A quantitative analysis of variation in verbal negation in Jordanian Arabic

This study investigates the variable expression of verbal sentences negation in Jordanian Arabic (JA). Verbal sentences in JA can be negated in three different ways (with no effect on the meaning of the sentence). The pre-verbal negation particle *ma:* (not) can be used alone (as in (1) below); it could also be reinforced by the negation suffix *-ʃ* which is encliticized onto the verb (see (2)); or the suffixal negation clitic, *-ʃ*, can be used alone (see (3)).

(1) ʔana **ma:** baħibb ʔil-ħali:b (the preverbal negation variant)
    I   NEG like   the-milk
  'I don't like milk.'

(2) ʔana **ma:** baħib-biʃ ʔil-ħali:b (the discontinuous negation variant)
    I   NEG like-NEG the-milk

(3) ʔana baħib-biʃ ʔil-ħali:b (the post-verbal negation variant)
    I   like-NEG   the-milk

While negation variation has been extensively investigated in many languages (see, e.g., Martineau 1994, Horn 2010, Childs 2017), it can be noticed that much previous research on negation in Arabic has mainly focused on syntactic, morphological and semantic aspects of negation (Al-Salem 2012, Benmamoun et al. 2013, Tawalbeh 2013). Systematic analyses of morpho-syntactic variation in negation based on spontaneous speech data are given sparse attention in contemporary studies of syntactic variation in Arabic. Such paucity of quantitative studies on the variable negation of verbal sentences (in all Arabic varieties) provides the primary motivation for the present study. Following the tenets of variationist sociolinguistics (Labov 1972), we investigate verbal sentences negation in a corpus of spontaneous Jordanian Arabic recorded in the Irbid metropolitan area in the fall of 2018. The corpus (over 50 hours of audio-recordings obtained from 50 speakers stratified by age, sex, level of educational attainment, and locality) explores the distribution of the different variants of verbal sentences negation in JA and decides how social factors affect the choice of verbal negation variants. The number of tokens retained and coded for analysis is 1069.

The distributional results show that pre-verbal negation is the most frequent variant (55.2%), followed by the discontinuous negation variant (31.8%), which in turn is followed by the post-verbal negation variant (13%). This result is at variance with the one reported by Al-qassas (2012) on Palestinian Arabic (PA). Al-qassas (2012), based on a personal judgement rather than an accountable analysis, claims that post-verbal negation in PA is almost as frequent in sentential negation (verbal and non-verbal) as discontinuous negation. The distributional results of the social factors show that young speakers slightly favor post-verbal and discontinuous negation more than old speakers who favor pre-verbal negation more than their young counterparts. The results also show that females favor pre-verbal negation more than males who favor discontinuous and post-verbal negation. For region, urban speakers favor pre-verbal negation more than rural speakers who, in turn, favor discontinuous and post-verbal negation more than their urban counterparts. The results further reveal that educated speakers favor pre-verbal negation more than uneducated speakers who, in turn, favor discontinuous and post-verbal negation more than their educated counterparts.

Variable rule analyses of the social factors (age, sex, education and locality) show that verbal negation variation in JA is socially constrained. This result is in line with the ones reported in previous studies for other languages (Coveney, 2002; Meisner, 2010). Variable rule analyses of the social factors reveal that level of education, region and sex are statistically significant in constraining variant choice. Based on the range values of the social factor groups, level of education has the strongest effect in determining variant choice. The constraints hierarchy within this factor group shows that speakers with post-secondary education favor pre-verbal negation (.67) while those with intermediate education and no education disfavor pre-verbal negation (.44) and (.29) respectively. The factor group with the second strongest effects on

variant choice is region (locality), with urban speakers favoring pre-verbal negation (.67) while rural speakers disfavoring it (.34). The results also show that speaker's sex has the third strongest effects on variant choice. Females favor pre-verbal negation (.62) whereas males disfavor it (.39). Age is found to be statistically non-significant in conditioning variant choice.

Closer inspection of our results through cross-tabulating age and the other social factors provides some remarkable insights. First, a cross-tabulation of age and gender shows that young females, old females and old males favor pre-verbal negation while young males favor discontinuous negation. Similarly, a cross-tabulation of age and region shows that young urban speakers favor pre-verbal negation while young rural speakers favor discontinuous negation. A third cross-tabulation of age and level of education reveals that educated speakers (young and old) favor pre-verbal negation while uneducated speakers (young and old) favor discontinuous negation. This result can be interpreted in light of two viewpoints. The first view relates to the effect of Standard Arabic, which only permits pre-verbal negation. Educated speakers favor pre-verbal negation as it is syntactically similar to that in Standard Arabic. Educated speakers might feel badly when they use post-verbal or discontinuous negation as they are not used in Standard Arabic (the language of educated speakers). Although using the non-standard negation particle -ʃ is not stigmatized in JA, it can be taken as a sign of colloquial speech. This pattern is similar to the one reported in French by Coveney (2002: 57-8), who states that "educated speakers feel that they are speaking badly when they omit *ne*, and this is due principally to the fact that *ne* is obligatory in written French." The other interpretation of this result can be discussed within Al-Wer's (2002) viewpoint proposing that education by itself is not the reason behind using different variants. Rather, education increases the chance of expanding the speaker's social network and mobility. Therefore, the speaker meets new people from different regional backgrounds and chooses the innovative forms/variants whether these variants are similar to or different from the standard variants. In case of negation, the innovative form, according to our results, is the pre-verbal negation as it is favored by female urban, as well as educated, speakers. Therefore, education can be viewed here as a chance for speakers to expand their social networks and meet people in urban centers, and consequently, adapt their linguistic choice (i.e., pre-verbal negation). Put together, the different cross-tabulations of age and the other social factors reveal that females, old males, urbans, old rurals, and educated speakers favor the pre-verbal negation variant while young, rural males and uneducated speakers favor the discontinuous negation variant. These cross-tabulations further show that young urban females lead in the use of the pre-verbal negation variant while young rural males lead in the use of the discontinuous negation variant. These results constitute a strong piece of evidence to the effectiveness of accountable analyses of spontaneous speech in uncovering key patterns of morpho-syntactic variation in one of contemporary spoken varieties of Arabic.

Al-salem, E. 2012. *Negation in Standard and Kuwaiti Arabic*. Ph.D. Dissertation, Urbana, Illinois. Al-Wer, E. 2002. Education as a speaker variable. In: Rouchdy, A. (ed.). Curzon, 41 - 53. Coveney, A. 2002. *Variability in Spoken French. A Sociolinguistic Study of Interrogation and Negation*. Bristol, UK/Portland. Labov, W. 1972 *Sociolinguistic Patterns*. University of Pennsylvania Press. Martineau, F. 1994. Movement of negative adverbs in French infinitival clauses. *Journal of French Language Studies*, 4, 55–73. Meisner, C. 2010. A corpus analysis of intra- and extra-linguistic factors triggering *ne*-deletion in phonic French. Benmamoun, et al. 2013. The location of sentential negation in Arabic varieties. *Brill's Annual of Afroasiatic Languages and Linguistics* 5, 83-116. Childs, C. 2017. Integrating syntactic theory and variationist analysis: The structure of negative indefinites in regional dialects of British English. *Glossa: A Journal of General Linguistics* 2. Horn, L. R. 2010. Multiple negation in English and other languages. In: Horn, L. R. (ed.).