

Children's Deviation in the Acquisition of Variable Linguistic Gender Patterns

Rania Habib*
(Syracuse University, USA)

Abstract: This study examines the acquisition of variation from the vernacular Syrian Arabic input of 22 parents in the output of their 21 children in the village of Oyoun Al-Wadi in Syria, using the four rural vowel variables (o), (o:), (e), and (e:). Each variable has two realizations: rural [o, o:, e, e:] respectively and urban [a, a:, a, a:] respectively. Fathers use the rural vowels more than mothers, but the difference is statistically insignificant. Like fathers, boys use more rural vowels than girls. However, the difference between boys and girls is statistically significant. No correlation emerged between the children's and parents' use of the variants, indicating that children are not acquiring their parents' exact frequencies, which suggests developmental effect rather than statistical learning of parental input effect. The boys' higher use of the rural forms after age eight is attributed to a social, psychological polarization process between boys and girls to create a highly differentiated gendered linguistic behavior in line with another highly differentiated gendered linguistic behavior related to a stereotypical consonant variable, (q), which is observed in both parents and children.

Keywords: child dialect acquisition, variation, gender polarization, statistical learning, socio-psychological factors, Syrian Arabic, rural vs. urban vowels

1. Introduction

Many studies have been concerned with the age at which children acquire linguistic variation (e.g. Labov, 1964; Roberts, 1994; Roberts, 1997a; Roberts & Labov, 1995; Kerswill, 1996; Chambers, 1992, 2002; Foulkes, Docherty & Watt, 2005; Smith, Durham & Fortune, 2007; Tagliamonte & Molfenter, 2007; Smith, Durham & Richards, 2013). Some studies have examined the pattern of acquisition of sociolinguistic variation by children (e.g. Smith et al. 2007; Smith et al. 2013) as well as the order in which social and linguistic constraints are acquired (e.g. Labov, 1989; Roberts, 1994; Tagliamonte &

* Rania Habib: Associate Professor of Linguistics and Arabic, Coordinator of Arabic Program, Department of Languages, Literatures and Linguistics, Syracuse University, New York State, USA. E-mail: rhabib@syr.edu.

Molfenter, 2007; Miller, 2013; Smith et al. 2013). Other studies explored the influence of the caregivers' input on the child's variable linguistic behavior, yielding conflicting results between correlation (e.g. D'áz-Campos, 2005; Foulkes et al. 2005; Miller, 2013) and lack of correlation between parents' input and children's variable output (e.g. Poplack, 1978; Labov, 1989; Roberts, 1997b; Smith, Durham & Fortune, 2007, 2009; Smith et al. 2013). This study seeks to explore the latter issue further through comparing the use of the rural vowel variables (o), (o:), (e), and (e:) in the vernacular Syrian Arabic of 22 parents and their 21 children in the village of Oyoun Al-Wadi, Syria.¹ Table 1 shows the realizations of these variables in the variety of Oyoun Al-Wadi and in major urban varieties such as Damascene and Himsi. It also presents examples of these vowel variations in Oyoun Al-Wadi. This comparison combines variationist and dialect acquisition quantitative frameworks and analyses (e.g. Smith et al. 2007; Smith et al. 2013) with the explanatory power of social and developmental psychology theory on childhood gender segregation (e.g. Fabes, Martin and Hanish, 2004).

Table 1. Realization of the Variables (o), (o:), (e), and (e:) in Oyoun Al-Wadi and Urban Varieties with Examples

Variable	Variants in Oyoun Al-Wadi	Variants in urban varieties	Examples of variation in Oyoun Al-Wadi
(o)	[o] ~ [ɔ] ~ [a]	[a]	<i>ʔabyodʕ/ʔabyadʕ</i> 'white'
(o:)	[o:] ~ [ɔ:] ~ [a:]	[a:]	<i>matʕo:r/matʕa:r</i> 'airport'
(e)	[e] ~ [æ] ~ [a]	[a]	<i>walad/waled</i> 'child'
(e:)	[e:] ~ [æ:] ~ [a:]	[a:]	<i>ħuse:m/ħusa:m</i> 'proper noun'

A previous study (Habib, 2017) compared the use of the variable (q) (realized as the rural uvular voiceless stop [q] or urban glottal stop [ʔ]) in the speech of the same parents and children and showed that although children do not acquire the frequencies that exist in their immediate environment, they acquire the linguistic gender differences in their community; boys, like men, use the rural form [q] much more than girls. Gender emerged as statistically significant for both parents and children. In other words, children acquire only the linguistic patterns of males and females in their community, but do not acquire the linguistic rates of the variants in their caregiver's or parents' speech. In this study, I investigate different variables to further examine the effect of the caregiver's and parents' input on the child's acquisition of variation and to draw more firm conclusions, advancing the following hypotheses: (1) If children acquire the exact frequencies of the vowel variants in their parents' speech, it can be assumed that parental input is instrumental in acquiring variation; (2) if children do not acquire those exact frequencies, it can be safely deduced that acquiring variation is largely developmental and influenced by factors other

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than parental input, such as social, psychological and peer pressure.

In Table 1, the first column presents the four rural vowel variables. The second column presents the variants of each variable in the variety of Oyoun Al-Wadi. In this column, the first two variants are the rural forms and the third variant is the urban form that corresponds with the urban variant in the third column. In the second column, the first two variants are collapsed in the quantitative analyses for the following reasons. First, the occurrence of any of the first two variants indicates rural-like variety whereas the occurrence of [a] and [a:] indicates urban-like variety. Second, the variants [æ], [æ:], [ɔ], and [ɔ:] occur in limited numbers and adding their numbers to [e], [e:], [o], and [o:] respectively does not affect the results of the quantitative analyses. Third, the data is transcribed impressionistically, leading sometimes to blurred distinction between the front [e] and [æ] or back [o] and [ɔ] vowels, for example. However, clear distinction can be easily achieved between the front [e] and [æ], on the one hand, and the back [a], on the other hand. The same applies to other collapsed and non-collapsed vowels. Thus, grouping the rural front vowels ([æ] with [e] and [æ:] with [e:]) and the back, round vowels ([ɔ] with [o] and [ɔ:] with [o:]) together is preferable for the sake of the current analysis.

The use of the rural round [o] and [o:] and 'imala vowels [e] and [e:] instead of the urban [a] and [a:] is characteristic of Oyoun Al-Wadi and other neighboring villages in Syria (Behnstedt, 1997). This use is conditioned phonologically, morphologically, and lexically (Habib, 2012, 2014). Round vowels occur in word-final closed syllables when an emphatic sound [tʰ, dʰ, sʰ, zʰ] or [r] is present in the word. 'Imala vowels occur in all other word-final closed syllables, in the initial syllable of specific morphological patterns, and in specific morpheme suffixes. Lexically conditioned words are excluded from the analysis because they do not exhibit variation. The influence of the phonological and morphological conditioning factors was examined in depth in Habib (2012, 2014). Hence, this study mainly focuses on the influence of social factors on the use of these variants, particularly gender as a reasonable comparison factor between parents and children. The purpose of comparing the speech of parents and children is determining whether variation is acquired faithfully from parents or developed later in life. In this light, the study seeks to answer the following questions:

- (1) Do children show statistical learning of the vowel variants in their parents' or caregiver's speech?
- (2) Are there differences in the use of the vowel variables in the speech of these children, and how do the observed vowel variations compare to the children's variable use of the consonant (q) in Habib (2017)?

(3) What can the observed vowel variations inform us about the acquisition of sociolinguistic variation and/or a second dialect and about the reasons for existing differences and/or similarities among children and among children and their parents?

1.1 Oyoun Al-Wadi

Oyoun Al-Wadi is a small Christian village in the western mountains of Syria and mid-way between the two cities Hims and Tartous within an hour drive from each city. It is about the same distance from the city of Hamah, which is to the northeast of the village. Its touristic nature in the summer and its closeness to urban centers have allowed for immense contact with urban people and their varieties. The village is also close to the northern Lebanese border within 50 minutes' drive from Tripoli. It overlooks Akkar Mountains in Lebanon, with which it maintains geographical, social, and religious connections. Because the forefather of the village is originally from present-day Lebanon, the speech of the people of this village and some surrounding villages include some similar features to those used in Tripoli, such as the emphaticized [a:] that is likened to [o:] in al-Nassir (1993:103), and other Lebanese mountainous areas.

