bılіədz	bılja:rd
27	biscuit	bıskıt	bıskıt
28	block	blɒk	blɔ:k
29	blouse	blaʊz	blu:z
30	body (of a car)	bɒdi	badi
31	bonnet	bɒnıt	bani:d
32	boot (type of shoe)	bu:t	bu:t
33	bottle	bɒtl	bʊtˁʊl
34	(box) cutter	kʌtər	katar
35	bracket (lighting support)	brækıt	bra:ke:t
36	brake [pedal]	breık	bre:k
37	break (recess)	breık	bre:k
38	bug	bʌg	bˁag
39	bus	bʌs	ba:sˁ
40	busboy (waiter/garcon)	bʌsbɔı	bɔ:j
41	bye bye	baıbaı	bajba:j
42	cabin	kæbın	ka:bi:na
43	cable	keıbl	ke:bıl
44	cake	keık	ke:k
45	camera	kæmərə	ka:mıra
46	canary	kəneəri	kana:ri
47	captain	kæptın	ka:ptın
48	caravan	kærəvæn	karava:n
49	carburettor	kɑ:bəretər	ka:bre:ta - ka:bre:tar
50	carbon	kɑ:bən	ka:rbɔ:n
51	card	kɑ:d	ka:rt invitation
52	cartoon	kɑ:tu:n	ka:rtɔ:n
53	cash	kæʃ	ka:ʃ
54	cashier	kæʃıər	ka:ʃe:r

	Loanword	Original form (GB)	Adapted form (IA)
55	cashew	kæʃu:	ga:zɔ:
56	casino	kəsi:nəʊ	ga:zi:nɔ:
57	catalogue	kætəlɒg	katalɔ:k
58	cement	sɪment	smɪnt
59	centre	sentər	santar
60	ceramics	səræmɪks	si:ra:mi:k
61	chance	ʧɑ:ns	ʧansˁ
62	chassis	ʃæsi	ʃa:sˁi
63	chef	ʃef	ʃe:f
64	cheque	ʧek	ʧe:k ; ʃe:k
65	chips	ʧɪps	ʧɪbɪs
66	cholera	kɒlərə	kɔ:lɪra
67	cigarette	sɪgəret	ʤɪga:ra
68	cinema	sɪnəmə	si:nama
69	circus	sɜ:kəs	se:rk
70	classic	klæsɪk	kla:si:ki
71	clips	klɪps	klɪps
72	clutch	klʌʧ	klaʧ
73	coat	kəʊt	kɔ:t
74	coca cola	kəʊkəkəʊlə	kɔ:kakɔ:la
75	cocktail	kɒkteɪl	kɔ:kte:l
76	coil	kɔɪl	kɔ:jɪl
77	colon (body part)	kəʊlɒn	qɔ:lɔ:n - qa:lɔ:n
78	commission	kəmɪʃən	kɔ:mɪʃɪn
79	compressor	kəmpresər	kɔ:mpre:sar - kɔ:mbre:sar
80	computer	kəmpju:tər	kɔ:mpju:tar - kɔ:mbju:tar
81	Concrete	kɒŋkri:t	kɔ:nkri:t
82	conditioner (hair)	kəndɪʃənər	kɔ:ndɪʃɪnar
83	corner (football)	kɔ:nər	kɔ:rnar
84	corridor	kɒrɪdɔ:r	kɪlɪdɔ:r - kɒlɪdɔ:r - kɪlɪdɔ:r
85	counter	kaʊntə	ka:wɪntar

	Loanword	Original form (GB)	Adapted form (IA)
86	couple	kʌpəl	kapıl - kabıl
87	coupon	kuːpɒn	kɔːbɔːn
88	course	kɔːs	kɔːrs
89	cover	kʌvər	kavar
90	cowboy (jeans)	kaʊbɔɪ	kaːwbɔːj
91	crane	kreɪn	kreːn
92	cream	kriːm	kriːm
93	crystal	krıstəl	krıstaːl
94	cup	kʌp	kuːb
95	cushion	kʊʃən	kʊʃın
96	custard	kʌstəd	kaːstar
97	dashboard	dæʃbɔːd	daʃbuːl
98	design	dızaın	dızaːjn
99	diploma	dıpləʊmə	dıblɔːm
100	diplomat	dıpləmæt	dıblʊmaːsi
101	disc	dısk	dısk
102	doctor	dɒktər	dıktɔːr
103	dollar	dɒlər	duːlaːr
104	domino	dɒmınəʊ	dɔːmna
105	double	dʌbl	dabal
106	dozen	dʌzən	darzan
107	drama	drɑːmə	draːma
108	drill (tool)	drıl	dreːl
109	drunkard	drʌŋkəd	drıŋga
110	dynamo	daınəməʊ	daːjnamɔː
111	eczema	eksımə	ʔagzıma
112	elastic (band)	ılæstık	laːstiːk
113	exhaust	ıgzɔːst	ʔıgzɔːz
114	eye shadow	aı ʃædəʊ	ʃadɔː
115	eyeliner	aılaınər	ʔaːjlaːjnar
116	Facebook	feısbʊk	feːsbʊk - feːs

