التنوع الفونولوجي (الصوتي) في لهجة سكان الريف بمحافظة دمياط: دراسة لغوية اجتماعية

Phonological Variation in the Rural Dialects of Damietta Egyptian Arabic: a Sociolinguistic Study

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ملخص البحث

تتناول هذه الدراسة التنوع والسمات الفونولوجية (الصوتية) للهجات المستخدمة في المناطق الريفية في محافظة دمياط من حيث سياقاتها وانماطها. يتم ذلك من خلال إجراء مسح للهجات المختلفة بجميع المناطق الريفية لتحديد اكثر الصفات الصوتية اختلافًا في لهجات تتبع الدراسة المنهج الكيفي في جمع وتحليل البيانات. تبحث الدراسة التنوع الفونولوجي للهجات الريفية من خلال بحث التغيرات الصوتية الرئيسية كإضافة او حذف بعض الأصوات للكلمات، إمالة بعض الأصوات، استخدام الأصوات المتحركة (حروف العلة) والإدغام. الهدف الرئيسي من التوثيق من شأنه المساعدة في أرشفة هذه السمات الصوتية مع تحليل بعض أسباب اختلاف هذه السمات بين المناطق المختلفة تعتمد الدراسة في عملية جمع البيانات على خمسة مصادر رئيسية اللغوية المستخدمة في المحادث، والمقابلات، والدراسات الميدانية، وبطبيعة الحال مراقبة المتغيرات اللغوية المستخدمة في المحادث اليومية. أظهرت نتائج الدراسة وجود تنوع صوتي (فونولوجي) واختلاف بين اللهجات المستخدمة في المناطق ببعض المخافظات المصرية مثل محافظة دمياط وبين اللهجات الأخرى المستخدمة في بعض المناطق ببعض المخافظات المصرية مثل محافظة دمياط وبين اللهجات الأخرى المستخدمة في بعض المناطق ببعض المخافظات المصرية مثل مخافظات القاهرة والشرقية وكفر الشيخ المستخدمة في بعض المناطق ببعض المخافظات المصرية مثل مخافظات القاهرة والشرقية وكفر الشيخ المستخدمة في بعض المناطق ببعض المخافظات المصرية مثل مخافظات القاهرة والشرقية وكفر الشيخ المستخدمة في بعض المناطق ببعض المخافظات المصرية مثل مخافظات القاهرة والشرقية وكفر الشيخ

كما أوضحت الدراسة وجود سمات صوتية مميزة وخاصة باللهجات المستخدمة بمحافظة دمياط وتتلخص تلك السمات المميزة في عدة عمليات فونولوجية أبرزها استبدال الأصوات والحروف، إضافة أو حذف أصوات للكلمات، تغيير الأصوات المتحركة من خلال مد أو إطالة أو حتى استبدال الصوت المتحرك بصوت متحرك اخر، الإدغام الكلي أو الجزئي للأصوات الساكنة، الإدغام الكلي للأصوات، إضافة أصوات في بداية الإدغام الكلي للأصوات، إضافة أصوات في بداية الكلمة أو حذف أصوات من نهاية الكلمة، استخدام الاصوات المتحركة (حروف العلة)، واخيرا الماط وضع شدة الكلمة (word stress patterns).

Abstract

The present study attempts to investigate variations in the major phonological features of the rural dialect (dialect of the peasants {fellahin}) spoken in the rural regions of Damietta governorate: their contexts and patterns. Targeting old, rural speech, a survey of all localities is conducted through recordings of natural speech, questionnaires, close linguistic observation, and interviews. The primarily purpose of this study is documenting phonological variations in the different regions of Damietta governorate. That is it would help archive these phonological features for diachronic research. The attached Linguistic maps would also give us the chance to compare different kinds of variation by placing linguistic phenomena in spatial context. The study maintains both quantitative and qualitative approaches of data collection and analysis. The investigated

phonological variables include major allophonic variants (such as the use of **ğ** instead of **g**), sound addition, sound deletion, pausal forms, the use of vowels and diphthongs, and stress patterns. The findings are interpreted with reference to the phonological system of Egyptian Arabic as a whole and various models of language variation. Finally, the investigated linguistic features are drawn on a series of linguistic maps so as to show their geographical provenance and to distinguish an area in which a certain feature is found from areas in which it is absent. The findings of the present study demonstrate to what extent are the dialects spoken in the rural districts of Damietta Governorate similar to the Cairene dialect and other rural dialects of Egypt as well as the most distinctive features of such dialects which make them different from the Cairene dialect and other rural dialects. The study manifest that the rural districts of Damietta Governorate enjoy a number of distinctive phonological variables, which mark them on both inter and intra regionally levels. Generally, variants are subject to some linguistic, social and geographic constraints.

Introduction

Language is variable from one place to another, from one social group to another, and from one situation to another. The way language is used to greet and compliment may be expressed distinctively in a particular cultural group (Holmes, 2008, p.3). Language variation is a basic concept in sociolinguistics, because the differences in language among members of a speech community or between different regions speaking different varieties of the same language is the real basis for much of sociolinguistic studies which are the base of "Regional Dialectology" (Meyerhoff, 2011, p.11).