The people of Oyoun Al-Wadi are very proud of their village and have preserved it historically from foreign/external influence including property ownership, indigenous marriages, and linguistic usage (Habib, 2011, 2014). However, in the past 30-40 years, the situation in the village changed greatly. For example, exogenous marriages, migrating and living in urban centers, and increased contact with urban dialects through tourism and friends became the trend. Consequently, major infrastructural, social, and linguistic changes have been taking place. Among these linguistic changes that are accompanying other social changes are the use of the urban vowels [a] and [a:] in place of the rural vowels [o] and [e], and [o:] and [e:] respectively. Nonetheless, there is still a strong sense of local identity in the village particularly among males (Habib, 2011, 2014). This strong sense of belonging to the village and a notable masculine attitude are indexed to the use of more rural forms by the younger male generation after age eight (Habib, 2011, 2014, 2016b).

1.2 Background

In sociolinguistic research, while the primary caregiver is considered the most influential person in the initial developmental stage of a child's speech (Labov, 2010:8; Smith et al. 2013), it is observed that children can deviate from their caregivers' speech and adopt the speech that is most common or acceptable by the community (Labov, 2010, 2012) or the speech of their peers (Labov, 1972:304; Romaine, 1995; Kerswill & Williams, 2000; Chambers, 2002; Starks & Bayard, 2002; Ghimenton, Chevrot & Billiez, 2013). It has also been observed that children can adjust their linguistic behavior according to the social setting and situation (Patterson, 1992; Roberts, 1994, 1997b; Dáz-Campos, 2005; Smith et al. 2007; Khatlab, 2013). Very young children can, for example, change their speech based

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on the identity they identify with (Wolfram, Carter & Moriello, 2004) and can be sensitive to the social meanings of variants (Andersen, Brizuela, DuPuy & Gonnerman, 1999), associating certain variants with certain social groups or categories (Hirschfeld & Gelman, 1997).

In addition, the age and gender of a child may affect the way a caregiver behaves linguistically with the child, hence affecting the linguistic behavior of the child according to gender and age (Foulkes et al. 2005). Such gendered linguistic differences between boys and girls have been observed (e.g. Poplack, 1978; Cameron, 2010; Habib, 2011, 2016b, 2016c; Barbu, Martin & Chevrot, 2014; Shin & Erker, 2015). While Shin and Erker (2015) show that girls steadily increase their use of the Spanish subject pronouns after age six with age, Habib (2011, 2014, 2016b, 2017) shows that boys increase their use of the local forms after age six with age. Although the two results may seem different, they are highly similar. That girls learn the incoming or adult form more than boys is evidenced in many studies (e.g. Fischer, 1958; Foulkes et al. 2005; Shin & Erker, 2015), including Habib (2011, 2014, 2016b, 2017) in which girls use the incoming urban forms, i.e. the caregiver's form, more than boys. Studies that did not find linguistic gender differences between boys and girls in their early stages of development (e.g. Roberts, 1994, 1997b; Smith et al. 2007; Shin, 2012) indicate that linguistic gender differences may develop later in life after boys and girls learn their differentiated gendered social roles. A support of this view comes from studies that found delayed linguistic gender differences (e.g. Docherty, Foulkes, Tillotson & Watt, 2006).

Furthermore, research comparing variation in the speech of children and their caregivers or parents has shown that children as young as three years of age can replicate the sociolinguistic variation patterns of their caregivers but do not necessarily replicate their frequencies (Smith et al. 2007; Smith et al. 2013). The replication of frequencies depends on the variable (Smith et al. 2013). In other words, children acquire the linguistic patterns or structures of adults, i.e. the linguistic constraints/factors that affect the use of a variant (e.g. Roberts, 1997b; Shin & Erker, 2015; Smith et al. 2013). Additionally, in Habib (2017) children acquired the social patterns of adults, i.e. the gendered linguistic differences regarding the use of the variable (q). All of the above indicates that children acquire linguistic variation to differing degrees, and while the acquisition of variation is considered an integral part of acquiring one's dialect (Roberts, 2005; Foulkes et al. 2005; Chevrot & Foulkes, 2013) and happens at the same time that children acquire categorical rules (Roberts & Labov, 1995; Chambers, 2002; Smith et al. 2009; Smith et al. 2013), the existence of differences in the frequencies between parents and children in the use of certain variants (Smith et al. 2007; Shin, 2012; Smith et al. 2013; Shin & Erker, 2015) calls for further investigation to discover the reasons behind such differences.

2. Methodology

2.1 Participants

The naturally occurring speech of 22 parents (11 married couples) and their 21 children (11 boys and 10 girls) comprise the data set. The 21 children are selected from a larger study that included 50 children aged 6-18 (Habib, 2011, 2014) because the Author was able to record both their parents during the data collection period in spring 2010. This selection of 21 children still gives very accurate and similar results to those of the 50 children. At the time of recording, there were approximately 125 children ages 6-18 years in the village, attending 1st to 12th grades. Hence, the 21 children constitute about 17% of the total number of children ages 6-18 in the village, which is a very significant and representative sample of children of those ages in the village. The children are divided into four age groups: 6-8, 9-11, 12-14, and 15-18 (See Habib, 2014, for details on this age division and how data were collected from children). The age groups have almost balanced numbers of participants and of boys and girls. Table 2 shows the social distribution of the 21 children according to age and gender. Each married couple is compared with all its recorded children, which ranges from one to four children. The linguistic distribution of all variants in the speech of parents and children is given in Table 3 and individual frequency comparisons of all variants between each child and his/her parents are given in Tables 6-9.

Table 2. Distribution of Children According to Age, Gender, and Mother's Origin

Age group	Male	Female	Total
6-8	2	3	5
9-11	4	1	5
12-14	1	2	3
15-18	4	4	8
Total	11	10	21

The Author who is an in-group member of the community under investigation recorded the children and parents in a naturalistic setting, where other members of the family and/or friends were present during the unstructured interviews. The recordings ranged from 30-120 minutes or longer. The Author transcribed the conversational data and tabulated the vowel variants for each speaker individually. For a number of speakers, their data were collected from various conversations with the same or different speakers. Topics of the conversations varied and the researcher led a normal conversation with the people present during the recording. The Author occasionally asked questions about whether parents preferred that their children spoke in a different way or not. As most participants are informed that the project deals with linguistic variation and change, many times children

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and adults volunteered information about the use of certain vowels without solicitation. This volunteered information included references to the use of the rural vowels [e], [e:], [o], and [o:] and consonant [q] by some boys in a highly prominent manner that amazed even their parents. More detailed information about data collection can be found in Habib (2011, 2012, 2014).

2.2 Data and statistical procedures

Data were transcribed impressionistically because the recordings contained notable background noise due to the naturalness of the conversations, the presence of other speakers, and the frequent interruptions and intrusions. Such noise does not allow for more detailed acoustic transcription. To ensure reliability, the Author listened repeatedly to the recordings to make sure that each vowel was heard correctly. If doubt persisted regarding a certain vowel, the vowel was excluded from the data.

Table 3 presents the data set. It presents the count and frequency of each variant in the speech of parents and their children. Tables 6-9 compare the counts and frequencies of each variant between each child and his/her mother and father.

The quantitative analyses include binary regression tests and visual distribution of variants in the speech of all participants. For parents' use of the variants, gender and mother's origin are considered. This is because the study seeks to see if gendered linguistic differences are present between fathers and mothers and if the origin of the mother is significant, given all the fathers are from Oyoum Al-Wadi, whereas only three of the mothers are local (Rose(3), Rafah (4), and Nujud (11)) (Tables 6-9) and eight are not. Most of the non-local mothers come from neighboring villages that may use one or more of the rural vowels used in Oyoum Al-Wadi. However, most of them including two of the local women (Rose and Rafah) have had significant contact with urban forms either through living in urban centers for a long period of time or being in contact with urban speakers through their husband's business. Only one of the local women (Nujud) sounds totally local, as she had fewer opportunities to be in contact with urban speakers and urban dialects. For children's use of the variants, age and gender are considered, because the study seeks to discover if there are differences among the different age groups and if there are gendered linguistic differences between boys and girls, and if these differences are comparable to those between their mothers and fathers or males and females in their community. Hence, individual frequency comparisons between each child and his/her parents are executed (Tables 6-9), and Paired-Samples T-Tests to test for correlations are performed between both parents combined and each of their children and between individual parents and each of their children, i.e., between each mother and each of her children, and each father and each of his children.

