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Variation in Negation in the Jordanian Arabic Dialect of Ma'an

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Abstract

The study investigates variation in negation in the Jordanian Arabic dialect spoken in Ma'an (Ma'an Jordanian Arabic, MJA hereafter). Both verbal and non-verbal clauses in MJA use different negative variants. The study shows that negation of verbal clauses in MJA is categorical with a strong preference for the old preverbal negative proclitic *maa-* over the new negative markers that include the discontinuous negative variant *maa … ʃ* and the enclitic *-ʃ*. Negation of non-verbal clauses, on the other hand, manifests significant variation with an indication of a change in progress toward more use of the new non-verbal negative variant *muʃ* at the expense of the remaining two old variants *muu* and the negative pronouns. The study reveals that variation in the negation system of non-verbal clauses in MJA is constrained by some social factors such as age, sex, level of education, and place of origin. In particular, the study shows that young, female, educated, rural speakers of MJA are leading the change toward the new non-verbal negative variant *muʃ*. The observations that are based on the distributional and statistical analyses of the study indicate that level of education and place of origin show the highest statistical significance followed by age and sex factors. Finally, we claim that the new non-verbal negative variant *muʃ* in MJA has not resulted from the Jespersen's Cycle; rather, it has been borrowed into MJA from other local Jordanian Arabic vernaculars that have already undergone the Cycle.

Keywords: Variationist Sociolinguistics, Negation, Language Change, Language Contact, Ma'an Jordanian Arabic.

1. Introduction

In spite of the fact that different attempts have been conducted to study the social context of modern Arabic vernaculars, most of those studies have privileged phonological variation in those vernaculars over other variable linguistic components (Al-Shawashreh 2016). Among those studies are Schmidt (1974) and Schulz (1981) on Egyptian Arabic, Shorrab (1981) on Palestinian Arabic, Holes (1983, 1986) on Bahraini Arabic, Al-Jehani (1985) on Makkan Arabic, Daher (1997) on Damascene Arabic, AlAmadihi (1985) on Qatari Arabic, and Haeri (1991) on Cairene Arabic.

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The situation in Jordanian Arabic (hereafter JA) is not different; most of the sociolinguistic variationist studies on JA have dealt with phonological variation in the language. Examples include Abdel-Jawad (1981, 1986), Al-Wer (1991, 1999) Al-Khatib (1988), Al-Tamimi (2001) and Al-Ali & Arafa (2007). An exception here is the study of Al-Shawashreh (2016) on word order variability and pro(noun)-drop variability in JA.

The current study aims to bridge the gap of sparsity of studies on syntactic variability in JA. In particular, the study investigates variability in the use of negation in JA. Negation in JA forms a very rich environment for sociolinguistic variability. JA uses different types of clauses and different negation particles for those types of clauses. In addition, the social situation in Jordan is heterogeneous, which makes the country a very productive natural setting of sociolinguistic variability.

The study is based on the variationist approach of Labov (1972). The variationist approach proposes that the linguistic variable is an inherent property of human language in the sense that the same message can be expressed in different forms. This approach defines the linguistic variable as "two or more ways of saying the same thing" (Labov 1972, 271). It also emphasizes the idea that language variability is not random; rather, it is systematic and rule-governed by certain social and linguistic factors. The influence of social and linguistic factors on variant choice can be captured by quantitative analysis ((Tagliamonte 2006; Poplack & Tagliamonte 2001). In addition, a comparison between the variable grammar of younger and older speakers makes it possible to uncover the similarities and differences between those grammars; and it can also assess the presence and directionality of any possible change in progress (Al-Shawashreh 2016, 7). Finally, Labov (1972, 1984) emphasizes the use of vernacular speech data over intuitive claims and grammaticality judgments in studies of language variability. He defines vernacular speech data as "the style in which the minimum attention is given to the monitoring of speech" (Labov 1972, 208); he also stresses that this kind of data is "the most systematic data for linguistic analysis" (Labov 1984, 29).

2. Negation in JA

JA comprises three main types of clauses: verbal, semi-verbal and non-verbal clauses. Each type is negated using different variants. Verbal clauses in JA are clauses that include a verbal predicate. These clauses are negated by three variants: the preverbal negative proclitic *maa-* alone (1a), the preverbal negative proclitic *maa-* and the post-verbal negative enclitic *-ʃ* (1b), or the post-verbal enclitic *-ʃ* alone (1c).[1]

1) a. (ana) maa-baʕraf.
I NEG-know.1S
'I don't know.'

b. (ana) maa-baʕraf-ʃ.
I NEG-know.1S-NEG
'I don't know.'

c. (ana) baʕraf-ʃ.
I know1S-NEG
'I don't know.'

These examples show that standard negation (i.e., negation of declarative verbal main clauses) in JA exhibits the three stages of the Jespersen's Cycle.[2] In his study of negation in various Indo-European languages, Jespersen (1917, 4) notes that:

> The history of negative expressions in various languages makes us witness the following curious fluctuation: the original negative adverb is first weakened, then found insufficient and therefore strengthened, generally through some additional word, and this in its turn may be felt as the negative proper and may then in course of time be subject to the same development as the original word.

Dahl (1979) identifies three stages for the development of negation in natural languages based on this observation of the fluctuation in the expression of negation. In stage I, a pre-verbal negative particle is used which might be weakened over time (e.g. the preverbal proclitic *maa-* in the Arabic examples in (1a) above). In stage II, the pre-verbal negative particle is strengthened with the help of an additional post-verbal negative particle (e.g. the discontinuous negative marker *maa…ʃ* in the Arabic examples in (1b) above). In stage III, the pre-verbal negative particle is omitted and the verbal sentence is only negated with the post-verbal negative particle (e.g. the post-verbal negative marker *-ʃ* in the Arabic examples in (1c) above). Dahl refers to this hypothesis about the development of negation in natural language as Jespersen's Cycle in recognition of Otto Jespersen's observation of the Cycle.

Semi-verbal clauses in JA are those clauses that include a semi-verbal predicate rather than a verbal predicate. Semi-verbs in Arabic are lexical items in the language that do not belong to the morphological category of verbs, but they share some syntactic features with verbs (Brustad 2000). For example, the preposition *fi* 'in' in (2) below has a verbal meaning and it selects for a logical object. In addition, it is negated by the same negative variants that are used to negate verbal clauses.

2) a. maa-fii daaʕi.
NEG-in need
'There is no need.'

b. maa-fii-ʃ daaʕi.
NEG-in-NEG need
'There is no need.'

c. fi-ʃ daaʕi.
in-NEG need
'There is no need.'