Regional dialectology is concerned with documenting the way and methods speakers use language differently and the reason why language varies depending on the village, city or region speakers come from (Meyerhoff, 2011). Such notion of variation is called" Dialect". The term 'dialect' refers to variations of one language that characterize a particular group of the language's speakers. The term is mostly applied to regional speech patterns, and the study of dialects with regard to their geographic distribution, as well as how their distribution may be affected by geography is called 'Dialect Geography' (Ianna'ccaro& Dell'Aquila, 2001, p.1). The most significant purpose of studying and mapping dialect variations

is to document such variations and dialects in different regions so as to offer the chance to compare different kinds of variation and study the factors influencing such variation, i.e. (geographical borders, ethnic diversity, social environment...etc.).

Over time, there has been a plenty of theories and approaches to interpret language variation. One of the most important key trends in the attempts to interpret language variation is Chambers and Trudgill's view known "Variability as Accidental" in which Chambers and Trudgill (1998) believe that variability is a result of dialect mixtures and free variation. It is the idea that some variants alternate with each other without any reliable constraints on their occurrence in a particular context or by particular speakers. The free variation hypothesis maintains that the variable elements in speech are the unpredictable occurrences of some linguistic feature which for some reason or other has two or more possible realizations. It is the idea that some variants alternate with each other without any reliable constraints on their occurrence in a particular context or by particular speakers (Meyerhoff, 2011, p.10). The present study, besides documenting some features of phonological variation in a specific type of Egyptian Arabic, attempts to discuss the documented variation in lights of Chambers and Trudgill's proposed views of language variation. The aim of the present work is to investigate the major distinctive phonological features and variations of the Egyptian Arabic spoken in the rural regions of Damietta governorate.

Theoretical framework

Language variation has become a main issue among linguists and sociolinguists because it has a relationship with social communities. The use of the language is various according to social groups because they do not use the language in a similar way, as the way language is used to greet and compliment is distinctively expressed in a particular cultural group (Holmes, 2008, p.3).

The most significant purpose of studying regional dialects is documenting language variations and dialects in different regions so as to give us the chance to compare different kinds of variation and study the factors influencing such variation, i.e. (geographical borders, ethnic diversity, social environment...etc).

Most linguistic theories originated from the idea that language variation is unmanageable. Over time, more and more linguists are coming to see that variability is not only interesting but also that it can be made manageable and incorporated into linguistic theory (Chambers & Trudgill, 1998, p.127). Hence, sociolinguists assert that Language variation in space and time is inevitable. Consequently, dialect studies and diachronic linguistics have long been associated. The degree and scale of variation is determined by a number of factors, chief among which are the geographical proximity and amount of mutual interaction and relations among speakers. However, the existence of distinct dialects with (distinctive linguistic features) of a language has been objectively questionable (Durrell, 2005, p.508).

In traditional dialectology, region (geographical proximity) is regarded as the primary and often the only independent variable. At the time of introducing dialectology as a systematic study, in the second half of the nineteenth century, scholars considered dialect differences to be mainly a function of region. Most of the founders of dialectology inherited to a powerful conviction about the relation of

dialect variety to regional proximity and the local landscape. Eighteenth century philosophers believed that language was a natural, organic entity, like a plant, and its diversity was thought to have the same source as the diversity of vegetation. Just as vegetable life took on distinctly different appearances according to the climate and soil that nourished it, so languages took on distinctly different characteristics in different climates. In this intellectual tradition, landscape and language were inextricable. The idea grew out of the commonplace observation that people whose lives were circumscribed by their home territories used speech features identifiable as indigenous to their region. That is probably still true, but the numbers of such people whose lives are so circumscribed, a majority in Herder's day, have dwindled to a statistically insignificant miniscule, minority today....appeared many reason, but region retained its primacy as a determinant of dialect variation. Saussure, the most perspicacious linguist of the day, declared that: "geographical separation is still the most general force in linguistic diversity". In the developed nations, region no longer maintains its primacy. Wholesale changes in mobility, urbanization, literacy, and other social factors have led to a drastic leveling of regional accents and dialects. The matter

which leads us to the idea that because of the changing conditions, region is no longer the main determinant of dialect, but also the relationships among speakers and the magnitude of mutual interaction (J.K. Chambers, 2000).

The following part outlines some of the key trends in the attempt to integrate the analysis of variability into linguistic theory:

Variability as accidental

Variability has usually been categorized either as the result of dialect mixture or as free variation. In the dialect mixture hypothesis, the variable element of a person's speech is assumed to be the result of two or more coexistent dialects which the person controls. It is not unusual, of course, for people raised in one location or one social class to retain their 'home' dialects in some circumstances long after they have changed their location and their status and, with them, their accents. However, there is no clear connection between this kind of 'mixture' and the occurrence of variable features in speech (Chambers & Trudgill, 1998, p.127).

The free variation hypothesis maintains that the variable elements in speech are the unpredictable occurrences of some linguistic feature which for some reason or other has two or more possible realizations. It is the idea that some variants alternate with each other without any reliable constraints on their occurrence in a particular context or by particular speakers. That is there were no clear linguistic constraints which would predict when you got one variant rather than another (Meyerhoff, 2011, p.10).

Variability as essential

Variability is inevitable. It cannot be ignored, but in case it can be ignored, the alternative to ignoring variability in language or to assigning it a peripheral and accidental status is, of course, to incorporate it. The variable thus becomes another structural unit, equivalent to structural units like the phone, phoneme, morpheme, and others that linguists have posited (Chambers & Trudgill, 1998).