	Loanword	Original form (GB)	Adapted form (IA)
117	feed pump	fi:dpʌmp	fi:tpam
118	fifty-fifty	fıfti -fıfti	fıfti -fıfti
119	file	faıl	fa:jal
120	film	fılm	fılım
121	filter	fıltər	fıltar
122	fit	fıt	fıt
123	fitter	fıtər	fi:tar
124	flash (camera)	flæʃ	fla:ʃ
125	foam	fəʊm	fɔ:m
126	folklore	fəʊklɔ:r	fılıklɔ:r
127	foul	faʊl	fa:wal
128	freezer	fri:zər	fri:z - fri:zar
129	full	fʊl	fʊl
130	fuse	fju:z	fju:z
131	gallon	gælən	galan
132	game	geım	ge:m
133	gangrene	gæŋgri:n	gangari:n
134	garage	gærɑ:ʒ	gara:dʒ
135	gas	gæs	ɣa:z
136	gasket	gæskıt	ga:zge:t
137	gear	gıər	ge:r
138	geyser	gi:zər	gi:zar
139	glass	glɑ:s	gla:sˤ
140	goal	gəʊl	gɔ:l
141	gorilla	gərılə	ɣɔ:rılla
142	gram	græm	ɣra:m
143	grease	gri:s	gri:z
144	gross	grəʊs	glɔ:sˤ
145	group	gru:p	gru:b
146	gauge	geıdʒ	ge:dʒ
147	guarantee	gærənti:	garanti

	Loanword	Original form (GB)	Adapted form (IA)
148	guitar	gɪtɑ:r	gi:ta:r
149	gym	ʤɪm	ʤɪm
150	hall	hɔ:l	hɔ:l
151	hamburger	hæmbɜ:gər	hambargar
152	handbrake	hændbreɪk	hındıbre:k
153	happy birthday	hæpibɜ:θdeɪ	hapibe:rdaj
154	headphone	hedfəʊn	hadfɔ:n - hatfɔ:n
155	heater	hi:tər	hi:tar
156	helicopter	helıkɒptər	halıkɔ:ptar
157	horn	hɔ:n	hɔ:rın
158	ice cream	aıskri:m	ʔa:jsıkri:m
159	inch	ınʧ	ʔındʒ
160	influenza	ınfluenzə	fla:wanza
161	Instagram	ınstəgræm	ʔınıstagra:m
162	iPhone	aıfəʊn	ʔa:jfɔ:n
163	Isolation (tape)	aısəleıʃən	sle:ʃın
164	jack	ʤæk	ʤag
165	Jacket	ʤækıt	ʧa:ke:t
166	jeans	ʤi:nz	ʤi:nz
167	jeep	ʤi:p	ʤe:b
168	jelly	ʤeli	ʤali
169	Jerrycan (container)	ʤerikæn	ʤalika:n
170	joker	ʤəʊkər	ʤɔ:kar
171	judo	ʤu:dəʊ	ʤɔ:dɔ:
172	ketchup	keʧʌp	kaʧap - kaʧab
173	kettle	ketəl	kıtli
174	keyboard	ki:bɔ:d	ki:bɔ:rd
175	kilo	ki:ləʊ	ke:lu:
176	kiwi	ki:wi:	ki:wi:
177	Kleenex	kli:neks	kli:nıks
178	laptop	læptɒp	la:btɔ:b