2.3 Analysis

Regarding the variables (o) and (o:), parents in general use [o] and [o:] 21% and 22% respectively more than children (Table 3). However, it is important to examine the distribution of [o] and [a] and [o:] and [a:] in the speech of males and females, as their behavior may differ and combining their tokens may give an unclear picture of the real distribution of these sounds. Table 3 shows that fathers use the round vowels [o] and [o:] 24% and 16% respectively more than mothers. Similarly, boys use the round vowels [o] and [o:] 20% and 19% respectively more than girls. Interestingly, girls show a strong pattern of vowel urbanization as their use of these vowels is not only lower than their fathers' but also much lower than their mothers'. Comparing the variables (e) and (e:) to the round ones shows that the rural vowels [e] and [e:] are used by both parents and children more than the round vowels (Table 3). In addition, parents use [e] and [e:] 40% and 22% respectively more than children. However, the distribution of [e] and [a] and [e:]

Table 3. Distribution of [o]/[a], [o:]/[a:], [e]/[a], and [e:]/[a:] in the Speech of Fathers, Mothers, Boys, and Girls

Category	% of [o]	N of (o)	% of [o:]	N of (o:)	% of [e]	N of (e)	% of [e:]	N of (e:)
Fathers	48	479	44	239	81	1760	68	2283
Mothers	24	484	28	277	60	1632	50	1940
<i>Total for Parents</i>	<i>36</i>	<i>963</i>	<i>36</i>	<i>516</i>	<i>71</i>	<i>3392</i>	<i>60</i>	<i>4223</i>
Boys	25	342	22	214	39	801	49	1449
Girls	5	324	3	155	22	652	25	1334
<i>Total for Children</i>	<i>15</i>	<i>666</i>	<i>14</i>	<i>369</i>	<i>31</i>	<i>1453</i>	<i>38</i>	<i>2783</i>

and [a:] in the speech of males and females shows that fathers use the 'imala vowels [e] and [e:] 21% and 18% respectively more than mothers. Similarly, boys use these vowels 17% and 24% respectively more than girls. As in the case of the round vowels, girls show much lower percentages of [e] and [e:] than even their mothers'.

Table 3 shows that urban vowels are used by all speakers including fathers. However, mothers including local ones use more urban forms than fathers, alluding to the presence of a change in progress towards the use of urban vowels not only in the village of Oyoun Al-Wadi but also in other rural areas as most of the non-local women are from neighboring villages that may share some vowel characteristics with Oyoun Al-Wadi. The women's higher usage of urban vowels indicates that this change is led by women (Labov, 1972, 2001). Girls seem to be advancing this change further by using more urban vowels than their mothers. Although boys lag behind girls in their use of the urban forms, they use more urban vowels than their mothers with the exception of the vowel [o]. The boys' similar

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percentages of the round vowels and the 'imala vowels to their mothers', especially regarding the vowels [o] and [e:], is not necessarily due to acquisition because of the observed great difference between boys and mothers regarding the vowel [e] and between boys and girls regarding all vowels. If it were merely based on acquisition, a similar pattern of acquisition would be expected with the vowel [e] and among girls, and more similarity between mothers and girls would be expected than between mothers and boys based on Foulkes et al. (2005). Hence, it is possible, amidst the observed change in progress and as in the case of the rural variant [q] (Habib, 2011, 2016a), that boys are increasing their use of the rural vowels to approximate their use by other males in the village and to distinguish themselves from girls in the village (Habib, 2014). Girls are also maintaining very low percentages of the rural vowels to distinguish themselves from boys and to appear more urbanized and refined, surpassing their mothers.

2.3.1 Distributions in parents

Figure 1 shows that while both fathers and mothers use less round vowels than 'imala vowels, fathers generally use more rural vowels than mothers. Figure 2 shows that those who are not from Oyoun al-Wadi use fewer rural vowels. Figure 2 correlates with Figure 1 since all fathers are from Oyoun Al-Wadi and eight out of 11 mothers are from outside the village. Even two of the three local women behave differently from the one local woman who sounds very rural.

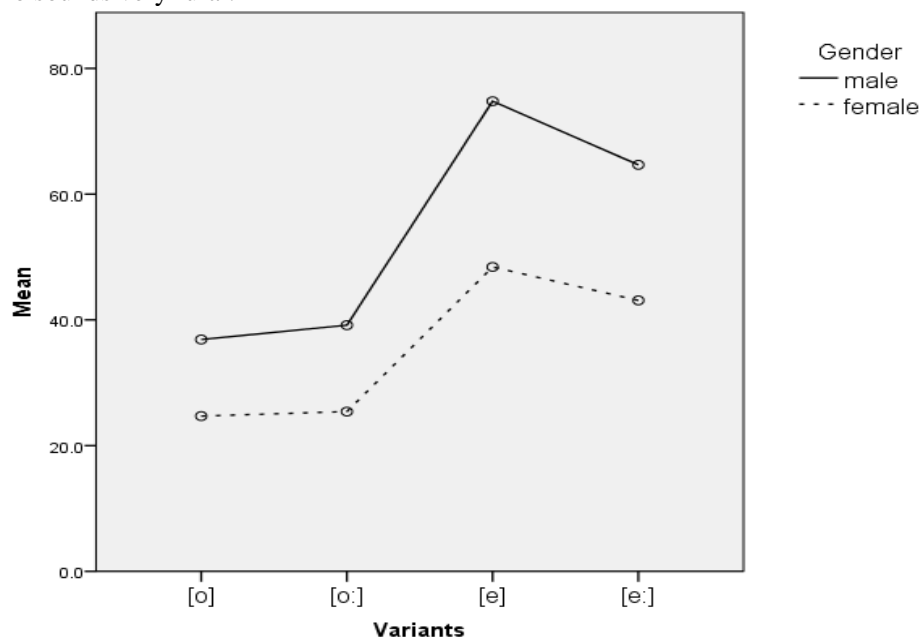


Figure 1. Distribution of vowels in parents' speech by gender

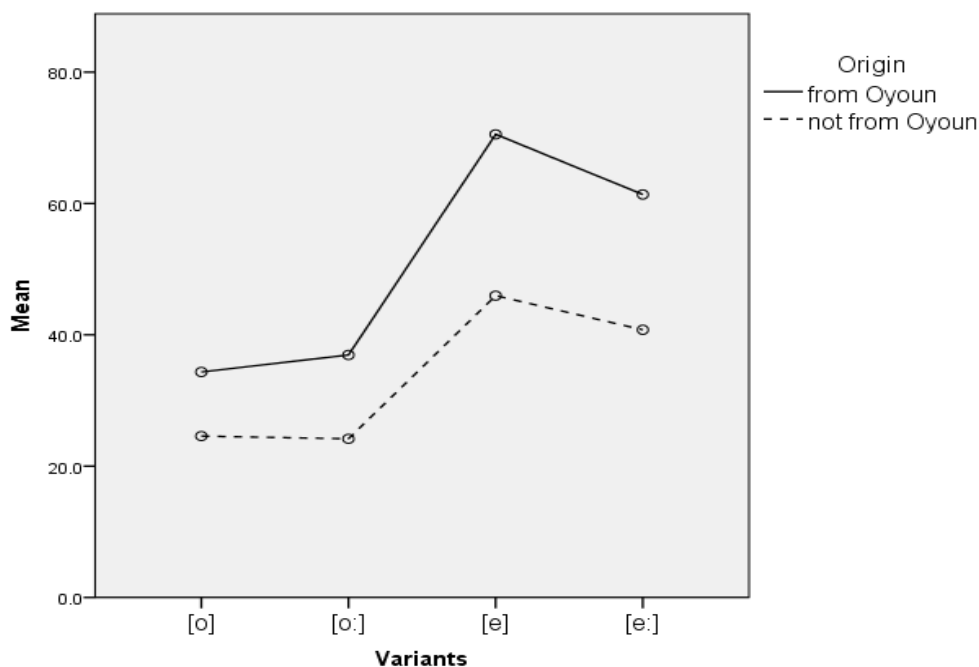


Figure 2. Distribution of vowels in parents' speech by origin

2.3.2 Parents' binary regression tests results

Only gender and origin are considered in the parents' binary regression tests because of the observed difference between males and females and those who are or are not from Oyoum Al-Wadi. In the parents' regression tests, gender emerged as statistically insignificant regarding all four variables (Table 4), and origin emerged as statistically significant regarding the variable (o:).

Table 4. Main Effects and Interactions of Gender and Origin in Parents' Use of the Variables (o), (o:), (e), and (e:)

Independent factor	<i>p</i> -value for (o)*	<i>p</i> -value for (o:)	<i>p</i> -value for (e)	<i>p</i> -value for (e:)
Gender	.080	.883	.329	.260
Origin	.066	.012	.327	.488
Gender*Origin	.003	.011	.11	.116
Male*FO	.000	.003	.028	.034
Female*FO	.057	.007	.319	.48
Female*NFO

**p*-values are significant at the .05 level.

According to the coefficient (*B*) and its exponential ($\text{Exp}(B)$) ($p = 0.007$; $B = 1.510$; $\text{Exp}(B) = 4.525$), the odds that those from Oyoum Al-Wadi would use [o:] are five times

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more than the odds that those who are not from Oyoun Al-Wadi would use it. Interaction between gender and origin is significant regarding the round vowels (Table 4). Interaction between fathers and locality is significant regarding all four variables. However, there is only significant interaction between mothers and locality regarding the variable (o:), and it approaches significance regarding (o). These interactions indicate that locality plays a significant role in producing the rural forms, particularly among males. Local women show more use of the round vowels than non-local women.