Phonological variation

Phonological variations can occur due to the difference in lexicon, manner of articulation, prosodic variation, even variation in stress and duration also causes phonological

variation in dialects and language varieties. Phonological variation is an outcome of many factors. One is that everyone learns language for themselves, starting in infancy. Toddlers don't mimic, indeed can't. Another is that, within a culture, when different ethnic or social classes are formed, each one distinguishes members by change in phonological and lexical differences. The way one speaks reveals his or her feelings of identity. In other words, social stratification results in direct differences. Also, if a group is admired, others will change their speech to be like them. An interesting aspect is that some phonological variations within language are noncontinuous in space (i.-+e., distinct locations may share features while closer locations may show different features). This was been found for intonation contours, for example, and draws a picture unlike that found for segmental variation in most cases.

Phonological variation _differences between accents_ comes in a variety of forms. Some speakers might be difficult to place geographically, while others who speak with a broader accent might use a number of localized pronunciation features. This might include the articulation of certain consonant or vowel sounds. It might be apparent in the so-called "connected speech process'_ the way certain sounds are pronounced in particular combinations of words or phrases. Or it might be revealed in characteristic intonation patterns (www.bl.uk).

Hudson (1990) assumes that Regional variation in phonological variables takes several forms such as allophonic variants, the number of phonemes in the inventory of a particular dialect in relation to those of other dialects, the phonetic environments in which a given phoneme is undergoing some changes such as assimilation, metathesis, elision, addition etc.

The previously mentioned phonological processes including assimilation, metathesis, elision, addition and stress represent the key processes distinguishing regional variation in phonological variables, and they are actually the most important factors that highlight the differences between the rural dialects of Egypt, especially those spoken in the rural regions of Damietta governorate.

Damietta Governorate (The Area of Investigation)

Damietta Governorate is an Egyptian Governorate. It is located in the northeastern part of Egypt. Its capital is the city of Damietta. The governorate has a population of over 1 million.

The city of Damietta is famous for its skilled carpenters and furniture. Their products are sold in Egypt, and throughout the Middle East, Europe and the USA. 80% of the governorate's income is related to furniture.

As stated above, Damietta governorate is mainly famous for the industry of furniture, the matter which allows its interact with people population to from the governorates of Egypt coming to Damietta to buy wooden products and furniture. Normally, Damietta population would have been affected by such interaction with people from other governorates using different dialects, but actually, that was not the case with Damietta people as the native inhabitants, (especially old and rural people as well as other people working in the field of furniture industry and fishing), of the governorate are sticking to their dialects and very proud of its features distinguishing it from other dialects spoken in Egypt. On the other hand, we can find many of university students and graduates speaking in a different way using a dialect that may be described as a mixture between the cairene dialect and the dialects used in Damietta.

Methodology

This study is an investigation of the language spoken in the rural regions of Damietta. It will explore whether some of the traditional rural features are still present in the speech of the peasant speakers in the present day. The study considers some phonological features such as major allophonic variants (such as the use of **ğ** instead of **g**), sound addition, sound deletion, pausal forms, the use of vowels and diphthongs, and stress patterns. In order to In order to attain such goals, the study mainly uses the same methodology of many other branches of sociolinguistics in gathering data. The methodology maintained in the process of data collection depends on five main data resources; questionnaires, recordings, interviews, field work surveys, and, of course, the linguistic variables observation of used conversations

The selection of informants

The most typical feature shared by all of the major projects in dialect geography is the type of informant selected. The type of informants which all sociolinguistic books refer to as NORMs, an acronym based on the description given in the preceding sentence (**Chambers & Trudgill**, 1998, p.30).

In the present study, Two over-seventy year-old (a female and a male) residents of each rural locality randomly are selected as informants. As **Aurrekoetxea & Perea** (2009) maintain, interviewing more than one informant could help reveal further variation, as they might not provide identical answers to the same question. Socioeconomically, the informants represented a relatively homogeneous group of illiterate, immobile farmers who were likely to provide the most natural and regional speech (**Labov**, **1972**).

Data collection and analysis

Throughout questionnaires, recordings, interviews, field work surveys, and, the researcher's own observation of linguistic variables used in casual conversations data is collected from different localities of Damietta governorate.

Such methods are supposed to draw the closest picture of the dialectal reality of those localities.

Data collection and analysis involved three stages. The first stage constituted a pilot study involving the recording of a natural speech sample for a random number of informants from all areas under examination.

After transcribing and analyzing the collected data, a number of the most recurring, distinctive and regionally-representative phonological features of Damietta speech are selected.

Accordingly, a questionnaire is developed around a number of such variables as phoneme variants and some phonological processes. The second stage involves administering the interviews by recording free conversations, orally eliciting data (indirectly and directly) on the questionnaire items, transcribing and coding data.

Coding data involves compiling lists of the investigated phonological variables for the localities belonging to each of the districts of the governorate. After specifying the distinctive phonological features of Damietta Arabic rural speech, the findings are interpreted with reference to the

phonological system of Egyptian Arabic as a whole and various models of language variation. Finally, the investigated linguistic features are drawn on a series of linguistic maps so as to show their geographical provenance and to distinguish an area in which a certain feature is found from areas in which it is absent.