It is important to note at this point that the Arabic vernaculars spoken in Jordan are in different stages of the Jespersen's Cycle. For example, the Arabic vernaculars spoken in the central part of Jordan such as as-Salṭ (Palva 2004) and the northern part of Jordan such as rural Irbid (Alqassas 2012) are already in Stage II of the Cycle with the discontinuous marker of negation *maa…ʃ* being a typical characteristic of the language of people who speak those vernaculars. In addition, those vernaculars have already incorporated Stage III of the Jespersen Cycle using only the post-verbal enclitic *-ʃ* to negate special types of verbs and semi-verbs.[3] The vernaculars spoken in the southern part of Jordan such as al-Karak (Alsarayreh 2012), on the other hand, are still in Stage I of the Jespersen Cycle. The speakers of

those vernaculars typically use only the preverbal negative particle *maa-* when they negate verbal and semi-verbal clauses.

Non-verbal clauses in JA, on the other hand, are those which include non-verbal predicates such as nouns, adjectives, prepositional phrases, active participles, etc. Non-verbal clauses in JA are negated by four variants that reflect different forms of what is known as the negative copula as show shown in (3):

3) a. Maryam miih hoon.
Mary NEG.3SF here
'Mary is not here.'

b. Maryam muu hoon.
Mary NEG.3SM here
'Mary is not here.'

c. Maryam maa-hii-ʃ hoon.
Mary NEG-3SF-NEG here
'Mary is not here.'

In (3a), the negative copula *miih* consists of the verbal negator *maa-* and a personal pronoun that agrees with the subject of the non-verbal clause in person, number and gender (*maa-* + inflected personal pronoun). The negative copula *muu* in (3b) is the result of the fusion of the verbal negator *maa-* and the third singular masculine personal pronoun *huu* (*maa-* + uninflected personal pronoun); this variant is generalized to negate all types of non-verbal clauses in several modern Arabic varieties (Alluhaybi 2019, 167). In (3c), the negative copula *maa-hii-ʃ* involves the discontinuous marker of verbal negation *maa…ʃ* and a personal pronoun that agrees with the subject of the non-verbal clause in person, number and gender (*maa-* + inflected personal pronoun + *-ʃ*). In (3d), the negative copula *muʃ* is the result of the fusion of the two negative particles that form the discontinuous marker of verbal negation *maa…ʃ* and the third singular masculine personal pronoun *huu* (*maa-* + uninflected personal pronoun + *-ʃ*); this variant is generalized to negate all types of non-verbal clauses in several modern Arabic varieties (Lucas 2009, 24).

The form of the negative copula used for negating non-verbal clauses in modern Arabic vernaculars is related to whether the vernacular in question has undergone the Jespersen's Cycle or not. In particular, it has been claimed that the Arabic vernaculars that have undergone the Jespersen's Cycle use the non-verbal negative variants that include the enclitic *-ʃ* as part of their morphological composition; whereas the vernaculars that have not undergone the Jespersen's Cycle do not (Lucas 2009, 26). The situation in JA seems to support this connection between Jespersen's Cycle and the choice of the non-verbal negative variant. For example, the varieties that have undergone the Jespersen's Cycle such as the variety spoken in as-Salṭ (Palva 2004) and the variety spoken in rural Irbid (Alqassas 2012) use *muʃ* as a typical characteristic of the language of the speakers of those varieties. The speakers of the varieties that have not undergone the Jespersen's Cycle such as the variety spoken in al-Karak (Alsarayreh 2012) use the other non-verbal variants that do not include the enclitic *-ʃ* as part of their morphological composition.[4]

The current study intends to highlight variation in negation in the JA dialect spoken in Ma'an Governorate in the Sothern part of Jordan in its natural setting, and to investigate how this variation in negation is influenced by certain social factors. The study will also shed light on the situation of MJA

with respect to the Jespersen's Cycle. For this purpose, a representative sample was chosen that uses various forms of negation or at least tends to use a specific variant more than others. Ma'an is considered a good place to investigate variation in negation because of its location on the Hajj pilgrimage route and because of the diverse social backgrounds of the people who live in it. One of the researchers is a native speaker of MJA and has lived almost her entire life in Ma'an City. The researchers also have many connections in the city which allows the use of the friend-of-a-friend approach designed by Milroy and Milroy (1977).

3. Methodology

3.1 Research questions

The study intends to answer the following questions:

1. What is the distribution of negation variants in MJA?
2. What is the relationship between social factors and the choice of negation variants?
3. What is the directionality of change, if any, in the negation system of MJA?

3.2 The informants of the study

A sample of 33 native speakers of MJA was randomly selected to address the research questions of the study. The informants of the study come from different urban and rural areas in Ma'an and they cover the social categories of age, gender, and level of education. The study used the sociolinguistic interview methodology of Labov (1984) to audio-record the speech of the informants of the study.

The speakers were stratified according to their sex into 19 female speakers and 14 male speakers. The speakers were also divided into two groups according to the social factor of age: 16 young speakers aged around 19-39 years old and 17 older speakers aged around 40-60+ years old. The speakers were also divided in terms of their place of origin into two groups: 18 urban speakers and 15 rural speakers. Finally, the speakers were divided into four groups according to their level of education. The majority of the speakers were either low-educated (13 speakers) or post-secondary (i.e., diploma or bachelor degree holders) (14 speakers). The remaining were 5 speakers with higher education (i.e., MA or PhD degree holders) in addition to 1 uneducated speaker. It was not easy to find uneducated speakers due to the compulsory primary education in Jordan, so it is difficult to find someone who is completely illiterate and who is willing to participate in a recorded interview. Table (1) below stratifies the informants of the study according to the aforementioned social factors.

Table 1: Distribution of informants according to their level of education, sex, age and place of origin. (Y = younger speakers; O = older speakers)

Level of Education	Rural				Urban				Total
	Male		Female		Male		Female		
	Y	O	Y	O	Y	O	Y	O	
No education	0	0	0	1	0	0	0	0	1
Low education	1	2	1	2	2	3	0	2	13
Post-secondary	1	1	2	1	1	0	5	3	14
Higher education	0	1	2	0	1	1	0	0	5
Total	2	4	5	4	4	4	5	5	33

3.3 Data collection

One of the researchers being a bona-fide member of the speech community of Ma'an City enabled the researchers to have access to members of fellow speech community. We used Labov's (1972) procedures in approaching people in public places such as universities and work places. We also interviewed others in their homes. We used the friend-of-a friend approach of Milroy and Milroy (1977) to approach speakers we do not have access to interview them. Some of the recordings of the informants included the speech of more than one family member. It is useful to show that variation also exists in the speech of the same family members. Prior to interviews, we explained that we were doing a social study. We did not mention that we are studying variation in negation in MJA to ensure that speakers would not monitor their speech during the interviews. This increased the possibility of getting the vernacular.

