

Negation in early Kuwaiti Arabic child language

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The current study investigates children's development of negation in Kuwaiti Arabic. The data were longitudinal spontaneous samples of four Kuwaiti children (one girl and three boys) between the age of 2; 0-2; 6. The main focus was to study the sequencing of the negative markers, anaphoric *laʔ/la*, *ma*+XP and *mu*+XP. The results indicate a similar developmental pattern across the four children. In all four children, the anaphoric *laʔ/la* emerged first, followed by the sentential negation *ma*+XP and finally *mu*+XP.

Introduction

The past decade in the study of developmental psycholinguistics has brought vastly increased understanding of how children acquire their native language. The acquisition of English has received most attention (Berko, 1958; Bellugi & Brown, 1964; Brown & Fraser, 1964; Miller & Ervin, 1964; Bloom, 1970, 1991; Brown, 1973; de Villiers & de Villiers, 1979, 1985; Ingram, 1989; Klima & Bellugi, 1964, 2004, among others). However, there has been a recent increase in early cross-linguistic acquisition studies as presented by Slobin (1985a, 1985b, 1992, 1997) on monolingual children who were learning languages other than English. Semitic languages are represented only by Hebrew (Berman, 1985) with limited attention paid to languages such as Arabic. The current study will demonstrate the importance of cross-linguistic studies by highlighting the similarities and differences in the process of language development in typologically distinct languages. The highly inflectional grammatical structure of Arabic makes it a useful contrast to help developmentalists sharpen their notions of universal aspects of language acquisition and linguistic competence.

In the 1960's and 1970's, the development of negation by English speaking children was described at length, and it was a popular topic of investigation. Based on three longitudinal studies, Klima & Bellugi (1964, 2004) postulate three stages in the development of negation in English. During the first stage, children place the negative word outside the sentence nucleus as in the examples, **no sit there*, **no the sun shining* and *not fit*. In the second stage, children continue to use the earliest form and the negative element is moved inside the sentence as **he no bite you*, **I no want envelope* and **I no taste them*. The negation particles are represented by *not*, *no* and *don't*, *can't* as in *I can't see you*, and *I don't want it*. The use of *don't* and *can't* is considered as lexical representations since their affirmative counterparts have not been established. The appearance of the negative imperative, as in *don't leave me*, marks the second stage. At the third stage the early construction disappears, auxiliaries appear and are no longer limited to *don't* and *can't*, such as *it's not cold*, *I didn't see something* and *that was not me*. The copular verb is optionally omitted. Because the affirmative auxiliaries appear in declarative sentences and questions, they can be considered as individual units from the negative marker of the sentence.

In her study of negation of three children with MLUs less than 1.5, Bloom (1970, 1991), focused on syntactic and semantic development of negation structures. She provides information on children's intention and context, features that were not reported in Klima & Bellugi's work (1964, 2004). She argues that when context was accounted for, her data showed examples of two types of

negative utterances where *no* is placed before or after the subject. The first occurs where the negative element *no* precedes the predicate which is being negated such as *Lois no hat* meaning 'Lois was not wearing a hat', and *Kathryn no shoe* meaning 'Kathryn was not wearing shoes'. The second type, such as *no Lois do it* meaning 'Kathryn was giving the train to Lois to fix', and *no doll sleep* meaning 'Gia wanted to put the doll to sleep' shows that the negative particle *no* did not negate the remainder of the sentence and it was anaphoric. Bloom argues that some of the examples that Bellugi (1964) considered as part of the first stage are actually instances of anaphoric use of negation where the negative element is placed outside the sentence nucleus to negate prior utterances. Klima & Bellugi (1964, 2004) and Bloom (1970, 1991) all agree, however, that *not* appears later in production than *no*.

In a cross-cultural study, Wode (1976) investigated the development of negation in Bulgarian, Latvian, Russian, English, Swedish and a more detailed study of German on his own children. He argued that children who are at the two or more word stage use negation devices to express anaphoric negation followed by non-anaphoric negation while intra-sentential negation appears last. Wode's findings on English as well as the other languages bear out Bloom's (1970, 1991) conclusion that anaphoric negation appears earlier than the others.

To test whether very young children between the age of 14-25 months have knowledge of negation before it surfaces in production, Gilkerson, Hyams and Curtis (to appear) designed a study using the preferential looking paradigm. In two experiments children first look at comprehension of *not* and the second at comprehension of anaphoric *no*. For example, the child heard something like *the girl's not sleeping* and *the girl's sleeping* simultaneously as they were shown an image of *a sleeping girl* and *a sitting girl*. Although Klima & Bellugi (1967, 2004) claim that sentence-initial *no* can have clausal scope, Bloom (1991) claims that it can actually have anaphoric interpretation. Gilkerson, Hyams and Curtis (to appear) argue that young children, younger than previously thought, treat anaphoric *no* as a sentential negator and show the same responses of *not*.