Results

The findings of the present study manifest that the rural districts of Damietta Governorate enjoy a number of distinctive phonological variables, which mark them on both, inter and intra regionally levels. The present work highlights and documents the most distinctive phonological features in the rural dialects used in Damietta Governorate. The study showed that the most distinctive features characterizing the rural speech of Damietta dialects are as follows:

/q/ Variants

In the rural dialects of Damietta regions, the voiceless plosive sound /q/ as in /qalb/ 'heart' has only one variant 〈?〉 (?alb) which is similar to that of cairene dialect and most of the neighboring governorates in Delta (except for Sharqiyah

Governorate where the most predominant realization of /q/ in the rural dialects is g [g]) as stated in (Abul–Fadl, 1961).

/ai/ and /au/ variants

The diphthongs /ai/ and /au/are changed to /e:/ and /o:/ respectively as in Cairo be:t, "house", mo:t, "death", are not used at the same way in Damietta dialects. The diphthong /ai/ as in /baid/ 'eggs' sometimes undergoes a process of ima:la, turning it to the higher and longer /e:/ or a lower pure vowel /a:/ in other dialects. In fact, the phonological realization of /ai/ is one of the most distinctive features of the Damietta rural dialects as most of the Domyati rural people tend to use the lower pure vowel /a:/ in their speech instead of the diphthong /ai/, while a less number of speakers (mostly educated young men and women) tend to use the diphthong /e:/ as used in the cairene dialects.

A similar set of variants to the preceding one is that of /au/, /o:/ and /a:/ as in /jaum/, /jo:m/ and /ja:m/ 'a day', with the second variant being the most common in Egyptian Arabic. The present study showed that /o:/ variant is the most commonly used realization for /au/ in the rural dialects spoken all over Damietta governorate.

/ā:/ variants

In the eastern part of the Delta, /ā:/ is split into clearly marked allophones with a strongly backed [a:] in emphatic environments [ifra:x], "chickens", and a fronted [e:] or even [e;] elsewhere ([be:b] {E}). Moving southwards in the Nile valley, /ā:/ gradually loses its inclination towards [a:] so common in Cairo in non-emphatic environments, becoming more open as in [ba:b]. The data gathered from the different regions of Damietta Governorate show that the use of /ā:/ is somehow similar to the later one used in Cairo but it is pronounced with a little more force and the sound is a little bit prolonged.

a, i, u, alternation

Pronunciations like /kitib/ and /katab/ 'he wrote' /ʃirib / ʃarib (ʃarab) 'he drunk' are usually alternating with each other in Egyptian Arabic dialects. In most of Damietta rural districts, the /i/ pattern as in the Cairene pronunciation of /fihim/ 'he understood', /ʔidir /he was able to' and /kibir/ 'he grew up', /kidib/ 'he lied' etc. is lowered to /a/ to be /faham/, /ʔadar/, / kabar/ and /kadab/ respectively.

Deletion of i and u

The deletion of i and u is a very important feature to be considered as a distinguishing mark of Egyptian Arabic dialects. Unstressed i and u in open intermediate syllables are elided in the following cases:

1) To have the plural form of a verb:

Yiktib (he writes) + u Yiktbu or yikitbu (they write)

Yidrab (he hits) + u yidrabu (they hit)

2) To have the feminine form of a verb in the past tense:

Misik (he held) + it Misikit (she held)

3) To have the feminine form of some adjectives:

wihiš (ugly / masculine form) wihša (ugly / feminine form)

4) To express the feminine form of a verb in the present continuous tense:

Masik (he is holding) + a maska (urban dialects) or maskih (rural dialects) (she is holding)

The present study shows that the first case applies in most of Damietta dialects on most forms of verbs in the present tense except the verb (yea'mil / he does) which is pronounced in the rural dialects of Damietta as (yea'mal) and the plural form of it is (yea'malu / they do) not (yea'milu) as used in the most Egyptian Arabic dialects. The other three cases all apply in the rural dialects of Damietta but with a slight change in case No. 2 where the i sound is replaced by a as follows:

Misik masak (he held)

Misikit masakat (she held)

Assimilation of the Detransitivizing Prefix t-

?it-habal 'he became crazy. In the rural forms of Damietta Egyptian Arabic, the prefix t- is interchangeable with n-making the following changes: ?in-habal 'he became crazy, ?in-lafat-li, ?in-baħħ 'it became hoarse', ?in-xajal 'he was distracted', ?in-yalab 'he was overcome'.

Total Assimilation of Some Sonorants (glide, liquid or nasal consonants)

The sonorant consonants //n, l, r// may totally assimilate to each other in various ways. The total assimilation of //n// to a following liquid /l, r / takes place in most of the speech of the rural districts in Damietta except the most careful speech of educated speakers. For example,

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//kaːn lu // → kal lu 'he had'

//ʔimaːn liʕibit // → ʔimal liʕbit 'Imān played'

miːn lajla // → mil lajla 'who is Layla'?

//fain laħmit l-ʕiːd // → fil laħmit ilʕiːd 'where is

Eid's meat'?
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Total Assimilation of Sibilants

Total assimilation of adjacent sibilants /s, z, \int , \int , \int is obligatory in the dialects used in the rural districts of Damietta except in the careful speech of a few upper-class speakers.