The researchers were able to record the speech of each participant who was willing to participate in the study. We used the recorder application installed in our mobile phones to record their speech. The data were recorded in the form of a sociolinguistic interview (Labov 1972) lasting form 15-120 minutes to ensure vernacular speech. In order to avoid the observer's paradox (Labov 1972), we did not reveal the linguistic nature of the study. We only explained that we are doing a social study. We also used a number of conversational questions that focus on the personal experiences of the interviewees throughout different stages of their lives (e.g. childhood, school, friends) and general questions that can minimize the interviewee's attention to speech (Labov 1984). Collected data included 1208 tokens from 33 native speakers of MJA.

3.4 Research ethics

For the data collection plan, an approval form was distributed to the informants of the study to sign it. The content of this approval described the reason behind the study, how we were collecting the data, and the anonymity and confidentiality of the participants' identities. No controversial subjects or sensitive topics were evoked during the interviews. The participants were mainly asked about their childhood or topics like their habits, dreams for the future and other related topics.

3.5 Reliability and validity of instruments

To ensure the consistency and the accuracy of the measure, we used Labov's (1972) stratified random sampling instrument. We conducted the study as planned and the study showed variation in the negation system of MJA due to the social variables under question. The internal validity of the study was sustained by eliminating any extraneous variables from the very beginning (e.g. native speakers of MJA who were not born in Ma'an).

3.6 Data extraction and coding

The audio recordings were transcribed for all instances of the investigated target variables on an EXCEL file using a rigorous transcription protocol. This was done to ensure that features of vernacular MJA (e.g. lexical choice, vernacular syntactic constructions, etc.) were respected. The tokens in the EXCEL file were coded for a number of individual factors assumed to condition the variant choice.

Before the importation of the coding to be analyzed using a 'GOLDVARBX' file (Sankoff et al. 2005), the data was given a carful check, then the coding string associated with each token was concatenated so that the 'GOLDVARBX' token file, a flat-text-file, can read and run a distributional analysis and a statistical evaluation. The researchers used this program to analyze the data distributionally and to conduct a binominal logistic regression analysis.

3.7 Limitations of the study

Even though the results of the study are based on the speech of 33 native speakers MJA, this sample cannot be generalized to the whole speech community of Ma'an because we did not include speakers from Bedouin areas. Another limitation is that the results of the current study cannot be generalized to all of the vernacular dialects of JA. It is greatly recommended to search for sociolinguistic variation in negation in several cities and towns in Jordan for comparing them with the results of this study.

4. Results and discussion

4.1 Overall distribution

All negative clauses were extracted from the data and then coded in terms of the negative variants used in each clause.[5] Three types of clauses that were investigated: verbal, non-verbal and semi-verbal clauses. The results in Table (2) provide the distribution of the different types of negative clauses in the data. This distribution shows that MJA speakers use verbal negative clauses (59%) more than non-verbal negative clauses (26%) and semi-verbal negative clauses (15%).

Table 2: Overall distribution of negative clauses in MJA

Clause type	**N**	**%**
Verbal	715	59
Non-verbal	315	26
Semi-verbal	178	15
Total	1208	

Each one of these types of negative clauses uses different negative variants as discussed earlier. Table (3) and Table (4) below show the distribution of negative variants in verbal and semi-verbal negative clauses in the data. As discussed earlier, both verbal and semi-verbal clauses use the same negative variants in Arabic. The results in the two tables below show that the preverbal negative variant *maa-* is categorical in both verbal and semi-verbal negative clauses. Although the variants *maa … ʃ* and *-ʃ* have no significant distribution in the language of the speakers of MJA, the tables below show that those speakers have a tendency to use those variants with semi-verbal clauses more than they do with verbal clauses.

Table 3: Overall distribution of verbal negative variants in MJA

Variant	**N**	**%**
maa-	699	97.7
maa … ʃ	9	1.2
-ʃ	7	0.9
Total	715	

Table 4: Overall distribution of semi-verbal negative variants in MJA

Variant	**N**	**%**
maa-	157	88.2
maa … ʃ	17	9.5
-ʃ	4	2.2
Total	178	

The distribution of the verbal and semi-verbal negative variants in MJA shows that MJA has not undergone the Jespersen's Cycle. The preverbal proclitic *maa-* is the unmarked marker of negation in declarative verbal main clauses in MJA. Therefore, we claim that MJA is in Stage I of the Jespersen's Cycle.

Table (5) below provides a breakdown of the major negative variants used to negate non-verbal clauses in the data. Three forms of the negative copula that are used to negate non-verbal clauses in Arabic appeared in the data which include the (*maa-* + the uninflected personal pronoun) variant *muu*, the (*maa-* + the uninflected personal pronoun + *-ʃ*) variant *muʃ*, and the (*maa-* + inflected personal pronoun) variant which we will refer to as the negative pronoun variant throughout for ease of reference. There were no instances of the (*maa-* + the inflected personal pronoun + *-ʃ*) variant in the data. The variation is completely obvious with a preference for the variant *muʃ* (59%) over *muu* (27%) and the negative pronouns (14%). *Muu* and the negative pronouns will be collapsed into one group in the analysis because many speakers do not use the negative pronouns.[6]

Table 5: Overall distribution of non-verbal negative variants in MJA

Variant	N	%
muʃ	186	59
muu	86	27
negative pronouns	43	14
Total	315	100

The distribution of the non-verbal negative variants in MJA shows that there is a preference for the variant *muʃ* over *muu* and the negative pronouns. This preference for the non-verbal negative variant *muʃ* cannot be the result of the Jespersen's Cycle as MJA has not undergone the Cycle. We claim that the non-verbal negative variant *muʃ* was borrowed into MJA from other local JA vernaculars that have already undergone the Cycle. The claim that the preference of *muʃ* over the other two variants of non-verbal negation in MJA is the result of borrowing through contact with other varieties of JA and not the result of the Jespersen's Cycle is supported by the observation that this preference is driven by external factors as we are going to see in the following sections of this study.

The overall distribution of the negation variants in verbal, semi-verbal, and non-verbal clauses presented above shows that there might be a significant variation in the use of those variants only in non-verbal clauses. Although the results presented above show that the speakers of MJA prefer to use the negative variant *muʃ* over the other two variants *muu* and negative pronouns, those two variants still have a significant distribution in the data. In addition, the negative variant *muʃ* is considered as a new variant in MJA. Verbal and semi-verbal clauses, on the other hand, seem to strongly favor the traditional preverbal

negative marker *maa-* over the other two new variants *maa … ʃ* and *-ʃ*. Therefore, only the effect of social factors on the distribution of non-verbal negative markers will be investigated in this study.