Three studies on negation in various forms of Arabic exist. Studies of the Arabic spoken languages, Egyptian (Omar 1973), Jordanian (Smadi 1983) and Palestinian (Abdu & Abdu 1986) all agree on the early appearance of such negative forms in languages spoken by children from these cultures. Omar's (1973) study of the acquisition of Egyptian Arabic was based on elicited speech production measures and a few examples collected from the spontaneous speech of young children. Omar documented the early appearance of the anaphoric negative form *la?* 'no' (pronounced as *la*) at around the

age of 2;6, such the to as question *di farruja* 'is this a chicken?', a girl at the age 3;6 replied *la? di wizza* 'no, this is a goose'. The sentential negation *miš* and *ma...š* appear second and last respectively. Smadi (1983) explains that the early occurrence of the negative form *mu/miš* is due to the fact that its usage does not require any change in the structure of the individual words it negates. On the other hand, the negative form *m...š* should come later in the course of negation development because its use requires morphophonemic changes that have to take place in the words it is attached to, such as lengthening the final vowel and shifting the major stress to it. Unfortunately, Omar (1973) did not provide any information about the non-anaphoric use of the negative particle *la?* 'no'. She claimed that the age 2;6 marks the emergence of the negative utterances which seem to be late in comparison with other studies (Abdu & Abdu 1986). Overall, Omar's study provides an example of the developmental pattern of negation in Egyptian Arabic and confirms the proposed stages by Wode (1976).

Smadi (1983) studied the development of negation in a Jordanian Arabic speaking child aged 19-36 months. He argues that the non-anaphoric negative marker appears before the anaphoric one and the sentential negation appears before the anaphoric *la* 'no'. Smadi challenges Wode's finding regarding the sequence of the anaphoric before the non-anaphoric *la/la?* 'no'. He listed two examples (1983:70) which led him to this conclusion as follows:

Adult	Child
ʔiʕtiħ laddaaha	laa ʔiddaada
Give it to your sister	no my sister
tisrabi ħaliib	laa ħiib
Do you want to drink milk	no milk

However, Smadi did not provide any information on the semantics, context and the child's intention. Therefore, it is not clear how the negative marker *la/la?* 'no' was considered as an anaphoric negator.

In their study of their children's development of Palestinian Arabic, Abdu & Abdu (1986) indicate the early appearance of the negative form *la?* 'no' around the age of 14 months followed by the sentential negation. These researchers specify the appearance of the negative form *ma* + verb at around 30 months of age. Unfortunately their study does not provide statistical information. No detailed developmental sequence can be established because they appear to be focusing on scattered examples that reveal first appearance. Mohammad & Ouhalla (1995) have studied negation in Palestinian Arabic, focusing on syntactic representation rather than the developmental pattern. They offer only fragmentary data. However, they indicate the early

appearance of the negative forms in Palestinian Arabic child language. Combining the evidence from both studies on Palestinian Arabic, negative particles seem to appear early in child language.

A general conclusion from studies on a variety of Arabic dialects is that the negative utterances are developed in sequence. Bloom (1991) speculates that negation in Arabic should be acquired in few stages since negative transformations are not as complicated as in English. Clearly the negative marker *la/la?* 'no' appears before the other sentential negations. Further, negation structures appear earlier in Palestinian Arabic and Jordanian Arabic than previously claimed in Egyptian Arabic. Unfortunately, data on the development of negative forms in Egyptian Arabic, Palestinian Arabic, and Jordanian Arabic are not presented in a manner that would allow comparison of early stages of the development of negation.

Negation in Kuwaiti Arabic¹

There are three negative markers in Kuwaiti Arabic (KA) *la?*, *ma* and *mu*.

A - *la/la?* 'no/not': The negator is used:

- 1 - anaphorically, that is to negate a previous utterance, as shown in the following exchange:

Il-kitab ʔala it- ʔawla
the-book on the table
'The book is on the table'

la?, ʔala il- kirsī
no, on the- chair
'No, it is on the chair'

- 2 - non-anaphorically to negate the sentence immediately following it to express negative imperative as in *laa te-rooḥ* 'Don't go'. And it is *la* rather than *ma* is used in Kuwaiti Arabic to express that which is also found by Brustad (2000). *la/la?* is also used with 3rd person singular or plural to express negative indirect commands as in *gool lahaa laa te-rooḥ* 'tell her not to go'.

B - Sentential negation in KA is realized by:

- 1 - **Verbal sentence:** *ma* precedes:

- a - a main verb whether perfective or imperfective,
ma ya-kil
not eat (he)
'He is not eating'
- b - future modal verb *raaḥ*

ma raaḥ ya-kil **but not** *raaḥ ma ya-kil*
 not going eat
 'He is not going to eat'

- c - auxiliary *kaan* which marks the past tense of the sentence,
ma kaan ya -kil **and** *kaan ma ya-kil*
 not was eat
 'He was not eating'

It appears that the auxiliary *kaan* 'be' acts differently from the future modal verb *raad*.

- 2 - Nominal sentence: **mu**² 'not' is used in instances when the head of the predicate is:

- a - a noun,
mu mudarris-a
 not teacher
 'She is not a teacher'

- b - an adjective,
mu ḥelw-a
 not beautiful
 'It/she is not beautiful'

- c - a participle,
mu raayih
 not going
 'He is not going'

- d - or a preposition,
mu ḥala it-- ṭawla
 not on the table
 'Not on the table'

- e - an adverb,
mu foog
 not up
 'Not up'
mu daayman ye-lḥab kora
 not always play ball
 'He doesn't always play ball'

- f - a free pronoun³,
mu ohwa
 not him
 'It is not him'

Nominal sentences that include the existential elements *fii* 'there', the boulemaic modality element (a term used in Mohammad & Ouhalla (1995)) *abi* 'want', or the possession particle *ʕind* 'have/possess', the negative particle *ma* is used⁴. For example:

ma fii fluus 'there is no money'
ma abi fluus 'I do not want money'
ma ʕindi flūs 'I do not have money'

Although *fii* 'in' and *ʕind* 'possess or have' are grammatically prepositional, they are negated by *ma*. In Palestinian Arabic, Mohammad & Ouhalla (1995) find that *fii* and *ʕind* act like verbal categories concerning their position in relation with the negative particle, although they are nonverbal categories. Holes (1990, 72) states that 'perhaps *fii* and *ʕind* have been reanalyzed as verbs' and Brustad (2000) names them pseudo-verbs.