Examples:

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//libis ∫a:1 // → libi∫ ∫a:1 'he put on a shawl'

//kanas ∫a:riγ // → kana∫ ∫a:riγ 'he swept a street'

//ɣaraz ∫auka // → ɣara∫ ∫ooka 'he inserted a thorn'

//gawwiz ∫adja // → gawwi∫ ∫adja 'he married

Shadya'
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//la:bis ʒinz // → labiʒ ʒinz 'wearing jeans'
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The present study also reports some of the prominent instances of assimilation based on the recorded data. Some of these instances might be used in other areas in Egypt, but are not common in the speech of the adjacent Cairene and Central Delta. One of them is ji\substacking is placing jixbiz 'to bake', where the voiceless uvular /x/ is influenced by the

following voiced /b/ and changes to its voiced counterpart / \mathbf{Y} /. Conversely, the latter assimilates to the former in /ji \mathbf{Y} sil/ 'to wash', rendering it to /jixsil/ under the influence of the following voiceless /s/. Further, x/ \mathbf{Y} mutual assimilation categorically applies when they occur word-medially.

Pausal forms

Imala

The pausal imala of -a is strongly present in the dialects of Damietta rural districts in the form of [ih] kalba, 'bitch' [kelbih], samaka 'fish' [samakih] and so on. Such kind of imala can be noticed in the speech of all kinds of speakers at all ages in the rural dialects of Damietta except the speech of some of the highly educated young speakers.

Pausal consonant deletion & pausal vowel prolongation and glottalization

A major prominent phonological feature in most rural districts of Damietta is the deletion of pausal consonants. Speakers feel that there is no need to complete the final word as long as they are certain that their message is conveyed. In this regard, the first-order phonological constraint operating categorically in a large number of rural districts is that the deleted consonant is replaced by a prolongation of the preceding vowel.

Metathesis (sound reversal)

The phenomenon of metathesis is widely present in the speech of the rural inhabitants of Damietta districts. A a common instance of metathesis occurs in the lexeme /fohra/ 'a hole' instead of /hofra/, where /f/ and /H /exchange positions. Another common instance marking all dialects of Damietta Egyptian Arabic is the use of the lexeme /fellina/ istead of /fanila/ referring to the underwear shirt. No definite interpretation can be offered for the occurrence of metathesis in the mentioned examples. One, however, could argue that /foHra/ sounds less educated and is receding.

Epenthesis (sound addition)

The sort of epenthesis used in the rural dialects of Damietta is extremely unique and it is apparent in the way they try to express negation. In the cairene dialects, negation is expressed by adding the prefix /mish/ meaning 'not' as in the following example:

/hayrouh/ ' he will go' ----- /mish hayrouh/ 'he will not go'

In the dialects used in the rural districts of Damietta, the matter is quite different as people tend to avoid the prefix /mish/ and add two sounds to the word, one at the initial syllable and the other at the middle of the word as commonly used in the dialects of Upper Egypt, for example:

/hayrouh/ ' he will go' ----- /ma ha yerohsh / 'he will not go'

/hayakol/ 'he will eat' ----- /ma ha yakolsh/ 'he will not eat'

Another form of epenthesis remarkably noticed in the rural dialects of Damietta, is the addition of the /i/ sound in

most of the forms of the past tense in case it used to express an adjective or describtion, for example,

/kebret/ "she grown up' ---- /kebirit/

A common sort of sound addition in Damietta rural dialects, is the very special use of the word /ʔi:gih/ 'he came' instead of the commonly used word /gih/ expressing the same meaning in most of other Egyptian Arabic dialects.

Word stress

In Egyptian Arabic, The most important variable is the position of stress in words which contain a consonant cluster. It falls either on the vowel following the cluster, as in madrása, or on the vowel preceding it, as in mádrasa. The first pattern, a salient feature of Cairo Arabic, dominates the Delta with some exceptions in the Sharqiyah and North East Delta, while the second is common in the area from Nile Valley to the south of Giza (Woidich, 2007).

In the rural dialects of Damietta, the most commonly used type of stress in words which contain a consonant cluster is the one falling on the vowel preceding the cluster as in madrasa (school), má γ sala (laundry) and so on.

Vowel elision (deletion of i and u)

In classical and specially cairene Egyptian Arabic, many words that begin with a vowel (e.g. /ana/ 'I'), and with a glottal stop (e.g. /?awi/ 'very', from Classical /qawi / 'strong'). When pronounced in isolation, both types of words will be sounded with an initial glottal stop. However, when following another word, words beginning with a vowel will often follow smoothly after the previous word, while words beginning with a glottal stop will always have the glottal stop sounded, e.g.:

- /il walad (?)aħwal/ → [el 'wælæhwal] or [el 'wælæd '?aħwal] ('the boy is squint)
- /inta kibi;r ?awi/ → /inta-kbi;r ?awi/ [entæk'bi;r
 '?æwi] ('you are very big')

The same feature actually exists in the dialects used in Damietta governorate. Furthermore, there are some other interesting forms of sound deletion represented in the deletion of vowels like i and u in case either of them exists in a word that contains more than three vowels, for example:

Yiktibu (they write)...... Yektbu

bey?ul (he says) bə?ul

beyruh (he goes) bəruh

Conclusions

The present study is an attempt to highlight and document the most distinctive phonological features in the rural dialects used in Damietta Governorate. The study concluded that the most distinctive features characterizing the rural speech of Damietta dialects are shown in the major phonological processes such as assimilation, elision, metathesis, epenthesis, and stress patterns as shown in the previous section in the results of the study.