2.3.3 Distribution in children's speech

A similar Polarity to that of the parents' is seen between boys and girls in Figure 3, as boys use more rural vowels than girls. The general lower percentages of the rural vowels among both boys and girls compared to that of their parents in Figure 1 indicates that the use of urban vowels is more prominent in the younger generation as a whole. Figure 4 shows increase in the use of the rural vowels [o] and [e:] in the age group 9-11. The rural vowel [o:] gradually increases throughout the three older age groups, and the rural vowel [e] remains constant throughout the four age groups. Figure 5 does not show major differences between those whose mothers are from Oyoun Al-Wadi or not. The slight differences in the use of the vowels [o:] and [e:] are not significant. Thus, mother's origin is not included in the quantitative analyses. Only gender and age are considered in the binary regression tests.

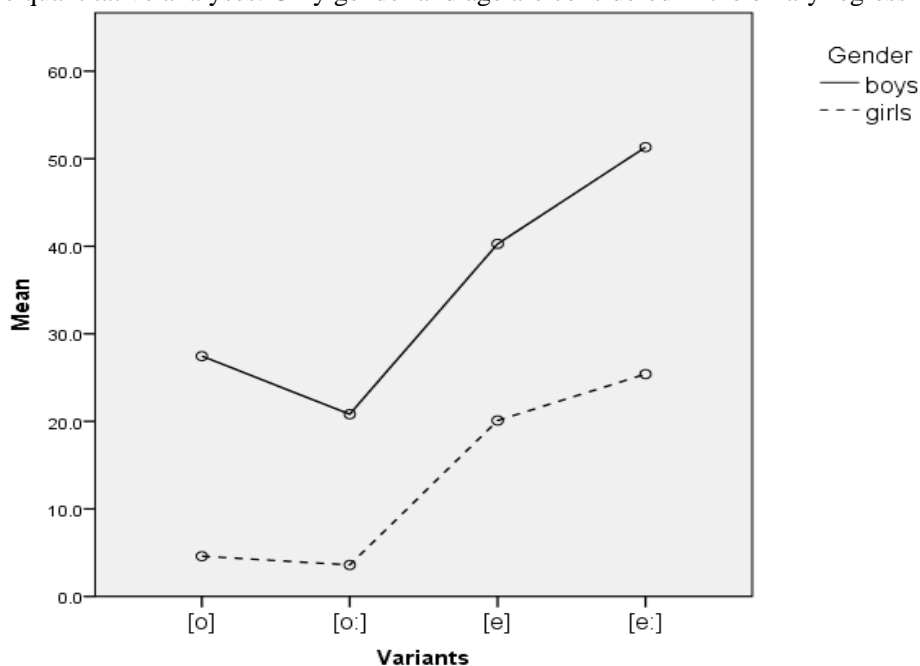


Figure 3. Distribution of vowels in the 21 children's speech by gender

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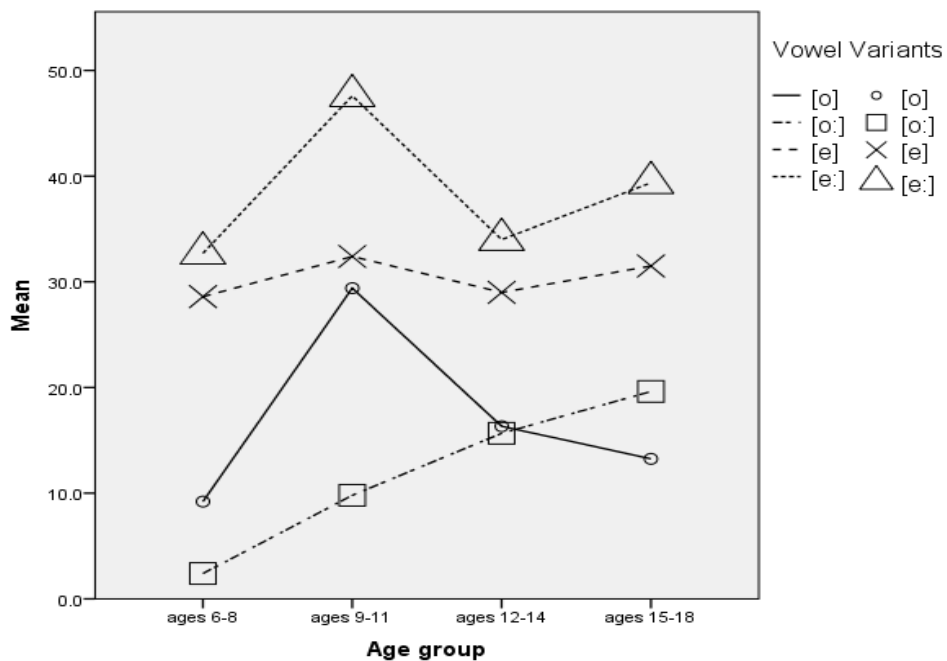


Figure 4. Distribution of vowels in the 21 children's speech by age group

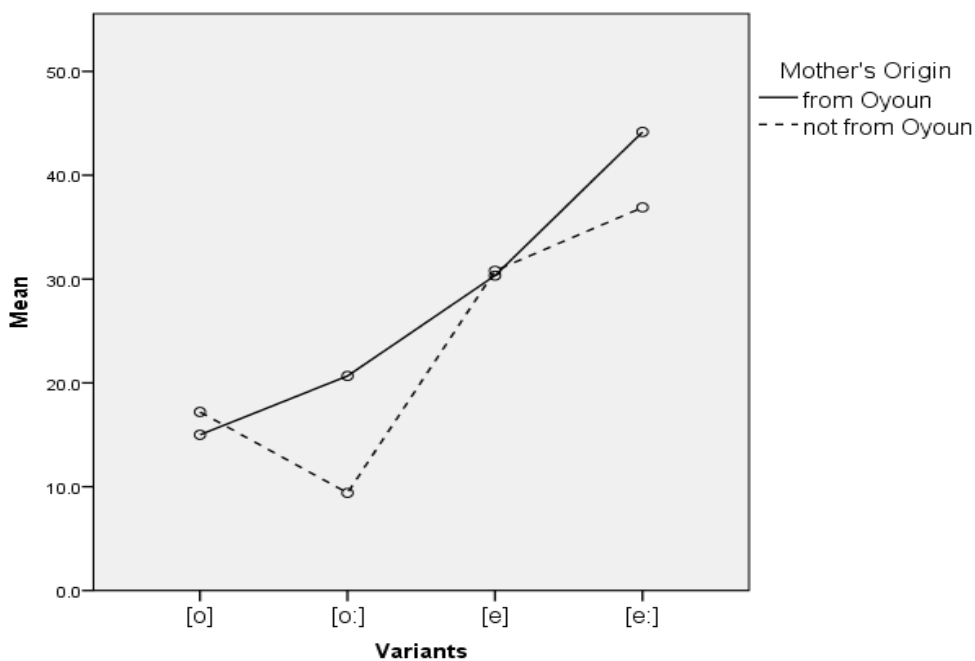


Figure 5. Distribution of vowels in the 21 children's speech by mother's origin

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2.3.4 Children's regression tests results

The results of the children's binary regression tests (Table 5) are somehow similar to the results of the larger study of 50 children (Habib, 2014). Only gender emerged as statistically significant regarding all vowel variables. In all cases, males use more rural vowels than females. The odds that males would use [o], [o:], [e], and [e:] are respectively 6, 9, 3, and 3 times more than the odds that females would use them, as the coefficients (B) and their exponentials show ($\text{Exp}(B)$) show ([o]: $p = 0.005$; $B = 1.731$; $\text{Exp}(B) = 5.647$; [o:]: $p = 0.003$; $B = 2.198$; $\text{Exp}(B) = 9.007$; [e]: $p = 0.007$; $B = 0.966$; $\text{Exp}(B) = 2.626$; and [e:]: $p = 0.000$; $B = 1.003$; $\text{Exp}(B) = 2.727$). Interaction between gender and age is significant in the case of the variables (o), (o:), and (e:). This interaction is particularly significant between boys and the age group 9-11 regarding the two variables (o) and (e:); boys and the age group 12-14 regarding the variables (o), (o:), and (e:); and boys and the age group 15-18 regarding the variables (e) and (e:). No interaction is observed between girls and any of the age groups. The presence of interaction only between boys and the three older age groups indicates that only older boys tend to adopt higher usages of the rural vowels, whereas boys in the youngest age group as well as girls in all age groups do not show such interaction, and thus, do not show such adoption. In other words, the youngest boys behave more like the girls, and when boys grow older, they adopt more rural vowels. The significant difference between boys and girls compared to the insignificant difference between fathers and mothers regarding all variables indicates a stronger gendered linguistic behavior among the younger generation. A common explanation to this difference between girls and boys in a change in progress is that males are usually one generation behind females (Labov, 2010). However, this could not be the case in the current data because boys like girls start using the urban form at much higher rates in the youngest age group and only deviate from those high rates, i.e. deviate from this change in progress towards urban forms at older ages by adopting more rural forms. Thus, it is not merely that males stop participating in the change and remain at the base level acquired from their mothers (Labov, 2010:199). Rather, the data shows that older boys in fact use more rural forms than their mothers instead of remaining stable or using more urban forms if they were going in the direction of the change in progress. A more plausible explanation would be the boys' adoption of more rural forms in older ages intends to counteract the spread of urbanization and to retain a local identity that they feel is being lost with time as a consequence of this urbanization (Habib, 2016a). Their pride in their village and their strong sense of belonging as well as their prominent masculine attitude that they have inherited from their forefathers compel them to sound more local (Habib, 2011, 2014).