4.2 Distributional analysis of the effect of social factors on non-verbal negative variants in MJA

The influence of social factors (i.e., age, sex, level of education and place of origin) on the use of non-verbal negative variants in MJA is distributionally analyzed in the following sections.

4.2.1 Age

Table (6) below shows that *muʃ* is used more than the collapsed group of *muu* and the negative pronouns in non-verbal clauses: 59% compared to 41%. The table also shows that *muʃ* is also used almost equally by younger and older speakers.

Table 6: Distribution of non-verbal negative variants in MJA according to speaker's age

Speaker age	*muʃ*		*muu* and negative pronouns		Total	
	%	N	%	N	%	N
Old	58.5	93	42.5	66	50.5	159
Young	59.6	93	40.4	63	49.5	156
Total	59.0	186	41.0	129		315

A more fine-grained analysis of speakers in terms of their age shows that speakers at the age of 60 and more favor *muu* and negative pronouns more than their younger counterparts; whereas speakers who are below 60 years old favor *muʃ* more than their older counterparts. The results in Figure (1) are considered a first possible indication of change in apparent-time in vernacular MJA. It seems that *muu* and negative pronouns were the most dominant non-verbal negative variants in the past.

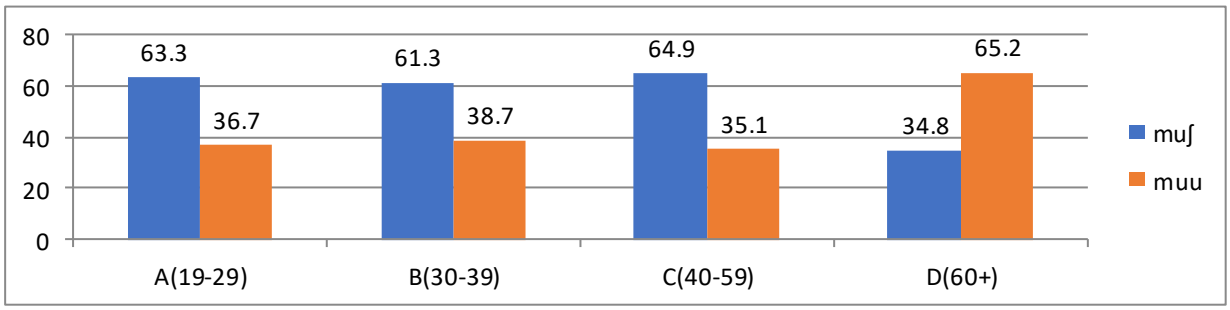

Figure 1: Distribution of non-verbal negative variants in MJA according to fine age division

The obvious finding taken from these results is that MJA seems to be moving in the direction of more *muʃ* at the expense of *muu* and negative pronouns among younger and below 60 years old speakers. In a later section, we are going to cross-tabulate fine age division with the level of education factor to show exact linguistic change.

4.2.2 Education

Table (7) shows the distribution of speakers according to their level of education. The majority of the speakers (27 out of 33) are either low-educated or post-secondary (i.e., diploma or bachelor degree holders). The remaining are 5 speakers with higher education (i.e., MA or PhD degree holders). There is

only one old uneducated female speaker. For statistical issues the old female uneducated speaker will later be considered as a low-educated speaker.

Table 7: Distribution of the informants according to their level of education, sex, and age

Level of education	Male		Female		Total
	Young	Old	Young	Old	
No education	-	-	-	1	1
Low education	3	5	1	4	13
Post-secondary	2	1	7	4	14
Higher education	1	2	2	-	5
Total	6	8	10	9	33

Table (8) below presents the distribution of non-verbal negative variants in the speech of the native speakers of MJA according to their level of education. The table shows that the higher the level of education of the speaker, the higher the use of the *muf* variant. The percentages of the use of this variant are 84.3%, 63.0% and 45.0% for speakers with higher education, speakers with post-secondary education, and speakers with low education, respectively. Conversely, it is noted that the lower the level of education, the higher the use of the variants *muu* and negative pronouns. In spite of the fact that higher-educated speakers have adapted the newer form of negation *muf* in their today's speech (84.3%) due to, maybe, their interaction with other communities, they still use *muu* and negative pronouns in their speech (15.7%) because they still consider themselves as being part of Ma'an community. The results indicate a change toward *muf* in non-verbal negative clauses, and that it is the higher-educated speakers who are leading the change.

Table 8: Distribution of non-verbal negative variants in MJA according to level of education

Speaker age	*muf*		*muu* and negative pronouns		Total	
	%	N	%	N	%	N
Low education	45.0	58	55.0	71	41.0	129
Post-secondary	63.0	85	37.0	50	42.9	135
Higher education	84.3	43	15.7	8	16.2	51
Total	59.0	186	41.0	129		315

Table (9) below gives the number of tokens for each non-verbal negative variant and its percentage in the data according to the speaker's fine-grained age division (i.e., A 19-29 years old, B 30-39 years old, C 40-59 years old, and D 60+ years old) and the level of education (i.e., low-educated, post-secondary, and higher education). There are three rows in each age group: *muf*, *muu* and the negative pronouns, and 'Total'. The first two rows express the numbers of the non-verbal negative clauses of the two variants *muf* and *muu* and negative pronouns and the percentages of each variant.

Table 9: Distribution of non-verbal negative variants in MJA according to the cross-tabulation of speaker's level of education and fine age division

Level of education / Fine age division		Low educated		Post-secondary		Highly educated		Total	
		N	%	N	%	N	%	N	%
A (19-29)	*muf*	16	43	22	73	12	100	50	63
	muu & negative pronouns	21	57	8	27	0	0	29	37
	Total	37		30		12		79	
B (30-39)	*muf*	22	96	17	39	18	69	57	61
	muu & negative pronouns	1	4	27	61	8	31	36	39
	Total	23		44		26		93	
C (40-59)	*muf*	17	36	33	89	13	100	63	65
	muu & negative pronouns	30	64	4	11	0	0	34	35
	Total	47		37		13		97	
D (60+)	*muf*	3	14	13	54	0	-	16	35
	muu & negative pronouns	19	86	11	46	0	-	30	65
	Total	22		24		0	-	46	
Total	*muf*	58	45	85	63	43	84	186	59
	muu & negative pronouns	71	55	50	37	8	16	129	41
	Total	129		135		51		315	

This table shows that older speakers (D 60+) tend to use less *muf* than other age groups. In addition, younger highly educated speakers favor *muf* more than their older counterparts. Two age groups ((A 19-29) and (C 40-49)) show that the higher the education, the higher the use of *muf*: 43%, 73% and 100%; 36%, 89% and 100% for low-educated, post-secondary, and high educated speakers in each group, respectively. Highly educated speakers in both age groups (A) and (C) use only *muf* in the data. Therefore, variation is categorical for highly educated speakers of MJA in the sense that it is always *muf* that those speakers use. Our justification for this is that of Al-Wer (1991) who claims that education by itself is not the reason behind variation; rather, education increases the chances of mobility for individuals and makes possible for them to meet other speakers and affect and be affected by their linguistic behavior.