In fact, Damietta Governorate is open and linked to other governorates from all over Egypt because it is regarded as the center of furniture industry in the whole country attracting thousands of furniture traders and customers every day. The majority of Damietta inhabitants work in furniture industry, the matter which keeps them in touch with other customers coming from all governorates and as a result of such contact they are more vulnerable to other dialects spoken in the rest of Egypt's governorates. In spite of the

previous facts which lead us to suggest that the speech of inhabitants is mostly influenced by other Damietta governorates, but actually this is not the case. The present study shows that most of Damietta native inhabitants, especially the rural speakers, enjoy and tend to use a very special dialect of Egyptian Arabic having its own distinctive phonological features, which in some rare cases are near or similar to only one or two neighboring governorates. The elderly speaker are more sticking to their native and original dialects, while the young generations and highly educated classes tend to use a dialect much more closer to the Cairene dialect. The distinctive features of Damietta rural dialects are very clear in the speech of most areas in Damietta Governorates, except the city of New Damietta because most of its inhabitants come from other governorates for the sake of work, education or pursuing better job opportunities at the industrial area in the city.

The present study is an attempt to highlight and document the most distinctive phonological features in the rural dialects used in Damietta Governorate. The study concluded that the most distinctive features characterizing the rural speech of Damietta dialects are shown in the major

phonological processes such as assimilation, elision, metathesis, epenthesis, and stress patterns as shown in the previous section in the results of the study.

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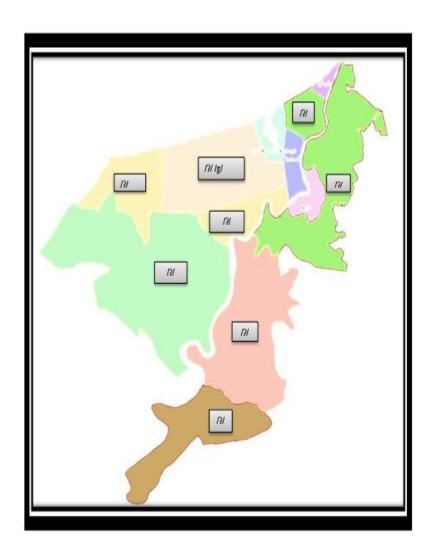
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Appendix (1): Questionnaire					
Phonological Variables	Examples	Variant(s) used	Name of locality/ district		
Vocalic Variants a) /ai/variants: / ai/, /e:/ /i:/ /a /: b) /au/variants: /au/,o:/ and /a /: c) i / a Alternation	/bait/, /be:t/, /bi:t/, ba:t/ 'house' /jaum/, /jo:m/, ja:m/ 'day' / diris/, /daras/ 'he studied'	Informant picks one or more than one variant of each variable			
/q/ variants: /ʔ/, /g/ /q/	/ jiʔu:l/, / jigu:l/, / jiqu:l/ 'to say'		Comments		
Deletion of i and u 1) To have the plural form of a verb: 2) To have the feminine form of a verb in the past tense: 3) To have the feminine form of some adjectives: 4) To express the feminine form of a verb in the present continuous tense:	Yiktib (he writes) + u				