Sometimes *mu* precedes a verb to express warning as in:

mu ta-kil el- ħin
 not eat the now
 'Don't eat now'.

Brustad (2000) states that *wala* 'not a, none, at all', signals categorical negation in different contexts, as in the following example: *wala ħad yjiisa* 'nobody touch it' Brustad (2000:309). Besides, co-ordinated clauses are negated by 'la...wala...' is used (Holes, 1990). For example: *la abi haatha wala hathaak* 'I want neither this nor that'.

It is worth mentioning that the following sentence is used with the three negation particles, with a different interpretation of each is derived. For example:

la takliin elħin 'don't eat now' (to express prohibition and certainty)
mu takliin elħin 'don't eat now' (to express warning)
ma takliin elħin 'don't eat now' (you get the impression that this command was said before).

Before bringing this section to a close, the reader is reminded that, like other inflectional languages, Arabic is a pro-drop language that permits finite null-subject and inverted subject-verb declarative sentences. Modern Standard Arabic (MSA) has a wide range of word order possibilities whereas modern colloquial varieties do not. This could result from the reduction of overt phonological case markers on the nouns (Mohammad 1989). MSA is in general classified as a VSO (verb-subject-object) language. On the other hand, colloquial Arabic varieties are considered to be SVO (subject-verb-object) (Comrie 1989; Holes 1990; Kaye 1990; Lyovin 1997) although the

VSO pattern is also found in some of them (Benmamoun 1997; Shlonsky 1997). The examples below are quoted from Cook and Newson (1996:57):

Subject - verb	huwa yatakallamu	'he speaks'
Null subject	yatakallamu	'he speaks'
Verb-subject inversion	yatakallamu huwa	'he speaks'

Methodology

Database

The database comprises longitudinal data on the spontaneous language of four children (one girl and three boys) who were tape-recorded twice a month for a period of six months. The subjects in this study were audio-recorded in situations in which, to ensure naturalness, they could move freely around. Each sample was 45 minutes in length. Table 1 describes each of the four subjects. See Table 1 for more information regarding the gender, their age at recording, other sibling(s) in their families and the recording settings for the four subjects. When reporting the age of the children, it was in the following format (years, months, days).

Table 1: Subjects' profile

Subjects	Sex	Age at Recording	Sibling(s)	Setting
Sara	F	1;11.23-2;5.23	Two sisters	Nursery
Osama	M	2;0.17-2;6.7	Three brothers	Nursery
Bader & Ahmad	M	1;7.15-2;6.6	Twins	Home

The data of Sara and Osama consist of child-adult spontaneous conversation which took place at the nursery. As for the twins, Bader and Ahmad, the spontaneous speech was between the twins and their mother (the investigator) at home. They were tape-recorded together most of the time during daily activities.

Stages for analysis

The investigator used the computer program SALT (Systematic Analysis of Language Transcripts) developed by Miller & Chapman (1993), which provides frequencies and general measures like mean length of utterance (MLU). Transcripts for each child were coded and analyzed for percentage correct use and error profiles for the specified negative forms.

Table 2: Stages for analysis

Stage of development									
Child	Stage I			Stage II			Stage III		
	Age	Average MLU	Number of files/ C&I	Age	Average MLU	Number of files/ C&I	Age	Average MLU	Number of files/ C&I
Sara	1;11.23- 2;1.4	1.82	4 1011	2;1.20- 2;3.28	1.94	4 1014	2;4.14- 2;5.23	2.21	4 1314
Osama	2;0.17- 2;1.8	1.59	4 1184	2;2.15- 2;4.10	1.90	4 1118	2;4.21- 2;6.7	2.09	4 1324
Bader	1;7.15- 2;1.22	1.68	9 1692	2;2.21- 2;4.1	2.12	8 2093	2;4.19- 2;6.6	2.64	8 2255
Ahmad	1;7.15- 2;1.22	1.53	9 1281	2;2.21- 2;4.1	1.80	8 1918	2;4.19- 2;6.6	2.32	8 1678

C&I: complete and intelligence utterances

The utterances that are included for analysis are all complete and intelligible utterances (C&I in SALT), plus any partially unintelligible utterance in which it was possible to identify and code the verb. Exact imitations of any previous utterance were excluded because it could be just a repetition of what was addressed to the children while inexact imitation could reflect the children's underlying grammar. Utterances are considered negative if they contain a negative element *la/ la?*, *ma* and *mu* that signaled negative intent. The interpretation of these negative utterances inferred from observation of linguistic and contextual features.

Looking at the MLU throughout the recording period, a considerable fluctuation was found. This makes it difficult to categorize the data into stages based on the MLU. Thus, to compare the children's language, the data were divided into three stages. Stage I starts at the first recording to the age of 2;1, Stage II is from age 2;2 to 2;4 and Stage III starts from 2;4.15 to the last recording session which is at the age of 2;6. The mean MLU for each stage was computed and was found to be similar for these four children. Table 2 shows the stages, average of MLU, the number of files as well as the number of C&I utterances of the four children within the stage of development.