	Loanword	Original form (GB)	Adapted form (IA)
179	laser	leɪzər	le:zar
180	light	laɪt	la:jt
181	line	laɪn	la:jɪn
182	load	ləʊd	lɔ:d
183	lorry	lɒri	lɔ:ri
184	make-up	meɪkʌp	me:kab
185	mall	mɔ:l	mɔ:l
186	manhole	mænhəʊl	manhɔ:l
187	manicure	mænɪkjʊər	manɪke:r
188	mascara	mæskɑ:rə	maska:ra
189	mask	mɑ:sk	ma:sk
190	master's (degree)	mɑ:stəz	ma:star
191	maximum	mæksɪməm	maksɪmam
192	mayonnaise	meɪəneɪz	ma:jɔ:ni:z
193	menu	menju:	ma:nju:
194	metre	mi:tər	matɪr
195	microwave	maɪkrəweɪv	ma:jkrɔ:we:v
196	mile	maɪl	mi:l
197	million	mɪljən	mɪljɔ:n
198	millionaire	mɪljəneər	mɪljɔ:ne:r
199	minimum	mɪnɪməm	mɪnɪmam
200	missed call	mɪstkɔ:l	mɪskɔ:l
201	mobile	məʊbaɪl	mɔ:ba:jɪl
202	model	mɒdəl	mɔ:de:l
203	modern	mɒdə(r)n	mɔ:drɪn
204	motor	məʊtər	ma:tˁɔ:r
205	motorcycle	məʊtəsaɪkəl	ma:tˁɔ:r-sɪkɪl
206	(computer) mouse	maʊs	ma:ws
207	neon	ni:ɒn	njɔ:n
208	negative (photo)	negətɪv	nagatɪv
209	Nescafé	neskæfeɪ	nɪska:fa

	Loanword	Original form (GB)	Adapted form (IA)
210	nylon	naɪlɒn	na:jlɔ:n
211	(day) off	ɒf	ɔ:f
212	offside	ɒfsaɪd	ʔɔ:fsa:jd
213	out	aʊt	ʔa:wt
214	oven	ʌvən	ʔɔ:vɪn
215	oxygen	ɒksɪʤən	ʔɔ:ksɪʤi:n
216	ozone	əʊzəʊn	ʔɔ:zɔ:n
217	packet	pækɪt	pa:ke:t - ba:ke:t
218	pajamas	pəʤɑ:məz	bɪʤa:ma
219	parachute	pærəʃu:t	baraʃu:t
220	park	pɑ:k	pa:rk - ba:rk
221	parliament	pɑ:lɪmənt	parlama:n - barlama:n
222	pass (football, ticket)	pɑ:s	ba:sˁ
223	pedal	pedəl	pa:jdar - ba:jdar
224	pedicure	pedɪkjʊər	badɪke:r
225	penalty	penəlti	balanti - panarti -banarti
226	Pepsi	pepsi	bɪbsi
227	piano	piænəʊ	pja:nɔ: - bja:nɔ:
228	pickup (truck)	pɪkʌp	bi:kap - bi:kab
229	piston	pɪstən	pɪstɪm - bɪstɪm
230	pizza	pi:tsə	bi:tza
231	plaster	plɑ:stər	pla:star - bla:star
232	plastic (n)	plæstɪk	pla:sti:k - bla:sti:k
233	pliers	plaɪəz	pla:jɪs - bla:jɪs
234	plug	plʌg	blak
235	polish	pɒlɪʃ	pɔ:lɪʃ - bɔ:lɪʃ
236	pose (position)	pəʊz	pɔ:z
237	poster	pəʊstər	pɔ:star - bɔ:star
238	pound (sterling)	paʊnd	pa:wan
239	powder	paʊdər	pɔ:dra - bawdar
240	prestige	presti:ʒ	prɪsti:ʤ

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241	professor	prəfesər	prɔ:fısɔ:r
242	(overhead) projector	prədʒektər	prɔ:dʒaktar
243	protocol	prəʊtəkɒl	prɔ:tɔ:kɔ:l - brɔ:tɔ:kɔ:l
244	pump	pʌmp	bam - pam
245	puncture	pʌŋkʧər	panʧar - banʧar
246	Pyrex	paıreks	ba:jraks
247	quiz	kwız	kwız
248	racket	rækıt	rıkıt
249	radar	reıdɑ:r	ra:da:r - la:da:r
250	radiator	reıdieıtər	ra:de:tar
251	radio	reıdiəʊ	ra:djɔ: - ra:djɔ:n
252	receiver	rısi:vər	rısi:var
253	regime	reıʒi:m	rıdʒi:m
254	relax	rılæks	ri:la:ks
255	remote [control]	rıməʊt	ri:mɔ:t - ri:mɔ:n(t)
256	ring (cars)	rıŋ	rıng
257	robe	rəʊb	rɔ:b
258	rod	rɒd	rɔ:tˁ
259	roller (paint)	rəʊlər	rɔ:la
260	routine	ru:ti:n	rɔ:ti:n
261	salad	sæləd	zala:tˁa
262	(hair) salon	sælɒn	sˁa:lɔ:n
263	salsa	sælsə	sˁalsˁa
264	sandal	sændəl	sˁandal
265	sandwich	sænwıdʒ	sandawi:dʒ
266	satellite (dish)	sætəlaıt	satala:jt - dıʃ
267	sauna	sɔ:nə	sa:wna
268	sausage	sɒsıdʒ	sˁɔ:sˁadʒ
269	scrap	skræp	sıkra:b
270	second (driver)	sekənd	sıkın
271	secretary [m]	sekrətəri	sıkırte:r