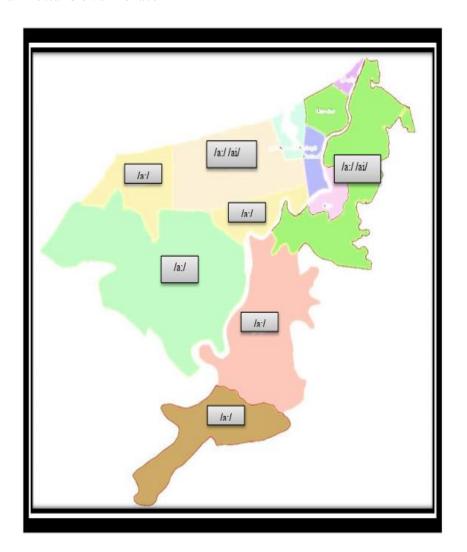
Assimilation Assimilation of the Detransitivizing Prefix t- (t- turns to be n-) Total Assimilation of Sonorants (sonorant consonants /n, l, r / may totally assimilate to each other) Total Assimilation of Sibilants (The coronal fricatives /s, z, ∫, 3/ may undergo total assimilation to a following palate-alveolar, for example: //s, z// may assimilate to /ʃ/ or /ʒ/ Assimilation of Sibilants (The coronal fricatives /s, z, f, 3/ may similate to oldowing palate-alveolar, for example: //s, z// may assimilate to /ʃ/ or /ʒ/ Assimilation of Sibilants (The coronal fricatives /s, z, ∫, 3/ may undergo total assimilation to a following palate-alveolar, for example: //s, z// may assimilate to /ʃ/ or /ʒ/ Assimilation of Sibilants (The coronal fricatives /s, z, ∫, 3/ may undergo total assimilation to a following palate-alveolar, for example: //s, z// may assimilate to /ʃ/ or /ʒ/ Assimilation of Sibilants (The coronal fricatives /s, z, ∫, 3/ may undergo total assimilation to a following palate-alveolar, for example: //s, z// may assimilate to /ʃ/ or /ʒ/ Assimilation of Sibilants (The became crazy, , ?it-xajal 'he was distracted'. Asai lu / → kal lu / → kal lu 'he had' /?ima:n liSibit / → 2 imal liSbit 'Imān played' //min:n ligla/ → mil lajla / who is Layla?' //kans fa:ris 'he swept a street' //araz ʃauka / → yaraʃ Jooka 'he inserted a thorn' //agawwiz ʃadja / → gawwiz ʃadja / → gawwiz ʃadja / → gawwiz ʃadja / → mil sibit 'Imān played' //imin:n liSibit / → 2 imal liSbit 'Imān played' //imin:n liSibit / → 2 imal liSbit 'Imān played' //imin:n liSibit / → 2 imal liSbit 'Imān played' //imin:n liSibit / → 2 imal liSbit 'Imān played' //imin:n liSibit / → 2 imal liSbit 'Imān played' //imin:n liSibit / → 2 imal liSbit 'Imān played' //imin:n liSibit / → 2 imal liSbit 'Imān played' //imin:n lajla / → 2 imal liSbit 'Imān played' //imin:n lajla / → 2 imal liSbit 'Imān played' //imin:n lajla / → 2 imal liSbit 'Imān played' //imin:n lajla / → 2 imal liSbit 'Imān played' //imin:n lajla / → 2 imal liSbit 'Imān played' //imin:n lajla / →	Assimilation of the Detransitivizing Prefix t- (t- turns to be n-) Total Assimilation of Sonorants (sonorant consonants /n, l, r / may totally assimilate to each other) Total Assimilation of Sibilants (The coronal fricatives /s, z, ∫, 3/ may undergo total assimilation to a following palatealve (J/f) or /3/ Assimilation of Sibilants (The caronal ficatives /s, z, /, 3/ may undergo total assimilation to a following palatealve (J/f) or /3/ Assimilation of Sibilants (The caronal ficatives /s, z, ∫, 3/ may undergo total assimilation to a following palatealveolar, for example: //s, z// may assimilate to /ʃ/ or /ʒ/ Assimilation of Sibilants (The coronal ficatives /s, z, ∫, 3/ may undergo total assimilation to a following palatealveolar, for example: //s, z// may assimilate to /ʃ/ or /ʒ/ Assimilation of Sibilants (The coronal ficatives /s, z, ∫, 3/ may undergo total assimilation to a following palatealveolar, for example: //s, z// may assimilate to /ʃ/ or /ʒ/ Assimilation of Sibilants (The became crazy, ?it-xajal 'he was distracted' Ain lu / → kal lu 'he had' //ima:n lisibit / → mil lajla / → mil lajla / → who is Layla?' //libis ʃa:l 'he put on a shawl' // kanas ʃa:ris / → kanaʃ ʃa:ris 'he was distracted' Ain lu / → kal lu 'he had' //ima:n lisibit / → mil lajla / → who is Layla?' // kanas ʃa:ris / → kanaʃ ʃa:l 'he put on a shawl' // kanas ʃa:ris / → who is Layla?' // yaraz ʃauka / → yaraʃ Jooka 'he inserted a thorn' // yawwiz ʃadja / → gawwiz ʃadja / → gawwiz ʃadja / → labiz // la:bis ʒinz / → labiz // la:bis ʒinz / → labiz // labis ʒinz / he was distracted'			
Pausal forms	Pausal forms	Assimilation of the Detransitivizing Prefix t- (t- turns to be n-) Total Assimilation of Sonorants (sonorant consonants /n, l, r / may totally assimilate to each other) Total Assimilation of Sibilants (The coronal fricatives /s, z, ʃ, ʒ/ may undergo total assimilation to a following palatealveolar, for example: //s, z// may assimilate to /ʃ/ or /ʒ/	crazy, , ?it-xajal 'he was distracted'? ?in-habal 'he became crazy, , ?in-xajal 'he was distracted' /ka:n lu / → kal lu 'he had' /?ima:n lisibit / → ?imal lisbit 'Imān played' /mi:n lajla / → mil lajla 'who is Layla?' /libis ʃa:l / → libiʃ ʃa:l 'he put on a shawl' /kanas ʃa:ris 'he swept a street' /yaraz ʃauka / → yaraʃ ʃooka 'he inserted a thorn' /gawwiz ʃadja / → gawwiʃ ʃadja 'he married Shadya' /la:bis ʒinz / → labiʒ	

Imala pausal Imàla of -a which varies between [e], [i] and [ih]	kalba, "bitch" [kelbe], [kelbih]	
Pausal consonant deletion & pausal vowel prolongation and glottalization: deletion of pausal consonants (Speakers feel that there is no need to complete the final word as long as they are certain that their message is conveyed)		
Metathesis (sound reversal)	/fohra/ 'a hole' instead of /hofra /fellina/ instead of /fanila	
Epenthesis (sound addition)	/mish hayrouh/ 'he will not go'/ma ha yerohsh / /kebret/ "she grown up' /kebirit/ /gih/ /ʔi:gih/	
Word stress	Madrasa madrasa	
Vowel elision (deletion of i and u)	Yiktibu (they write) Yektbu bey?ul (he says) bə?ul beyruh (he goes) bəruh	