4.2.3 Speaker's sex

The informants of the study are divided into 19 females and 14 males. The results in Table (10) below show that female speakers use the non-verbal negative variant *muf* more than males: 66.2% compared to 52.2%. On the contrary, males use more *muu* and negative pronouns than females: 47.8% compared to 33.8%. In other words, males use both variants nearly the same but with a slight preference for *muf* (52.2% compared to 47.8%), whereas females favor *muf* (66.2% compared to 33.8%). These results are compatible with Labov's (1990) idea that women play a leading role in linguistic change.

Table 10: Distribution of negative non-verbal variants in MJA according to speaker's sex

Speaker sex	*muf*		*muu* and negative pronouns		Total	
	%	N	%	N	%	N
Males	52.2	84	47.8	77	51.1	161
Females	66.2	102	33.8	52	48.9	154
Total	59.0	186	41.0	129		315

Table (11) below presents the distribution of non-verbal negative variants in Ma'an city according to the cross-tabulation of speaker's sex and fine age division. It shows that the younger the females, the more they use *muſ*: 91% for age group (A 19-29), 65% for age group (B 30-39), 63% for age group (C 40-59), and 43% for age group (D 60+). It also shows that females use more *muſ* than males in all age groups except (C 40-59). Males at both age groups ((B 30-39) and (C 40-59)) almost match their females' counterparts in using the non-verbal negative variant *muſ*: 65% compared to 58% for age group (B 30-39) and 63% compared to 66% for age group (C 40-59). In general, the data reveal that younger females are leading the change toward more *muſ* in MJA compared to the 60+ speakers who behave in the other direction (i.e., using *muu* and negative pronouns). This result is in line with the general pattern found in other variationist studies such as Labov (1990) where females are reported to be innovative in linguistic variation.

Table 11: Distribution of non-verbal negative variants in MJA according to the cross-tabulation of speaker's sex and fine age division

Sex division / Fine age division		Female		Male		Total	
		N	%	N	%	N	%
A (19-29)	*muſ*	32	91	18	41	50	63
	muu and negative pronouns	3	9	26	59	29	37
	Total	35		44		79	
B (30-39)	*muſ*	31	65	26	58	57	61
	muu and negative pronouns	17	35	19	42	36	39
	Total	48		45		93	
C (40-59)	*muſ*	26	63	37	66	63	65
	muu and negative pronouns	15	37	19	34	34	35
	Total	41		56		97	
D (60+)	*muſ*	13	43	3	19	16	35
	muu and negative pronouns	17	57	13	81	30	65
	Total	30		16		46	
Total	*muſ*	102	66	84	52	186	59
	muu and negative pronouns	52	34	77	48	129	41
	Total	154		161		315	

4.2.4 Urbanity vs. rurality

MJA can be divided into three sub-varieties: urban, rural, and Bedouin. Urban MJA is the variety spoken in the city of Ma'an. Rural MJA is the variety spoken by the inhabitants of the towns of Shoubak and Wadi Mousa and their villages in addition to the villages that surround the city of Ma'an such as al-Nwayymaat villages. Among the most characteristic linguistic features that distinguish urban MJA from rural MJA is the form of the first-person possession morpheme in the two varieties. While the speakers of urban MJA use the clitic *-i* as the first-person possession morpheme as in *ktaab-i* 'my book', the speakers of rural MJA use the clitic *-iih* as the first-person possession morpheme as in *ktaab-iih* 'my book'. Commenting on the use of these two clitics in MJA, one of the informants of the study who lives in the town of Shoubak said that he always urges his two young daughters to use the clitic *-i* instead of *-iih* as the latter is an indication of low social class and rurality. Bedouin MJA is the variety spoken in small villages in the northern and eastern parts of Ma'an. No Bedouin informants were included in the study; therefore, the use of negative variants in only urban and rural MJA will be investigated here.

It is well-known that urban speakers favor the most prestigious forms of language (Abdel Jawad 1986). However, Table (12) below shows surprising results according to which rural speakers favor the new negative variant *muʃ* more than their urban counterparts: 82.25% compared to 43.0%. *Muʃ* may not be the most prestigious form, but it may be the newest non-verbal negative variant form. If this form is the most prestigious form, then urban speakers should be using this variant more than rural speakers. If not, then, females from both urban and rural areas should avoid using it.

Table 12: Distribution of non-verbal negative variants in MJA according to speaker's place of origin

Speaker's place of origin	*muʃ*		*muu* and negative pronouns		Total	
	%	N	%	N	%	N
Urban	**43.0**	80	**57.0**	106	59.0	186
Rural	**82.2**	106	**17.8**	23	41.0	129
Total	**59.0**	186	**41.0**	129		315

This table shows that it is rural speakers who are leading the change in MJA not urban speakers. We can explain this by saying that the majority of the rural speakers are more involved with tourists than urban speakers since many rural cities in Ma'an have famous attractive touristic places such as the Rose City of Petra in the town of Wadi Mousa. These areas are visited by local JA speakers and tourists from all over the world. It is expected that the speakers of these rural areas in Ma'an Governorate are adopting the new norms of JA such as the negative non-verbal variant *muʃ* taking into consideration the fact that the majority of JA speakers come from Amman and the cities in the north of Jordan who use the *muʃ* variant more than *muu* and negative pronouns. The interaction between rural speakers in Ma'an Governorate with local JA speakers from different places might be the main reason why rurality is leading the change, not urbanity.

Figure (2) shows exactly who is leading the change. Females regardless of place of origin have very similar percentages of the use of *muʃ*: 50% for urban female speakers compared to 52% for rural female speakers. On the other hand, rural male speakers favor *muʃ* (54%) more than their urban counterparts (30%). Another thing to be noticed here is that rural female speakers favor *muu* (11%) and negative pronouns (2%) less than their urban counterparts (19% and 20%, respectively). It is also noteworthy that urban male speakers extremely favor *muu* (49%) over *muʃ* (30%) and the negative pronouns (18%).