Table 5. Main Effects and Interactions of Gender and Age in Children's Use of the Variables (o), (o:), (e), and (e:)

Independent factor	<i>p</i> -value for (o)*	<i>p</i> -value for (o:)	<i>p</i> -value for (e)	<i>p</i> -value for (e:)
Gender	.006	.002	.014	.001
Age	.726	.128	.768	.859
Gender*Age	.046	.03	.504	.032
Boy*6-8	.462	.79	.277	.063
Boy*9-11	.014	.297	.239	.006
Boy*12-14	.007	.027	.116	.009
Boy*15-18	.101	.067	.047	.013
Girl*6-8	.906	.437	.648	.968
Girl*9-11	.972	.	.97	.238
Girl*12-14	.392	.612	.973	.543
Girl*15-18

**p*-values are significant at the .05 level.

Tables 6-9 give the individual distribution of each variant in the speech of each married couple (i.e. the father and the mother) and each child, creating a frequency comparison between each child and his/her father and mother as well as comparison among children and siblings from the same or different gender. Each couple in the four tables is given a number (1)-(11). The first name of each couple is the father and the second name is the mother. The couple's data is to the left of each table and the children's data is to the right of each table. The children's gender is included next to their name in parentheses. Each couple and their children are separated by a double line from other couples and their children. Because the number of children for each couple varies, the comparison between children and parents ranges from one child to four children with each couple. Siblings are ordered from youngest to oldest in each table. The general observation in all four tables is that there is a great discrepancy between the percentages of parents and their children, especially between fathers and girls, and some girls and their mothers, such as Rachel, the daughter of couple (11), and Ghada, the daughter of couple (1). This discrepancy is higher in the case of the round vowels (Tables 6 & 7) than in the case of the 'imala vowels (Tables 8 & 9). Furthermore, comparing siblings in these four tables shows that in general all boys use higher percentages of the rural vowels than their sisters, and older boys use more rural forms than their younger brothers. The only two exceptions are: Nariman who shows equal use of [e:] to her older brother Naseem (42%) and slightly more use of [e] than him (48% vs. 45%) and Naseem's youngest brother 'Anis who shows slightly higher use of [e:] than him (46.5% vs. 42%).

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Table 6. Distribution of [o]/[a] in the Speech of Parents and Their Children

Name	% of [o]	N of (o)	Name	% of [o]	N of (o)
Sa'id(1)	59	27	Ghada(F)	3	30
Farah(1)	100	2			
Marwan(2)	40.5	42	Kamal(M)	11	54
Sanaa(2)	0	28			
Rashad(3)	42	19	Miller(M)	10	30
Rose(3) (local)	0	33			
Michael(4)	53	104	Ward(M)	15	26
Rafah(4) (local)	38	194	Rami(M)	25	64
			Salina(F)	0	37
Isam(5)	10	10	Shama(F)	0	16
Rania(5)	0	13			
Mark(6)	40	20	Hala(F)	0	33
Mariam(6)	33	15	Halab(F)	0	17
Nizam(7)	0	3	'Adan(M)	20	5
Manar(7)	4	46	Jabour(M)	56	18
			Ola(F)	0	39
Bassam(8)	32.5	40	Sandy(F)	14	36
Rajaa(8)	24	50	Dani(M)	44	16
Nabih(9)	48	31	'Anis(M)	12	42
Noura(9)	9	33	Mary(F)	7	30
			Nariman(F)	20	40
			Naseem(M)	25	32
Munir(10)	62	149	Maher(M)	47	30
Ibtisam(10)	26	54			
Raji(11)	18	34	Rachel(F)	2	46
Nujud(11) (local)	37.5	16	Peter(M)	40	25
Fathers % range	0-62		Boys % range	10-56	
Mothers % range	0-100		Girls % range	0-20	

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Table 7. Distribution of [o:]/[a:] in the Speech of Parents and Their Children

Name	% of [o:]	N of (o:)	Name	% of [o:]	N of (o:)
Sa'id(1)	47	19	Ghada(F)	0	10
Farah(1)	75	4			
Marwan(2)	25	16	Kamal(M)	4	26
Sanaa(2)	0	32			
Rashad(3)	69	16	Miller(M)	23	13
Rose(3) (local)	0	16			
Michael(4)	52	31	Ward(M)	9	22
Rafah(4) (local)	56	87	Rami(M)	22.5	40
			Salina(F)	0	14
Isam(5)	57	7	Shama(F)	7	14
Rania(5)	0	4			
Mark(6)	33	12	Hala(F)	0	11
Mariam(6)	60	5	Halab(F)	0	12
Nizam(7)	0	1	'Adan(M)	0	4
Manar(7)	0	20	Jabour(M)	17	24
			Ola(F)	10	10
Bassam(8)	41	34	Sandy(F)	0	27
Rajaa(8)	11	27	Dani(M)	0	7
Nabih(9)	36	22	'Anis(M)	5	19
Noura(9)	28	36	Mary(F)	0	23
			Nariman(F)	14	14
			Naseem(M)	42	24
Munir(10)	57	58	Maher(M)	42	24
Ibtisam(10)	19	36			
Raji(11)	13	23	Rachel(F)	5	20
Nujud(11) (local)	30	10	Peter(M)	64	11
Fathers % range	0-69		Boys % range	0-64	
Mothers % range	0-75		Girls % range	0-14	

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Table 8. Distribution of [e]/[a] in the Speech of Parents and Their Children

Name	% of [e]	N of (e)	Name	% of [e]	N of (e)
Sa'id(1)	85	33	Ghada(F)	23	70
Farah(1)	63	43			
Marwan(2)	93	117	Kamal(M)	38	125
Sanaa(2)	0	84			
Rashad(3)	41	34	Miller(M)	28	57
Rose(3) (local)	6	116			
Michael(4)	76	438	Ward(M)	20	49
Rafah(4) (local)	79	586	Rami(M)	31	211
			Salina(F)	17	65
Isam(5)	40	55	Shama(F)	0	21
Rania(5)	1	70			
Mark(6)	56	98	Hala(F)	5	73
Mariam(6)	43	51	Halab(F)	21	43
Nizam(7)	95.5	44	'Adan(M)	43	7
Manar(7)	22	135	Jabour(M)	46	50
			Ola(F)	2	95
Bassam(8)	82	262	Sandy(F)	40	63
Rajaa(8)	84	122	Dani(M)	43	37
Nabih(9)	95	102	'Anis(M)	39	61
Noura(9)	83	147	Mary(F)	22	37
			Nariman(F)	48	103
			Naseem(M)	45	55
Munir(10)	96	446	Maher(M)	46.5	86
Ibtisam(10)	71.6	190			
Raji(11)	63	131	Rachel(F)	23	82
Nujud(11) (local)	79.5	88	Peter(M)	63.5	63
Fathers % range	40-96		Boys % range	0-63.5	
Mothers % range	0-84		Girls % range	0-48	