Results

Table 3 shows the total number of the C&I utterances and negative utterances during the study period across the four children. The 74 files of the SALT program for the four children contain 1105 negative utterances, which is about 6% out of the 17881 total complete and intelligible utterances. Thus, the negative utterances which are ranged between 4% and 7% among the four children were infrequent in this sample.

Table 3: Number of utterances and number of negative utterances

Child	C&I Utterances	Negative Utterances
Sara	3339	203 (6%)
Osama	3625	158 (4%)
Bader	6040	406 (7%)
Ahmad	4877	338 (7%)
Total	17881	1105 (6%)

Table 4 shows the frequency of occurrence of the negative utterances across the four children during the study period. Initially, the negative form *la/la?* was used frequently along with the *ma + XP* form. In contrast, the *mu + XP* form was only very occasionally used by the four children. In terms of proportion of the whole negation database, the negation particle *la/la?* comprised 32% of all 1105 negative utterances expressed throughout the study period, as shown in Table 4. The negative forms *ma + XP* and *mu + XP* comprised 61% and 6% of all negative utterances respectively.

Table 4: Total number of the negative forms through out the sampling period

Negative Forms	Total
<i>La</i>	
<i>Number</i>	357
<i>percentage of database</i>	32
<i>ma + XP</i>	
<i>Number</i>	679
<i>percentage of database</i>	61
<i>mu + XP</i>	
<i>Number</i>	69
<i>percentage of database</i>	6
Total	1105

Table 5 shows the frequency of each negative form in each stage of development. The table indicates the frequent use of the negation particle *la/la?* and *ma + XP* at Stage I (45% and 52% respectively) relative to the form *mu + XP* (2%). This relation changes over time as *ma* was used more frequently to encode negation as language ability increased. At Stage III, the relative frequency for *la*, *ma* and *mu* was 24%, 67% and 8% respectively. As reflected by these percentages, the use of *la/la?* decreased from 45% at Stage I to 24% at Stage III (almost half) where *ma* and *mu* increased from 52% to 67% and 2% to 8% respectively. It seems that the negative form *ma + XP* is more common throughout the study period which ranges between 52-67% (*la* ranges 24-45% and *mu + XP* 2-8%)

Table 5: The negative utterance for the four children during the sampling period

Stage of development									
Child	Stage I			Stage II			Stage III		
	la?	ma	mu	la?	ma	mu	la?	ma	mu
Sara	6	12		41	32	6	39	40	27
Osama	23	25	3	10	24	4	31	33	5
Bader	30	23		39	76	6	55	174	3
Ahmad	20	31	1	47	68	2	16	141	12
Number	79	91	4	137	200	18	141	388	47
Percentage of stage	45%	52%	2%	39%	56%	5%	24%	67%	8%
Percentage of database	7%	8%	.4%	12%	18%	1.6%	13%	35%	4%
Total	174			355			576		
Percentage of database	16%			32%			52%		

In general, the negative forms were already in use at the beginning of the sampling period. The table also shows the remarkable increase of the negative form *ma*+XP at Stage II and III among the four children. On the other hand, the negative form *mu*+XP was never extensively used. An increase in both Sara's and Ahmad's data is noticed while Osama's and Bader's data show a slight decrease in the implementation of *mu*+XP negative form. Overall, negation was encoded most frequently at Stage III of development (Stage I = 16% negative utterances, exactly doubled at Stage II = 32%, and at Stage III = 52%).

Recall that the negation particle *la/la?* is used anaphorically to negate a previous statement and non-anaphorically to negate the sentence immediately following it to express negative imperative. Table 6 presents the frequency of the anaphoric and non anaphoric *la/la?* when the anaphoric particle was used in

Table 6: Anaphoric and non-anaphoric *la/la?* in the four children for the total sample of negative

Child	Anaphoric	Non-anaphoric
Sara		
<i>one word</i>	69 (80%)	
<i>sentence</i>	17 (20%)	
<i>database</i>	86 (42%)	
Osama		
<i>one word</i>	38 (60%)	
<i>sentence</i>	26 (40%)	
<i>database</i>	64 (41%)	
Bader		
<i>one word</i>	54 (44%)	
<i>sentence</i>	69 (56%)	
<i>database</i>	123 (31%)	1 (.25%)
Ahmad		
<i>one word</i>	53 (65%)	
<i>sentence</i>	29 (35%)	
<i>database</i>	82 (24%)	1 (.3%)

one word sentence, or in a full sentence as presented in the second and third row respectively, and the final row shows its occurrence in the whole negative database.⁵ When we take context into account, it appears that all instances of the negative particle *la/laʔ* either in sentence-initial or inside the sentence, have an anaphoric interpretation. On the other hand, the non-anaphoric *la/laʔ* occurred only once for the meaning of negative imperative in both Bader's and Ahmad's data. In both instances they were warning each other not to fall down. This was sufficiently representative for inclusion in the analysis. Therefore the study focused on the developmental order of the forms anaphoric *la/laʔ*, and sentential negation particles *ma* and *mu*.