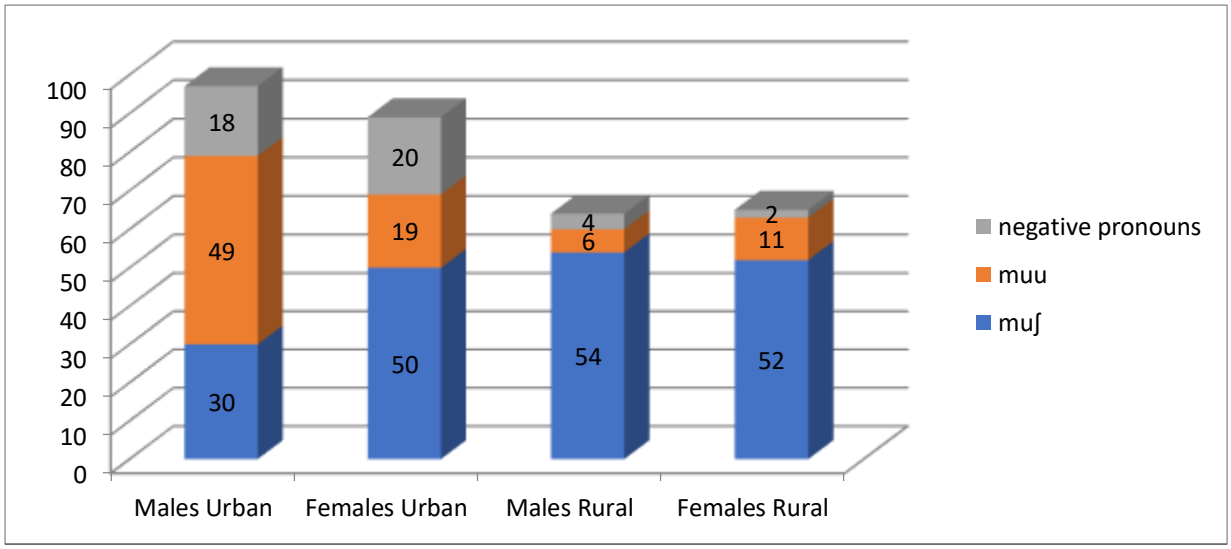

Figure 2: Distribution of *muʃ*, *muu* and the negative pronouns in MJA according to sex and locality[7]

Rural male speakers use *muu* and the negative pronouns almost equally, and they favor to use *muʃ* over them. The decrease in the use of *muu* and negative pronouns amongst females is an indication that urban and rural females are leading the change toward favoring *muʃ*. Similarly, rural male speakers are leading the change alongside their female counterparts. Yet, urban males are not. Another possible suggestion on why urban male speakers use the non-verbal negative particle *muu* (49%) more than the other groups as illustrated in figure (2) is because they think that *muu* is their regional variant that shows their identity. So, they resist using the new form *muʃ* over *muu*.

Figure (3) manifests each variant for three social factors: locality, sex and level of education. It turns out that post-secondary urban female speakers use the three variants with an extreme preference of *muʃ* over the remaining variants. Their low-educated counterparts use the three variants almost equally; whereas their rural counterparts extremely favor *muʃ* despite their level of education. Rural male speakers also favor *muʃ*. The low-educated urban male speakers favor *muu* and negative pronouns almost three times more than *muʃ*.

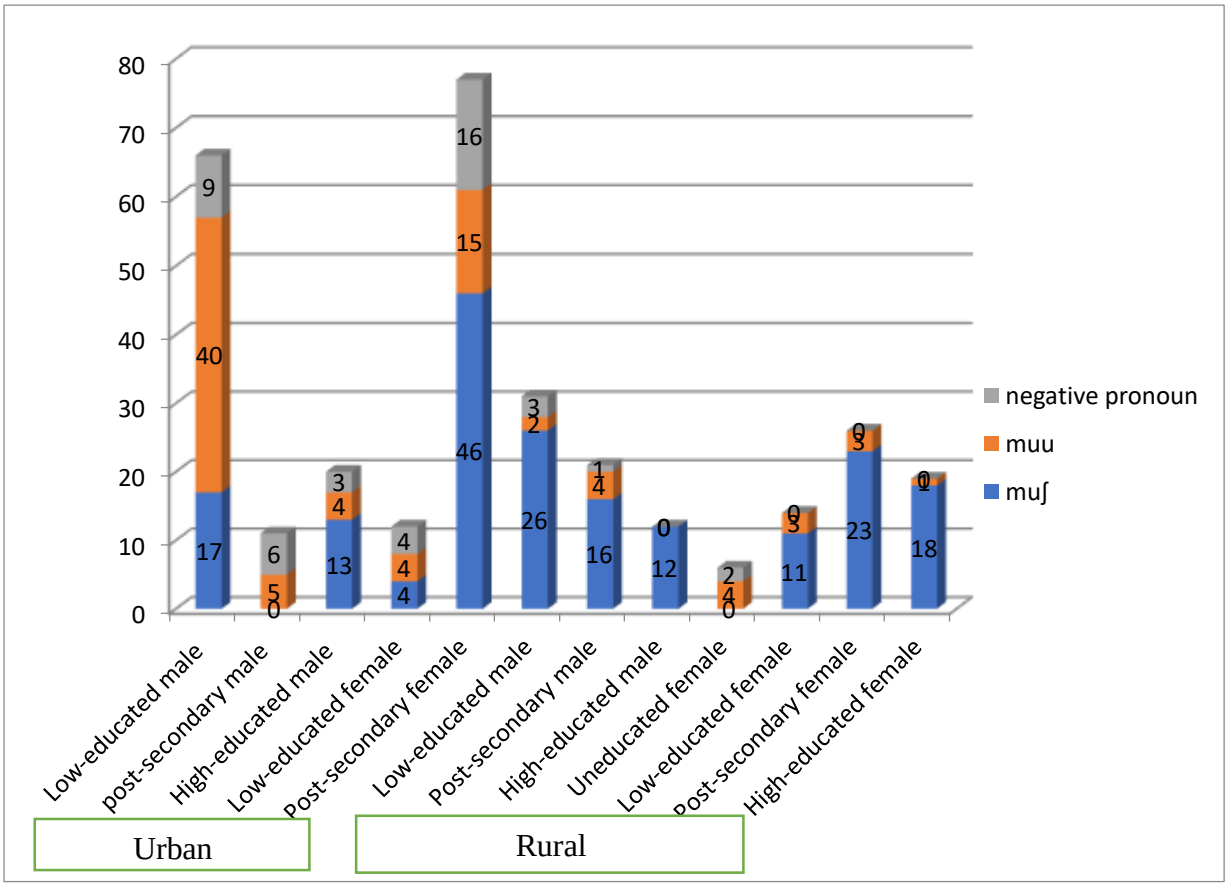

Figure 3: Distribution of non-verbal negative variants in MJA according to level of education, sex, and locality

After the cross tabulation for the social factors, it is clear now that young educated urban female speakers are leading in the direction of the new variant *muʃ*, while low-educated urban male speakers are leading in the direction of using more *muu*. Thus, the first group is more educated, more mobile and more open to new variants, unlike the second group who does not seem to be as open as the speakers in the first group.