Table 9. Distribution of [e:]/[a:] in the Speech of Parents and Their Children

Name	% of [e:]	N of (e:)	Name	% of [e:]	N of (e:)
Sa'id(1)	61	57	Ghada(F)	31	88
Farah(1)	74	76			
Marwan(2)	77	135	Kamal(M)	43	278
Sanaa(2)	0	124			
Rashad(3)	50.5	109	Miller(M)	46	103
Rose(3) (local)	2.5	204			
Michael(4)	69	480	Ward(M)	41	106
Rafah(4) (local)	71	516	Rami(M)	57	203
			Salina(F)	15	151
Isam(5)	57	74	Shama(F)	7	75
Rania(5)	0	71			
Mark(6)	62.5	144	Hala(F)	23	184
Mariam(6)	39	49	Halab(F)	37	51
Nizam(7)	74	38	'Adan(M)	44	32
Manar(7)	39	127	Jabour(M)	41	107
			Ola(F)	5.5	127
Bassam(8)	66	231	Sandy(F)	29	203
Rajaa(8)	58	203	Dani(M)	59	73
Nabih(9)	71	282	'Anis(M)	46.5	185
Noura(9)	53	204	Mary(F)	40	145
			Nariman(F)	42	132
			Naseem(M)	42	180
Munir(10)	77	565	Maher(M)	63.5	126
Ibtisam(10)	63	231			
Raji(11)	46	168	Rachel(F)	24	178
Nujud(11) (local)	75	135	Peter(M)	82	56
Fathers % range	46-77		Boys % range	41-82	
Mothers % range	0-75		Girls % range	5.5-42	

2.3.5 Paired-Samples T-Tests: Multiple comparisons between individual children and parents (combined and individually)

Because of the discrepancies found in the data between parents and children, fathers and boys, mothers and girls, it is essential to conduct multiple comparisons to test for correlations and to see if the children acquire the combined frequency of their both parents

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or the frequency of one of their parents or neither. It is not sufficient to compare boys to fathers and girls to mothers, as we see similar frequencies among some boys and their mothers and strong discrepancy between some boys and their fathers. Hence, Paired-Samples T-Tests are performed to test for correlations between the speech of parents combined and their children; mothers and children; fathers and children; mothers and girls; mothers and boys; fathers and boys; and fathers and girls. The first Paired-Samples T-Test for each variable compares children with their parents combined, showing no correlation (correlation is presented by *r* and the first *p*-value in Table 10) between the children's speech and their parents' speech regarding any of the vowel variables (Table 10, Lines 1), which means that children are not using the same rates or frequencies of these variants in their immediate environment (i.e. average percentage of both parents). In addition, the difference (difference is presented by *t* and the second *p*-value in Table 10) between the parents and their children is statistically significant for all vowel variables. All the other Paired-Samples T-Tests also show no correlation between the speech of mothers and children (Table 10, Lines 2); fathers and children (Table 10, Lines 3); mothers and girls (Table 10, Lines 4); mothers and boys (Table 10, Lines 5); fathers and boys (Table 10, Lines 6); and fathers and girls (Table 10, Lines 7). In some cases, the difference between the two compared categories is statistically significant.

Table 10. Results of the Paired-Samples T-Tests for the Variable (o), (o:), (e), and (e:)

Variable (o)							
	Pairs	<i>r</i>	<i>p</i> -value*	<i>t</i>	<i>df</i>	<i>p</i> -value	Mean difference [†]
1	Parents and children	-.060	.795	2.162	20	0.043	11.3952
2	Mothers and children	-.137	.554	.903	20	.377	6.0286
3	Fathers and children	-.097	.677	3.122	20	.005	18.8476
4	Mothers and girls	-.202	.576	2.467	9	.036	24.2200
5	Mothers and boys	.271	.420	-1.810	10	.100	-10.5091
6	Fathers and boys	-.340	.306	.901	10	.389	8.4273
7	Fathers and girls	.296	.406	5.093	9	.001	30.3100
Variable (o:)							
1	Parents and children	-.045	.845	3.197	20	.005	17.7762
2	Mothers and children	-.106	.647	2.158	20	.043	14.8667
3	Fathers and children	.002	.944	3.843	20	.001	22.1952
4	Mothers and girls	-.573	.083	3.285	9	.009	31.2000
5	Mothers and boys	.240	.476	.002	10	.998	.0182
6	Fathers and boys	.069	.841	1.539	10	.155	13.8545
7	Fathers and girls	-.355	.314	5.042	9	.001	31.3700

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Variable (e)							
1	Parents and children	.409	.066	6.943	20	.000	34.1714
2	Mothers and children	.337	.135	3.943	20	.001	26.0476
3	Fathers and children	.425	.055	11.553	20	.000	48.0000
4	Mothers and girls	.795	.006	6.167	9	.000	38.0100
5	Mothers and boys	.145	.670	1.442	10	.180	15.1727
6	Fathers and boys	.222	.512	7.459	10	.000	42.3000
7	Fathers and girls	.488	.153	9.461	9	.000	54.2700

Variable (e:)							
1	Parents and children	.251	.272	4.050	20	.001	17.7238
2	Mothers and children	.279	.221	1.766	20	.093	9.8667
3	Fathers and children	-.028	.904	5.950	20	.000	26.9048
4	Mothers and girls	.397	.256	3.716	9	.005	24.7100
5	Mothers and boys	.510	.109	-.542	10	.599	-3.6273
6	Fathers and boys	-.530	.093	2.678	10	.023	16.2727
7	Fathers and girls	.100	.784	8.370	9	.000	38.6000

**p*-values are significant at the .05 level.

† Mean difference shows whether the first category in the comparison uses more or less of the variable.

First, the difference between the mothers and children is statistically significant for only the variables (o:) and (e), although mothers use more rural vowels than children regarding all vowel variables. Second, the difference between fathers and children is statistically significant for all variables; fathers use more rural vowels than children. Third, the difference between the mothers and girls is statistically significant for all variables; mothers use more rural vowels than girls. Fourth, although the difference between the mothers and boys is statistically insignificant for all variables, it is worth noting that mothers use more [e] and [o:] but less [o] and [e:] than boys. Fifth, the difference between the fathers and boys is statistically significant for only the variables (e) and (e:). However, fathers use more rural vowels than boys regarding all variables. Sixth, the difference between the fathers and girls is statistically significant for all variables; fathers use much more rural vowels than girls. All of these results indicate that children's use of the variants, i.e. their output, is not a replica of their parents', mothers' or fathers' frequencies.

2.3.6 Visual individual comparisons among individual children and individual parents for all four variables

To see if there are individual similarities and/or differences in the linguistic behavior of children as well as similar and/or different influences on individual children from either one of the parents, visual representations of comparisons of each child to both parents

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regarding the use of the rural variants [o], [o:], [e], and [e:] are respectively presented in Figures 6-9. In all these figures, boys are placed to the right of the figures with ages decreasing from right to left; girls are placed to the left of the figures with ages also decreasing from right to left. The pseudonym and the age of each child are given at the bottom of the figures. In each figure, each child is compared with both parents.

Figure 6 clearly shows that boys use more [o] than girls. Boys ages 9-15 show the highest use. Most boys use more [o] than their mother, while girls use it much less than their mothers. Some of the boys not only use [o] more than their mothers but also use it more than their fathers, such as Dani 9, Jabour 10, and Peter 15, although Peter's mother is local and is one of the three local women who sounds very local. A similar pattern is seen in Figure 7 where boys use more [o:] than girls and some boys use it more than both their parents, such as Jabour 10, Peter 15, and Naseem 17. All older boys aged 14-18 and Jabour 10 use [o:] more than their mothers. Boys aged 6-11, except Jabour 10, and all girls except Shama 6 use [o:] less than their mothers. In these two figures, it seems that boys increase their use of the round vowels with age.

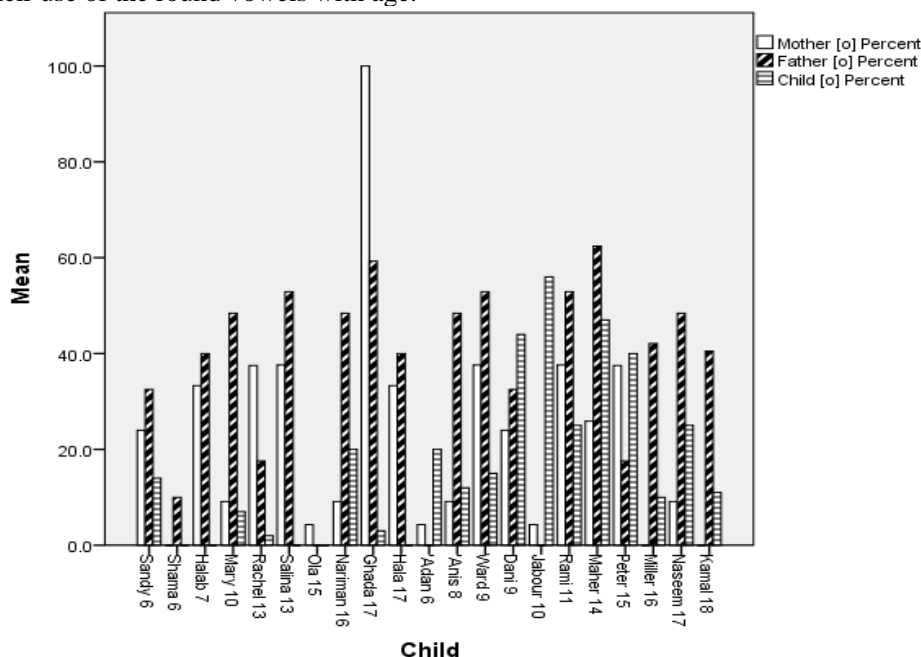


Figure 6. Comparison of the frequencies of [o] in the speech of fathers, mothers and their children