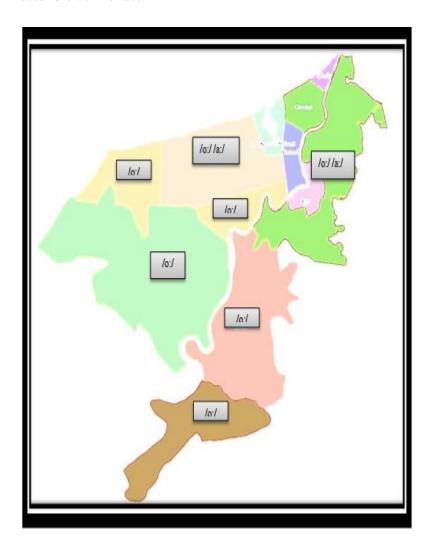
Appendix (2): Maps of the study



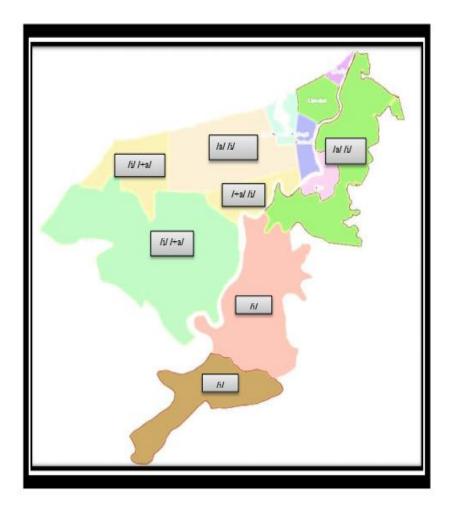
Map (2): Regional distribution of /ai/ variants inDamietta Governorate



Map (3): Regional distribution of /au/ variants in Damietta Governorate

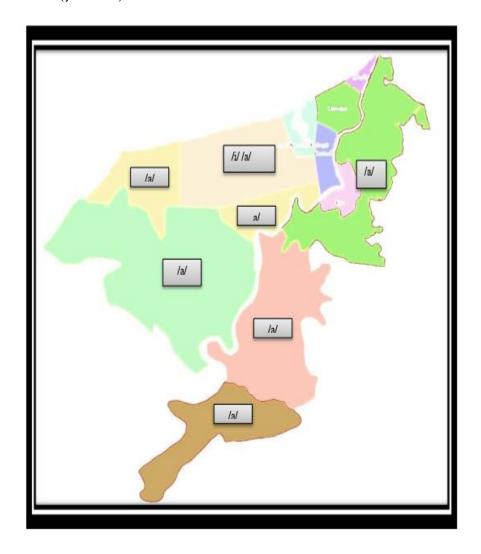


Map (4): Regional distribution of i/a alternation in diris / daras'he studied' in Damietta Governorate. Note: (+) means that the variant is strongly present and more frequent in the speech area



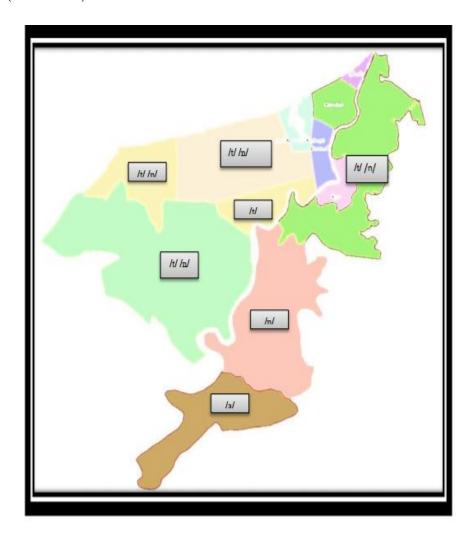
Map (5): Regional distribution of deletion/alternation of i and u : (yea'mil / he does)...... (yea'mal) and the plural form of it (yea'malu / they do) in Damietta Governorate

Note: /i/ variant stands for (yea'mil / he does), /a/ variant stands for (yea'mal)



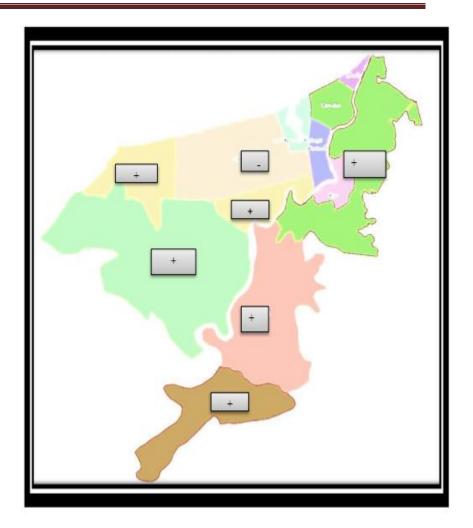
Map (6): Regional distribution of prefix t- assimilation with n- making the following changes: ?it-habal 'he became crazy...... ?in-habal in Damietta Governorate

Note: /t/ variant stands for (?it-habal), /n/ variant stands for (?in-habal)



Map (7): Regional distribution of total assimilation of//n// to a following liquid /l, r / e.g. //ka:n lu // \rightarrow kal lu 'he had' in Damietta Governorate

Note: (+) means that assimilation is strongly present and more frequent in the speech area. (-) means that assimilation is weakly present and less frequent in the speech area



Map (8): Regional distribution of pausal 'Imala' of –a in Damietta Governorate: samaka 'fish'[samakih]

Note: (+) means that Imala is present in the speech area.

(-) means that Imala is weakly present and less frequent in the speech area.