In the above sections, we gave a separate distribution analysis of the effect of each social factor group on non-verbal negative variants in Ma'an. Now it is time for analyzing them simultaneously using the statistical analysis performed by GOLDVARBX (Sankoff et al. 2005).

4.3 Multivariate analysis of the effect of social factors on non-verbal negative variants

GOLDVARBX is a programme that can provide the analyst with three lines of evidence: statistical significance, relative strength of significant effects, and constrains hierarchy of factor groups (Poplack & Taglimonte 2001).

In the multivariate analysis, the factor groups in Table (13) below are all statistically significant in conditioning the use of the non-verbal negative marker *muʃ*. The numerical figures in Table (13) are elucidated as follows. Factor weights above 0.50 indicate that a factor group has a favoring effect on variant choice while those below 0.50 mean that a factor group has a disfavoring effect. Level of

education is found to be the strongest factor that conditions the choice of negation variant, followed by locality which in turn is followed by age. The factor group with the weakest effect on the variant choice is speaker's sex. Highly educated speakers favor *muʃ* (.79) more than speakers with post-secondary education (.53) while low-educated speakers prefer not to use *muʃ* (.35). The results also show that rural speakers favor *muʃ* (.75) while their urban counterparts prefer not to use it (.32). Females as well favor *muʃ* (.59) while their male counterparts prefer not to use it (.41). The results also show that speakers below 40 favor *muʃ* while 40+ speakers prefer not to use it. Interestingly, this supports the pattern or tendency that the younger the speaker the higher the preference of using *muʃ*.

Table 13: Variable rule analysis of the contribution of the social factors to the probability that *muʃ* variant will be selected

Corrected mean			.64
Log likelihood			-169.303
Significance			.031
Total number			315
Level of education	Factor weight	%	N
Highly educated	.79	84	43/51
Post-secondary educated	.53	63	85/135
Low-educated	.35	45	58/129
Range	*44*		
Locality			
Rural	.75	82	106/129
Urban	.32	43	80/186
Range	*43*		
Speakers' age			
A (19-29)	.61	63	50/79
C (40-59)	.55	65	63/97
B (30-39)	.47	61	57/93
D (60+)	.29	35	16/46
Range	*32*		
Speaker's sex			
Female	.59	66	102/154
Male	.41	52	84/161
Range	*18*		

5. Conclusion

The results of the current study show that the investigated speech community of Ma'an is currently in Stage I of the Jespersen's Cycle by virtue of their categorical use of the preverbal negative variant *maa-* to negate declarative verbal main clauses. The remaining two verbal negative variants *maa … ʃ* and *-ʃ* are slightly used in Ma'an and might be borrowed into the language from other local JA varieties that have already undergone the Jespersen's Cycle.

Negative non-verbal clauses in Ma'an, on the other hand, manifest significant variation. The results of the distributional and multivariate analyses confirm that variation in negation in non-verbal clauses in MJA is subject to various constraints. Many social factors such as age, sex, education and place of origin contribute to the linguistic change in progress toward more use of the non-verbal negative variant *muʃ* at the expense of the remaining two non-verbal negative variants *muu* and the negative pronouns. In particular, the study shows that young, female, educated, rural speakers of MJA are leading the change toward the new non-verbal negative variant *muʃ*. The observations based on the above analyses indicate

that level of education and place of origin are the highest to show statistical significance followed by age and sex factors.

These results confirm the results of Al-Khatib (1988), Al-Wer (1991), and Al-Tamimi (2001) which all emphasize the key role that education plays in variant choice in the Arabic-speaking world. We are not sure about the claim of Abdel-Jawad (1986: 55) that "Jordanians share the feeling that linguistic urban variants are more prestigious and modern and are endowed with superior status." The data of the current study show that *muʃ* is the new form, and it is used by the majority of rural speakers not by urban ones. Abdel-Jawad's claim may extend to the data of this study if *muʃ* is considered a new form but not the most prestigious form. Sex is associated with linguistic change with females always playing a leading role in this change (Labov 1990). The results of the current study confirm this leading role of females in linguistic change. Concerning the age factor, this factor becomes significant in the current study when it is stratified into four different age groups.

We claim that the preference of the new non-verbal negative variant *muʃ* over *muu* and negative pronouns in MJA does not result from the Jespersen's Cycle as MJA has not undergone the Cycle. Rather, the new non-verbal negative variant *muʃ* has become part of the negation system of MJA through contact with other local JA varieties that are already in Stage II or Stage III of the Jespersen's Cycle. The is supported by the results of the current study which indicate that the change from *muu* and negative pronouns into *muʃ* in the negation system of non-verbal clauses in MJA is driven by some social external factors such as age, sex, level of education, and place of origin.

It is important to compare the results of this investigation with research from other dialects of JA and other varieties of spoken Arabic as well as other languages. The importance of such comparison lies in the fact that it "can increase our understanding of universal patterns of syntactic variation among languages" (Al-Shawashreh 2016: 168). In this case, the results of this study must be compared with other relevant studies on different dialects of JA. Then we should compare it with other varieties of spoken Arabic. Unfortunately, the dearth of related studies can make cross-varietal comparisons a major problem.

التنوّع في استخدام أدوات النفي في اللهجة العربية الأردنيّة في محافظة معان

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الملخص

تبحث الدراسة في التنوّع في استخدام أدوات النفي في اللهجة العربية الأردنية المنطوقة في محافظة معان. تستخدم الجمل الفعليّة والجمل الإسميّة في اللهجة العربية الأردنية المنطوقة في محافظة معان أدوات نفي مختلفة. فيما يخص الجمل الفعليّة في اللهجة العربية الأردنية المنطوقة في محافظة معان، تبيّن الدراسة أنّه لا يوجد تنوّع في استخدام أدوات النفي في هذه الجمل حيث أنّ أداة النفي الأصيلة "ما" هي السائدة على حساب أدوات النفي "ما... ش" و "ش" الدخيلة على هذه اللهجة. أمّا بالنسبة للجمل الإسميّة في اللهجة العربية الأردنية المنطوقة في محافظة معان، فإنّ الدراسة تبيّن أنّ هناك تنوّعاً واضحاً في استخدام أدوات النفي وأنّ هناك تغيّراً لغوياً لصالح أداة النفي "مُش" الدخيلة على هذه اللهجة على حساب أدوات النفي الأصيلة "مو" و "ضمائر النفي". تبيّن الدراسة أيضاً أنّ هذا التغيّر في استخدام أدوات النفي في اللهجة العربية الأردنية المنطوقة في محافظة معان يضبطه عوامل اجتماعية مثل العمر والجنس ومستوى التعليم ومكان المنشأ. وبشكل دقيق، فإنّ الدراسة تدل على أنّ فئة الشابات المتعلمات من الإناث والآتي يسكنّ المناطق الريفية هنّ من يقدن هذا التغيير اللغوي لصالح أداة النفي "مُش". كما وتشير البيانات المبنيّة على التحليلات التوزيعية والإحصائية للدراسة إلى أنّ المستوى التعليمي ومكان المنشأ هي الأعلى لإظهار دلالة إحصائية تليها عوامل العمر والجنس. أخيراً، تفترض الدراسة أنّ أداة النفي "مُش" الدخيلة على اللهجة العربية الأردنية المنطوقة في محافظة معان لم تنتج عن "دورة جيسبيرسون"؛ بل أنّه تمت استعارتها إلى اللهجة العربية الأردنية المنطوقة في محافظة معان من اللهجات الأردنية المحلية الأخرى التي خضعت بالفعل لهذه الدورة.