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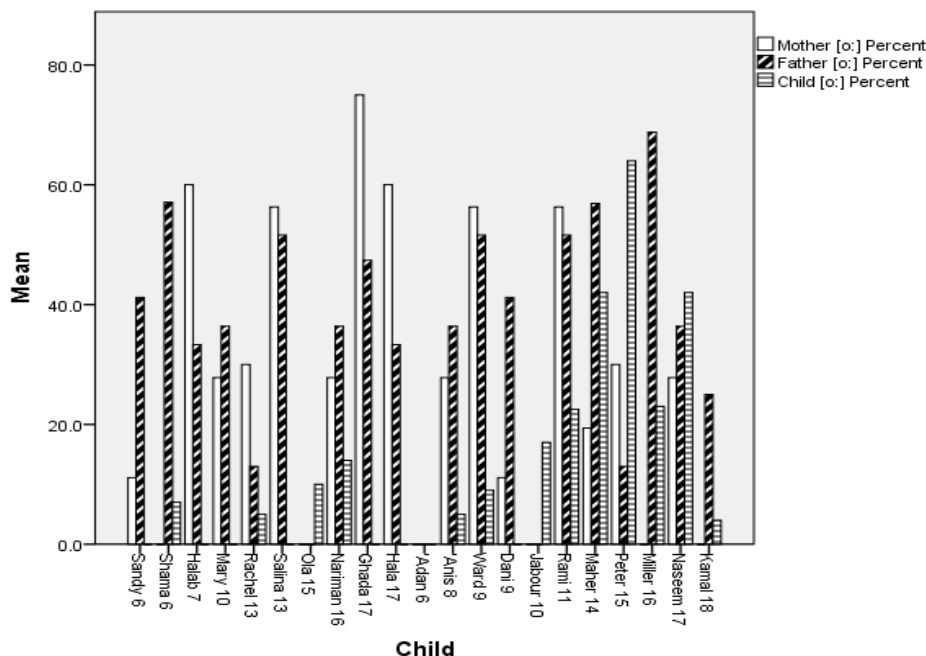


Figure 7. Comparison of the frequencies of [o:] in the speech of fathers, mothers, and their children. Similarly, in Figure 8, boys show more use of [e] than girls except for two girls (Sandy 6 and Nariman 16) who show almost equal use of [e]. The mothers of both girls are not local, but they come from neighboring villages that also use the round vowels. Nonetheless, the difference between the girls and boys is not as pronounced as it is in the case of [o] and [o:] especially in the older age groups. In this figure, most parents (mothers and fathers) use more [e] than their boys and girls, except the mothers of Kamal 18, Miller 16, Jabour 10, and 'Adan 6. Kamal's mother is one of the most urban-sounding mothers. Although she is from a neighboring village, she lived all her life before marrying to the village in an urban center. Miller's mother, although local, lived most of her life in urban centers and sounds more urban than local. Jabour and 'Adan are brothers, and their mother is from a neighboring village but her speech is characterized with great urban influence.

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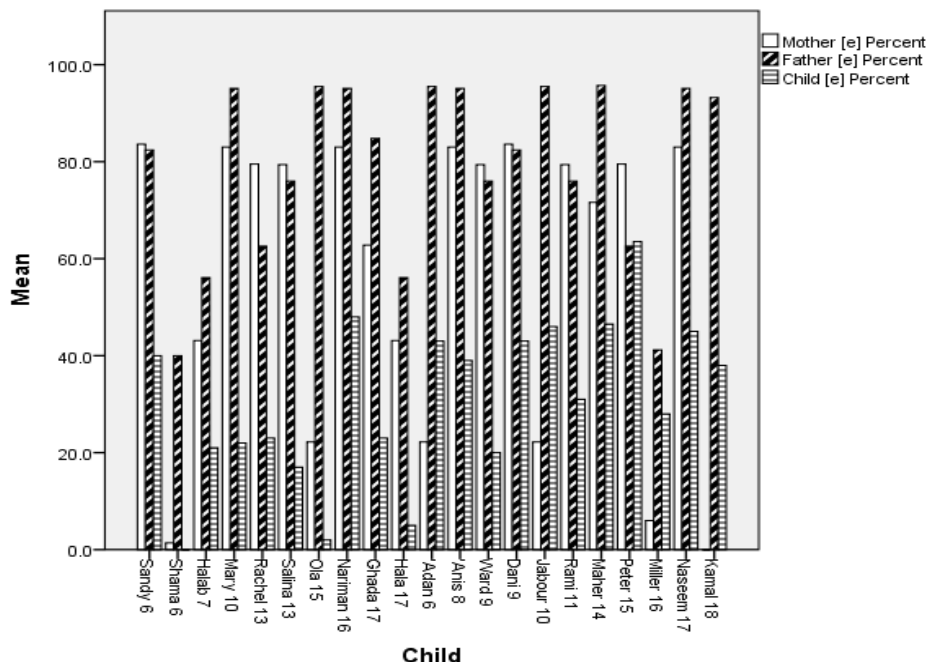


Figure 8. Comparison of the frequencies of [e] in the speech of fathers, mothers, and their children

Similar patterns to Figure 8 are observed in Figure 9. However, the difference between the children and their mothers shrinks compared to the previous figures, and especially the difference between older boys and their mothers. In fact, boys are closer to their parents than girls in the use of [e:], and many of them use it more than their mothers (Kamal 18, Miller 16, Peter 15, Jabour 10, Dani 9, and 'Adan 6). Peter 15 uses it more than both his mother and his father. Maher 14 has an equal use to his mother. All girls use fewer [e:] than both their mothers and their fathers except Shama 6 who has low usage of [e:], whereas her mother, who lived all her life in urban centers, has 0 usage of [e:]. In all figures, there is a great difference between fathers and most of their children, but this difference is even greater between fathers and girls than between fathers and boys. The difference between fathers and children is higher in the use of [e] than [e:]. Although boys and girls show higher usages of [e] and [e:] than [o] and [o:], they still lag behind their fathers in the use of these two variants.

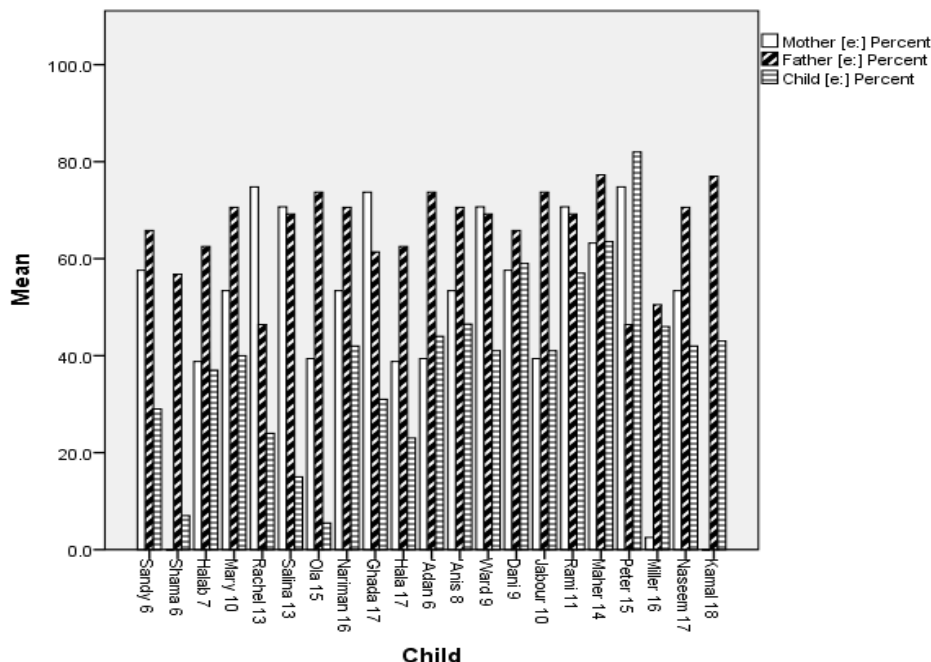


Figure 9. Comparison of the frequencies of [e:] in the speech of fathers, mothers, and their children