Table 6 shows that the anaphoric *la/laʔ* was used by the four children as a one- word sentence more frequently than in a full sentence except in Bader's data, where the anaphoric *la/laʔ* appears more often in a full sentence than in a one word sentence.

Looking at the negative forms *ma*+XP and *mu*+XP, it appears that certain structures appear earlier and more frequently than the others. Examples of such negative utterances of the form *ma*+XP in KA are: *ma abi* 'I don't want', *ma ku* 'there isn't', *ma ye-ṣeer* 'it can't be', *ma a-ṣarif* 'I don't know', *ma a-dri* 'I don't know', *ma ṣindi* 'I don't have', *ma fii* 'there is nothing', and *ma a-gdar* 'I can't'. The negative utterances of the form *mu*+XP in KA are: *mu ṣindi* 'I don't have it', *mu čeđi* 'not like this', *mu meni* 'not here', *mu hađa* 'not this (m)', *mu zeen* 'not nice', *mu ihnaḵ/ihni* 'not 'there/here'', *mu ḥaggi* 'not mine', and *mu bas* 'not enough'. Due to the high frequency of these negative forms, and late and rare appearance of their affirmative counterparts by the four children during the sampling period, these negative utterances *ma*+XP and *mu*+XP were considered formulaic. Radford (1990:16) defines formulaic utterance as the "one in which a given sequence of words (or morphemes) occurs only in a specific combination in the child's speech, and where no pair of the utterance can be replaced productively by other items". It seems that formulaic utterances function "as a unit for the child" (Hickey 1993:27) and thereby provide little evidence of grammatical knowledge (Radford 1990). They were eventually excluded. Accordingly, the data were scrutinized further to distinguish between formulaic and non-formulaic negative utterances.

Table 7 focuses on the formulaic and non-formulaic use of the negative forms *ma*+XP and *mu*+XP. The table shows detailed information of the frequency of both formulaic and non-formulaic types occurring within each stage of development, and the percentage of stage and database.

Table 7: The percentage occurrence of formulaic vs. non-formulaic negative utterances during the sampling period

Negative Forms	Development			
	Stage I	Stage II	Stage III	Total
<i>ma + XP</i>				
Non-formulaic-number	1	20	48	69
Percentage of stage	1	10	12	
percentage of database				6
Formulaic- number	90	180	340	610
Percentage of stage	99	90	88	
percentage of database				55
<i>mu + XP</i>				
Non-formulaic- number	2	6	23	31
Percentage of stage	50	33	49	
percentage of database				2.8
Formulaic- number	2	12	24	38
Percentage of stage	50	67	51	
percentage of database				3

Table 7 shows considerable differences between the formulaic and non-formulaic negative forms. Looking at the negative form *ma + XP*, it was used more frequently as formulaic than non-formulaic form during the sampling period: Stage I 99-1%, Stage II 90-10% and Stage III 88-12%. The table indicates the increase of non-formulaic forms from Stage I 1%, to Stage II 10% and finally, to Stage III 12%. In general, the table also shows the low frequency of the non-formulaic negative *ma + XP* in relation to formulaic ones (6-55% respectively) in the whole database.

As for *mu + XP* negative forms, in addition to the infrequent occurrence of these forms during the sampling period (non-formulaic 2.8% and formulaic 3%), the table also shows a decrease in the implementation of the non-formulaic forms (from 50% to 33 and 49%). On the other hand, formulaic negative utterances increase during the study period (Stage I 50%, Stage II 67% and Stage III 51%).

Overall, Table 7 shows the high occurrence of the formulaic *ma*+XP (55%) in comparison with the other forms. Generally, the formulaic usage appears higher than the non-formulaic negative utterances, as the occurrence of the non-formulaic negative utterance increases and formulaic ones decrease.

Although the results provide an overview of the implementation of the negative particles, they do not show the occurrences of each individual negative form. By excluding the formulaic negative utterances that occur excessively throughout the sampling period, it became possible to focus on the non-formulaic negative forms and children's contrastive use. Table 8 shows the contrastive use of the non-formulaic negative forms. It appears that, in addition to the substantial increase in the frequency of the sentences expressing negation, significant increase also occurred especially in the number of verbs in the form *ma*+XP. Sara used the negative *ma*+V once at Stage I as in *ma ye-ʔeedħ* 'it doesn't fall', while Stages II and III reveals a considerable increase of the types of verb to the total of nine times on five verbs and eight times on six verbs respectively. Although the negative form *mu*+N did not occur in Sara's data in the first two stages, the implementation of that negative utterance exceeded the other three children at Stage III (13 times on 12 types of noun). Sara did not use the form *mu*+A throughout the recording period.

Table 8: Type/Token of the non-formulaic negative forms throughout the study period

Child	Stage of development								
	Stage I			Stage II			Stage III		
	ma+V	Mu+N	mu+A	ma+V	mu+N	mu+A	ma+V	mu+N	mu+A*
Sara	1/1			5/9			6/8	12/13	
Osama		1/1		3/3			4/5		1/2
Bader				4/6	2/4	1/1	15/20	1/1	1/1
Ahmad			1/1	2/2	1/1		8/15	1/1	3/5

* Same type that is previously used; V = verb; N = noun; A = adjective

Osama did not use the negative *ma*+V at Stage I, whereas he used five formulaic negative forms *ma*+V at this stage. Stage II and III reveal the appearance of the non-formulaic forms contrastively on three verbs three

times and four verbs five times respectively. The negative form *mu* + N was used once during the period of collecting the data at Stage I as in *mu batta* 'not a duck'. The form *mu* + A appears twice at Stage III followed by the feminine adjective as in *mu delw-a* 'not nice/ugly (f)'.