الكلمات المفتاحية: التباين اللغوي الاجتماعي، النفي، تغيّر اللغة، الاتصال اللغوي، اللهجة العربية الأردنية المنطوقة في محافظة معان.

Endnotes

[1] It is claimed that the enclitic *-ʃ* in Arabic is the reduced form of the Negative polarity Item *ʃayʔ* 'thing' (cf. Benmamoun (2000: 77), Aoun et al. (2010:106), Lucas (2009: 23), and Alluhaybi (2019: 43).

[2] We adopt Miestamo's (2005) classification of sentential negation into standard and non-standard negation. The division is based on the type of the negated clause. Standard negation is negation of declarative verbal main clauses; whereas non-standard negation is negation of other types of clauses such as non-verbal clauses, imperative clauses, embedded clauses etc.

[3] The postverbal enclitic *-ʃ* as the only negative marker in JA is attested in clauses with b-imperfect verbs (1) and bilabial initial pseudo-verbs (2):

1) a. Kariim b-ħibi-ʃ t-tuffaħ.
Kareem IMPERF-like.3SM.NEG the-apples
'Kareem does not like apples.'

b. *Kariim ħabi-ʃ t-tuffaħ.
Kareem PERF.like.3SM.NEG the-apples
'Kareem did not like apples.'

2) a. maʕ-ii-ʃ maṣaari.
Have-1SM-NEG money
'I do not have money.'

b. *ʕind-ii-ʃ sayyarh.
Have-1SM-NEG car
'I do not have a car.'

The examples in (1) show that negation with only the postverbal enclitic *-ʃ* is allowed in (1a) with a b-imperfect verb but not in (1b) with a perfect verb. The examples in (2) show that negation with only the postverbal enclitic *-ʃ* is allowed in (2a) with a bilabial initial pseudo-verb but not in (2b) with a non-bilabial initial pseudo-verb. The same pattern of the distribution of the enclitic *-ʃ* as the only negator in a clause has been reported for other modern Arabic varieties such as Palestinian Arabic (see Lucas 2010).

[4] However, it has been observed that this connection between the Jespersen's Cycle and the choice of the non-verbal negative variant is not always true such as the case in al-ʔAḥsāʔ Arabic and Northwestern Sinai Arabic which use *muʃ* and *miʃ*, respectively for non-verbal negation in spite of the fact that they have not undergone the Jespersen's Cycle (Alluhaybi 2019: 222, 240-241). Alluhaybi (2019) proposes that these cases are the result of borrowing through contact with other varieties that have undergone the Jespersen's Cycle. We will see later in this study that the situation in MJA supports this misleading connection between the Jespersen's Cycle and the choice of the non-verbal negative

variant. In particular, we will see that MJA is witnessing a change in progress towards more *muʃ* in non-verbal clauses in spite of the fact that the variety has not undergone Jespersen's Cycle. It will be proposed that *muʃ* has been borrowed into MJA from other local Jordanian varieties that have undergone the Jespersen's Cycle.

[5] Data that were excluded from the analysis include prohibition clauses with a (*laa* 'not' + verb) construction (3), clauses with the negative indefinite *walaa* 'and not' as a sentential negative marker (4), and constructions where the verb is not understandable (5):

3) gult-lu laa truuħ.
told.1S-him NEG go
'I told him not to go.'

4) wa-laa qaʕadit maʕ-u.
and-not sit.1S with-him
'I didn't even sit with him'

5) laa maa-ʔ-ʃ ʔasʔal. (? = a missing verb)
no NEG-?-NEG ask.1S
'No, I don't/didn't ? ask.' (? = a missing verb)

Prohibition clauses were excluded from the analysis because only three tokens of those clauses were collected from the data. *Walaa* as a sentential negative marker was excluded because it exists in only one form in the language.

[6] In addition to its use as a negator of non-verbal clauses, the negative marker *muʃ* appeared in some verbal clauses in the data as shown in (6), (7) and (8) respectively below:

6) muʃ jaʕni mumtaazih.
NEG mean excellent
'It is not excellent.'

7) muʃ tugʕud w-hyyah ʕaruus tʕiid wit-tratib fi-kul iʃi min
NEG PROG and-she pride return and-tidy2S in-every thing from
ʔawal w-dʒdiid.
first and-new
'She shouldn't as a bride keep tidying everything all over again.'

8) muʃ raħ aldʒa il-hum
NEG FUT resort.1S to-them
'I will not resort to them.'

This tendency of using the non-verbal negative variant *muʃ/miʃ* to negate verbal clauses has been reported in other modern Arabic varieties such as Egyptian Arabic (Håland 2011, Al-Sayyed and Wilmsen 2017, Alluhaybi 2019), Tunisian Arabic (Al-Sayyed and Wilmsen 2017, Alluhaybi 2019), Aley Arabic, Baskinta Arabic and Palestinian Arabic (Alluhaybi 2019). Alluhaybi (2019) proposes that

this new preverbal negative marker is restricted to progressive and future clauses, and that it is the result of an additional Arabic Negative Cycle that exists side by side with the Jespersen's Cycle. In contrast, Håland (2011) and Al-Sayyed and Wilmsen (2017) argue that this deviant form of verbal negation has pragmatic functions such as contrastive negation, metalinguistic negation, rhetorical negation, cautioning, and progressive negation. A close analysis of this type of verbal negation in MJA is outside the scope of this study. Therefore, we will leave this analysis for future research.

[7] The negative pronouns were not collapsed with the *muu* variant in figure (2) and figure (3) because the data was analyzed in an Excel sheet file and not in the GOLDVARBX to present the percentages for comparison purposes.

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