In all figures, it is clear that most mothers use less rural vowels than fathers. However, it is not possible to see a specific influence from one parent on his/her child whether boy or girl. The only clear pattern that one can observe in all figures is the gendered linguistic difference between girls and boys. This difference exists between fathers and mothers but it is not as pronounced as it is among boys and girls, which corroborate the regression tests' results in which gender only emerged as statistically significant in the case of the children's use of the four variables. This difference in the linguistic behavior between girls and boys and between children and their parents indicates that children are exaggerating the gendered linguistic patterns in their community, and creating their own more pronounced gendered linguistic pattern. Thus, in response to research Question # 1 "Do children show statistical learning of the vowel variants in their parents' or caregiver's speech", the children are not acquiring the exact frequencies of their parents combined or separate. They use different frequencies where boys increase their use of rural vowels in the older age groups and girls maintain lower frequencies of the rural vowels than their caregivers, creating an exaggerated and highly differentiated gendered linguistic behavior that pronounces them different as boys and girls. This behavior is similar to their behavior regarding the use of [q] and [ʔ] in Habib (2017), where there was a pronounced gendered

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linguistic difference between boys and girls and fathers and mothers, which answers research Question # 2 “Are there differences in the use of the vowel variables in the speech of these children, and how do the observed vowel variations compare to the children’s variable use of the consonant (q).” In that study, gender emerged as statistically significant for both parents and children. The result showed that children acquired the general pattern of variation in the community, but did not acquire the exact frequencies of their parents. In this study, although the children seem to be acquiring the gendered linguistic behavior in the community, the greater difference between boys and girls than between fathers and mothers indicates that they are forming their own linguistic behavior and differences in parallel to their differences and the community’s gendered linguistic differences in the use of [q] and [ʔ]. This could only be interpreted as a way of enforcing their gendered linguistic differences as boys and girls in the community, especially that girls use rural vowels much less than their mothers. One cannot deny that the children’s variable use of the rural vowels is part and parcel of some kind of acquisition of these variables from their parents’ input and the surrounding community. However, one cannot confirm that the present extent of variation in their speech is an early childhood type of acquisition because of the frequency differences between parents, including caregivers, and their children and between boys and girls. The results suggest developmental effect in the form of delayed linguistic interpretation of the social gendered differences (Docherty et al. 2006), as all children, boys and girls, ages 6-8 behave similarly regarding the use of the four vowel variables, which answers research Question # 3 “What can the observed vowel variations inform us about the acquisition of sociolinguistic variation and/or a second dialect and about the reasons for existing differences and/or similarities among children and among children and their parents”. The use of the rural variants increases tremendously among boys in the older age groups, whereas girls maintain similar usages throughout the older age groups, and their usage is retained at a much lower level than their caregivers’. Hence, it seems there is a clear gendered linguistic differentiation that is developed and advanced by boys and girls to stay socially and linguistically apart, which alludes to the major role of socio-psychological factors in advancing this gendered differential linguistic behavior.

3. Discussion and conclusion

The lack of correlation in the Paired-Samples T-Tests in the use of all variables between combined parents and children; fathers and children; mothers and children; fathers and boys; fathers and girls; mothers and boys; and mothers and girls suggest that children do not acquire the frequencies of their parents or their caregivers, although they may exhibit a similar gendered linguistic pattern to that of their parents. These findings contradict hypothesis (1) “If children acquire the exact frequencies of the vowel variants in their

parents' speech, it can be assumed that parental input is instrumental in acquiring variation" and uphold hypothesis (2) "if children do not acquire those exact frequencies, it can be safely deduced that acquiring variation is largely developmental and influenced by factors other than parental input, such as social, psychological and peer pressure."

In the regression tests, the gender and origin of parents emerged as statistically insignificant like the age of children, whereas the gender of children emerged as statistically significant, indicating that boys and girls are growing apart linguistically, and their seemingly similar gendered linguistic pattern to that of their parents is highly exaggerated. The difference between boys and girls could be interpreted as a generational difference between males and females during a change in progress where females will be one generation in advance of males (Labov, 2010). However, the more exaggerated linguistic difference observed between boys and girls in the older age groups suggest increased socio-psychological awareness of the social meaning of the vowels with age, recognizing that the rural vowels are charged with masculinity and localness whereas the urban vowels deprive males from their masculinity and localness (Habib, 2014, 2016a).

The increase of socio-psychological awareness of the social meaning of the variants with age is grounded in social and developmental psychology theory. Martin and Fabes (2001) and Fabes et al. (2004) concur that girls and boys start segregating themselves from about age three and this segregation increases with age in elementary school. This segregation is child-driven, not adult-driven (Fabes et al. 2004:263). Boys tend to play in public places away from adults' supervision more than girls, and their play is usually rougher and more physical than that of girls who tend to select adult-structured activities that are governed by strict social rules (Fabes et al. 2004:264-265). In addition, the adult-structured activities of girls place them under more pressure from adults and in a more supervised and complacent position to avoid getting in trouble (Martin & Fabes, 2001:433). In contrast, the boys' unstructured and rougher play put them in a more dominant-oriented position and allow them to be more assertive and to establish their own rules and standards for their own behavior (Martin & Fabes, 2001:433). These different experiences within the girls' and boys' groups foster different behavioral norms, attitudes, skills, and interaction styles. This argument leads us to believe that the linguistic behavior of boys and girls will also be differentiated, as Cameron (2010:283) predicted and found. The differentiation could be in one of two ways: singular polarization or dual polarization. Singular polarization is a "pattern in which the behavior of only one sex changes over time while the behavior of the other sex stays relatively the same" in relation to its initial starting point (Martin & Fabes, 2001:434). In this case, linguistic differentiation increases over time, but the change is accounted for by the movement of only one gender from its initial position. Dual polarization is a "pattern in which both girls and boys move away from their starting points

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but in opposite directions” (Martin & Fabes, 2001:434). This pattern suggests that one gender will actively adopt one variant and the other gender will actively inhibit the use of this variant. If we take the community as a starting point, then dual polarization is in effect in this study, as girls are advancing the change in progress by adopting more urban forms than their caregivers, and boys are adopting more rural forms than girls, creating a polarized gendered linguistic behavior between boys and girls. If we take the usage of girls and boys in the age group 6-8 as the starting point, then singular polarization is in effect, as boys are adopting more rural forms as they grow older, and girls actively inhibit the use of the rural variants, maintaining an almost categorical use of the urban forms. Regardless of which polarization pattern we adopt, they both can explain the different gendered linguistic behavior observed in this study. The singular polarization pattern allows us to incorporate the change in progress towards the urban forms, whereas the dual polarization pattern only reflects on the great difference between boys and girls. Hence, the singular polarization pattern has a stronger explanatory power of the differentiated gendered linguistic behavior of boys and girls in this study. The adoption of this view enforces the idea that as children grow older they become more aware of the social meaning of certain variants, which leads them to constructing their local and gender identities around the social meanings of these variants (Habib, 2014; Barbu et al. 2014). As rural variants are associated with localness and masculinity (Cremona & Bates, 1977; Habib, 2014), boys tend to use them more after age eight to enforce their local and masculine identity in the face of urbanization that is sweeping over the rural region in which Oyoum Al-Wadi is located, whereas girls are refraining from the rural variants to enforce their femininity and complacent position by sounding sophisticated through using the urban forms. In other words, what appeals to boys becomes “increasingly unattractive and uninteresting” (Martin & Fabes, 2001:444) to girls.

Thus, the findings of the study indicate that boys and girls observe the strong gender differences in the community along other differences such as the strong distinction between rural and urban identities which are associated with the rural and urban forms respectively. Consequently, they implement a stronger linguistic gender division than their parents regarding the vowels, creating a parallel situation to their and their parents' strong linguistic gender and local identity division regarding the variable (q). The findings support a developmental approach to the acquisition of variation in child's language more than a statistical learning approach (cf. Roberts, 1994; Docherty et al. 2006; Smith et al. 2007; Shin, 2012). That is, while parental input is essential in the initial stages of a child's acquisition of language (cf. D'áz-Campos, 2005; Foulkes et al. 2005; Miller, 2013), socio-psychological factors and sociolinguistic competence can be more influential at later stages of a child's life particularly when acquiring variation, as s/he become, in addition to peer pressure (Nardy, Cheverot & Barbu, 2014), more aware of their surroundings and the

significance of certain sounds to projecting specific gender and spatial identities (Habib, 2016b).

Endnotes

¹ The main focus of this study is everyday speech and the interchangeable use of rural and urban vowels where urban vowels used in cities such as Damascus and Hims are considered the most accepted and mainstream forms in Syria.

² All names used in this paper are pseudonyms.

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