Stage I reveals the absence of the non-formulaic negative structures in Bader's data. At Stage II Bader used *ma* + V six times on four types of verb. Stage III reveals a significant increase in the use of that form on 15 types of verb for 20 times. The form *mu* + N was used four times on two types of noun at Stage I in the same session as in *mu ūbo-ūk* 'not your father' three times and *mu om-ok* 'not your mother' once. The form *mu* + N occurred once at Stage II as in *mu taawla* 'not a table'. As for the form *mu* + A, it was used once each at Stages II and III preceding the same feminine adjective as in *mu delw-a* 'not nice, ugly (f)'.

At Stage I, Ahmad used neither *ma* + V nor *mu* + N negative forms while the *mu* + A occurred once as in *mu xarbaan* 'not damaged'. Ahmad's data show rare occurrence of the negative form *ma* + V at Stage II twice, whereas at Stage III it was used 15 times on eight types of verbs. Stage II reveals a single appearance of the form *mu* + N as in *mu kabboos* 'not a hat', and at Stage III it was used contrastively once on another noun as in *mu xalaş* 'not finish/over'. Following the single appearance of the negative form *mu* + A, it reappeared at Stage III five times contrastively on three different adjectives as in *mu delw-a* 'not nice, ugly (f)', *mu bortaqaali* 'not orange color', *mu damr-aa* 'not red (f)'.⁶

Overall, Table 8 shows single appearance of the negative utterances in Sara, Osama and Ahmad's database, while Stage II and Stage III mark an increase in the use of these negative utterances among the four children. The negative form *ma* + V appeared contrastively higher than *mu* + N and *mu* + A.

Table 9: The frequency of non-formulaic negative utterances and anaphoric *la/la?* during the sampling period

Child	Stage of development								
	Stage I			Stage II			Stage III		
	<i>la?</i>	<i>ma</i> +XP	<i>Mu</i> +XP	<i>la?</i>	<i>ma</i> +XP	<i>mu</i> +XP	<i>La?</i>	<i>ma</i> +XP	<i>mu</i> +XP
Sara	6	1		41	9		39	8	13
Osama	23		1	10	3		31	5	2
Bader	30			39	6	5	55	20	2
Ahmad	20		1	47	2	1	16	15	6

Focusing on the frequency and the occurrences of the three negation particles: the anaphoric *la/la?* and the sentential negations *ma*+XP and *mu*+XP, Table 9 provides a developmental pattern for these forms. It appears that the anaphoric *la/la?* occurs early and frequently among the four children during the sampling period. The *ma*+XP appears higher than the form *mu*+XP. Overall, Stage III marks an increase in the implementation of the sentential negations. On the basis of the relative frequency of the negative utterances, and the progressive development of these forms, the order of development for all the four children is specified as *la/la?*, *ma* then *mu*.

Discussion

Frequency and order of appearance

The data show that negative forms were already in use at the beginning of the study period across the four children at age 2.0. It appears that the negative anaphoric *la/la?* 'no' occurs early and it was excessively used by the four children during the study period. This finding is consistent with the other studies on Arabic (Omar 1973; Abdu and Abdu 1986) and on English (Bloom 1970, 1991). Other cross-linguistic studies in other languages also note that children start to use the negative particle to express anaphoric negation before its non-anaphoric counterpart appears (Wode 1976). The current study also shows that the anaphoric *la/la?* was also frequently used as a single word utterance.

The anaphoric *la* was placed in different positions in utterances. The current study indicates that the negative marker appears initial and medial rarely is placed in the final position. When context is taken into account, it appears that all these instances have an anaphoric interpretation. That is, they negate the previous sentence as in the following examples:

Bader at the age of 2;2.13,

Mother	ub	uuk	haða	Bader?
	father	your	this	Bader
	'Is this your father, Bader?'			
Bader	la	hada	ayyal	
	no	this	man	
	'No this is a man'			
Mother	mu	ub	uuk?	
	not	father	your	
	'He is not your father?'			

Bader mu ob ook*⁷
 not father your
 'Not your father'

Bader la
 No.

Osama at the age of 2;5.20

Osama ha gattat
 This cat
 'This is a cat'

Examiner geta?
 Cat?

Osama la gettat la
 no cat no
 'This is not a cat'

Ahmad at the age of 2;6.2 said

Mother daxil deen ik
 inside hand your
 'Put your hand inside'

Ahmad a-sawi čedi la⁸
 I do like this no
 'I don't want to do like this'

Omar (1973) reports that to the question *?ummik hina?* 'Is your mother here?', the child answered *?ummi la?* and *hina la?* ('mother no', and 'here no' respectively). Another example, to a question *?il bit di đarabitik?* 'did this girl hit you?', a 3;6 girl answered *la?* 'no' then added *hiya darabitni la?* 'she hit me no'. Omar argues that this type of structure is used until about the age of 3; 6, that is at Stage I according to Omar.

On the other hand, the non-anaphoric *la* (*la?*) as a negative imperative is uncommon among the four children. It was not used by Sara and Osama and it was used only once each by Bader and Ahmad as in the following example when they were warning each other:

Bader:

la i- 'tiih
 no you fall
 'Don't fall down'

This is also consistent with other studies of Arabic where the negative imperative appears later (Abdu & Abdu 1986; Omar 1973).