	Loanword	Original form (GB)	Adapted form (IA)
272	set	set	se:t
273	shampoo	ʃæmpu:	ʃa:mpɔ: - ʃa:mbɔ:
274	share	ʃeər	ʃe:r
275	shift	ʃɪft	ʃɪft
276	shorts	ʃɔ:ts	ʃɔ:rt
277	shower	ʃaʊər	ʃawar
278	side	saɪd	sa:jɪd
279	silencer	saɪlənsər	sˤa:lansˤa
280	silo	saɪləʊ	sa:jlɔ:
281	sink	sɪŋk	sɪnk
282	skate	skeɪt	ske:t
283	slide	slaɪd	sla:jd
284	sister (nurse)	sɪstər	sɪstar
285	soda	səʊdə	sˤawda
286	sorry	sɒri	sɔ:ri
287	soup	su:p	su:p
288	spanner	spænər	spa:na - sba:na
289	spare (tyre)	speər	spe:r - sbe:r
290	special	speʃəl	spaʃal - sbaʃal
291	split (unit)	splɪt	sɪblɪt
292	sponge	spʌnʤ	sfanʤ
293	spray	spreɪ	sɪpre: - sɪbre:
294	Spring	sprɪŋ	sɪprɪng
295	standard	stændəd	standar
296	starter	stɑ:tər	sta:rtar
297	steak	steɪk	ste:k
298	steering (wheel)	stɪərɪŋ	ste:rɪn
299	stock	stɒk	stɔ:k
300	stool	stu:l	stu:l
301	(live) stream	stri:m	sɪtri:m
302	stress (worry)	stres	sɪtre:s

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303	stretch (leggings)	streʧ	sɪtre:ʤ
304	studio	stju:diəʊ	stɔ:djɔ:
305	subbase	sʌbbeɪs	sɪbbe:s
306	switch	swɪʧ	swi:ʧ
307	syphon	saɪfən	si:fɔ:n
308	syringe	sɪrɪnʤ	srɪnʤa
309	table lamp	teɪbəl læmp	te:bɪl la:m
310	tank	tæŋk	ta:nki
311	tanker	tæŋkər	tankar
312	tattoo	tətu:	ta:tɔ:
313	taxi	tæksi	taksi
314	telephone	telɪfəʊn	talɪfɔ:n
315	television	telɪvɪʒən	talvɪzjɔ:n
316	tennis	tenɪs	tanɪs
317	thermos	θɜ:məs	tɪrmɪz
318	thermostat	θɜ:məstæt	θe:rmɔ:stæt
319	ticket	tɪkɪt	tɪkɪt
320	Tide	taɪd	ta:jt
321	toast	təʊst	tɔ:st
322	toaster	təʊstər	tɔ:star
323	tomato	təmɑ:təʊ	tˁama:tˁa
324	ton	tʌn	tˁan
325	top	tɒp	tɔ:b
326	tracksuit	træksu:t	tra:ksu:d
327	tractor	træktər	traktar
328	traffic (lights)	træfɪk	trafɪk
329	trailer	treɪlər	tre:la
330	transit	trænzɪt	tra:nze:t
331	T-shirt	ti:ʃɜ:t	ti:ʃe:rt
332	tube (in a tyre)	ʧu:b	ʧu:b
333	tyre	taɪər	ta:jar

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334	vanilla	vənɪlə	va:nɪlla
335	video	vɪdiəʊ	vɪdjɔ:
336	visa	vi:zə	vi:za
337	vitamin	vɪtəmɪn	fi:ta:mi:n
338	volt	vɒlt	vɔ:lt
339	washer	wɒʃər	wa:ʃar
340	WhatsApp	wɒtsæp	watsap - wats
341	wheel	wi:l	wi:l
342	wire	waɪər	wa:jar
343	wrong side	rɒŋsaɪd	rɔ:ngsaɪd - rɔ:n
344	yacht	jɒt	jaxɪt
345	zig zag	zɪgzæg	zɪgza:g
346	zoom	zu:m	zu:m

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