It is worth mentioning that the negative form *ma* + V was used once by Bader at Stage II to express a negative imperative in the situation where he said⁹:

la ma i- tig-oon- *ah
no not you-pl hit him
No, don't hit her¹⁰

It is widely known that the earliest utterances of children consist of formulae. They are said to be perceived and stored holistically as unanalyzed and unproductive segments (Hickey 1993; Locke 1995) in a form with empty slots and the fixed element is either *ma* or *mu*. The intersection of the use of the formulaic forms and the non-formulaic of the same type (either *ma* + XP or *mu* + XP) may explain this finding. The more frequent formulaic negative form occurs, the higher the learnability of that form. One could argue that the children relied on formulaic frames. As they become able to segment these chunks, non-formulaic usage becomes widely and contrastively used. Then they combine and expand these patterns (Peters 1995).

The results of the current study reveal that the early appearance of the negative forms *ma* + XP and *mu* + XP were formulaic in nature and these formulae are relatively stable overtime. Further the affirmative forms of these formulae appear later than their negative counterparts. For example, Bader used the form *ma aku* 'there isn't' in session four while *aku* 'there is' appeared in session 15. The negative form *ma fii* 'there is nothing' appears once in Ahmad's data at Stage I while its affirmative counterpart *fii* 'there is' appears also at Stage II. Omar (1973) points out that the form *ma-fii-š* 'there isn't' is used by the youngest children in the two-word stage. Omar argues that since the form is used before its affirmative counterpart *fii* 'there is (are)', this could be strong evidence that this negative form is first learned as one unit.

The results also reveal the early use of negation elements to convey boulemaic modality as in *abi* 'want' which is consistent with what has been reported in relation to a number of languages (Bloom 1991). This is consistent with early Russian child language where the verb 'want' is negated significantly more frequently than are other verbs (Bar-Shalom & Snyder 1999). The nominal sentences (which include the existential elements *fii* 'there'), and the possession particle *ʕind* 'have/possess' are used early and more frequently in the early stages of development.

The form *mu* + A was not commonly found in the data. It was used once by both Bader and Ahmad at Stage I, while at Stage II, the form was rarely

used by the three boys (Osama, Bader and Ahmad). Surprisingly, *mu helw-a* 'not nice or beautiful' occurs in almost all the instances. However, Sara did not use that form during the recording period.

In general, the most frequently used negative form was *ma* + XP (61%) followed by *la/la?* (32%) and *mu* + XP (6%) as presented in Table 4. It appears that negation was encoded most frequently at Stage III (Stage I 16%, Stage II 32% and Stage II 52%) as shown in Table 5. In terms of the frequency and of early appearance, a developmental pattern of these negative utterances is signaled where anaphoric *la/la?* appears first, and *ma* + XP and *mu* + XP come second and third respectively. The spontaneous speech samples of the current study are consistent with previously reported data in Bellugi & Klima (1964 and 2004), the Wode's (1976) study where anaphoric negative particles appear before non anaphoric ones, followed by the sentential negation particles, as well as the data in Egyptian Arabic (Omar, 1973) and Palestinian Arabic (Abdu & Abdu 1986).

Individual differences

Although the four children had a similar pattern of development, individual differences were noticed. Ahmad was the only one who used the negative *mu* + A contrastively on 3 types of adjectives (*ħdamraa* 'red', *ħdelwa* 'nice, beautiful' and *botagaali* 'orange color')¹¹

Osama showed very little encoding of negation in the overall data. Sometimes Osama used the English negative particle *no* instead of *la?*. This is possibly because at age 2 Osama went to a nursery school where English served as the language of communication. The data show that he used several English words (mostly nouns, such as *car*, and *plane*) and twice he asked the question in English *what's this?*. However, at a certain point during the sampling period Osama started using Arabic words instead of English ones when (according to his mother) he began to play with a relative (a girl of his age), who speaks only Arabic.

It is interesting to highlight the creative use of the negative particles which mirrors the individual differences among the four children. Bader and Ahmad used the negative forms such as *maā fii* and *maā ku* in place of the negative particle *ma*. Bader at Stage II, instead of saying *ma a-rooħ* 'I am not going', said **ma fii a-rooħ ana* 'there isn't I go'. In another situation instead of saying *ma tegool* 'she doesn't say', he said *ma ku te-gool*. When he was talking about his brother he said *ma fii Aħmad* meaning 'not for Ahmad'. At Stage II, Bader said *ma ku ʔaaħ* 'there isn't fall down' and *ma ku ʔig* 'there isn't hit' instead of *ma ʔaaħ* 'he didn't fall down' and *ma a-ʔig* 'I don't hit'

respectively. As for Ahmad, at Stage II he said *ma ku naam* 'there isn't sleep' instead *ma naam* 'he didn't sleep'.

Bader produced the verb *biča* 'cry' 11 times in one session while talking about a new puzzle in which he was supposed to join opposite block figures together. One of the pieces was a boy crying and the complementary part was a boy laughing. Bader heard both verbs *cry* and *laugh* but he repeated the former more frequently and he imitated his mother once (which is excluded from consideration here). Interestingly, Bader was more comfortable with the verb *biča* 'cry' in the sense that he negated that verb instead of using the verb *ḡaḥak* 'laugh' in a construction such as:

xalaas ya- bči xalaas
finished- he cry finished
'He is not crying'

While in other situations at the same session, Bader said:

ma ya- bči
not he cry
'He is not crying'

Overall, it seems that the twins, Bader and Ahmad, were using negation particles more creatively than the other two children.

Inappropriate use of the negative markers

It appears that throughout the study period the form *ma* + *XP* was consistently correctly used whereas *mu* + *XP* was freely used both correctly and incorrectly. The inappropriate form *ma* + *XP* occurred occasionally instead of *mu* + *XP*. This suggests that these children were going through a transition period between well-established and emerging negative markers. This could also explain the developmental order and the frequency of the negative forms where the negative particle *ma* occurs earlier and more frequent than *mu*. Abdu & Abdu (1986) indicate that their children used *la* instead of the other negative particles, and *miš* was used instead *ma*.

The data show that throughout the sampling period Sara once inappropriately said *ma ṣaṣfoor* instead of *mu ṣaṣfoor* 'not a bird'. Looking at Osama's data, the inappropriate use of the negative forms occurs at Stage II, with Osama using *ma* instead of *mu*. The first appearance of the form *mu čeđi* 'not like this' was an inappropriate use as in **ma čeđi*. Osama used *ma* + *XP* three times instead of *mu* + *XP*, as in *ma ilḥeen* instead of *mu ilḥeen* 'not

now'. Interestingly, the appropriate and inappropriate forms of *mu hađi* 'not this one' and *ma hađi* respectively occurred in the same session.

As mentioned earlier, Bader used *xala#s* 'finish' instead of *ma*. This was an interesting example of the stereotypic use of the negative marker. It was seen in his data at Stage I, when he used inappropriately the form *A+la* instead of *mu+A* as in *qaweya la?* instead of *mu qaweya* 'not strong', while sometimes he said **ma qaweya* instead of *mu qaweya* 'not strong'.

As for Ahmad, at Stage II he said *ma čeđl* instead of *mu čeđi* 'not like this', and *ma ku naam* instead *ma naam* 'he didn't sleep'. The other inappropriate negative forms were mainly *ma+XP* instead of *mu+XP* which is consistent with what we have seen in the other children's data.

In conclusion, over the past decade, there has been a promising increase in cross-linguistic studies of children acquiring their native languages. The current study provides information concerning the development of a highly inflectional language heretofore not studied. In order to support the universality of the process of language development, studies on structurally different language such as Arabic are indispensable. Further, the study of the negative utterances in Kuwaiti Arabic provides a fruitful opportunity to further our understanding of Kuwaiti Arabic child language in particular, and the developmental pattern of negation in Kuwaiti Arabic in general. A degree of regularity is found in the emergence of negative forms, although individual differences in the rate of development exist. This study covered only the early development of negation in Kuwaiti Arabic. For example, negative constructions as in *wala* 'not a, none, at all' did not emerge during the course of this study, nor did other negative forms. Smadi (1983) predicts the complete acquisition of the negative system in Jordanian Arabic would be by the age of five. Additional studies on the development of negation in terms of syntactic representation and the interface of form and function would be an important next step.

ENDNOTES

- 1 - The current description of Kuwaiti Arabic is based on Kuwaiti Adults' language (the writer of this paper is a native speaker of the language), besides the description in Holes (1990) and Brustad (2000).
- 2 - Holes (1990) adds that some dialects of the Gulf region hold a gender distinction in the negative particle *mu*, that is *mu* with masculine subject and *mi* with feminine subject.
- 3 - Brustad (2000: 297) defines the negative copula as a combination of averbal negation particle with a personal pronoun, and differs in a structure and function from a negatively predicated sentence'.

- 4 - It is important to mention the usage of the possession particle *?end* as in the following sentences, *ma ?indi filuus* 'I do not have money' and *mu ?indi lifiluus* 'I do not have the money'. The former behaves like a verb and the latter behaves like a nominal predicate. It is also worth noting that *ma* precedes a bound pronoun as in: *ma hwa/hu rayi* 'he is not going' *hu/huwa* is homophonous with the 3rd person masculine singular pronoun which behaves like a verb in respect to the position and the type of the negative particle.
- 5 - Smadi (1983) indicates that the anaphoric negative particle can be differentiated from the non-anaphoric one in speech by the short pause after its production.
- 6 - An adjective can be created by the addition of the suffix */i/* to the noun, for example: *xashab* 'wood' becomes *xashabi* 'woody' (Erwin, 1963).
- 7 - The asterisk indicates an agreement error where the child used 2nd person masculine instead of 1st person singular and this could be due to the exact imitation of his mother.
- 8 - The adult form is *ma a-sawī ċeđi* 'I don't do this'.
- 9 - On a previous occasion a similar structure was used by the mother.
- 10 - The asterisk indicates the gender substitution where Bader used the 3rd person masculine pronoun instead of it's feminine counterpart since he was referring to his female cousin.

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Phonetic Transcription

Some International Phonetic Alphabet symbols (IPA) were used in this study to represent the Arabic utterances.

IPA		Arabic form
ħ	voiceless pharyngeal fricative	ح
ʔ	voiced glottal stop	أ
ʕ	voiced pharyngeal fricative	ع
ɣ	voiced velar fricative	غ
θ	voiceless dental fricative	ث
ð	voiced dental fricative	ذ
č	voiced palatal fricative	(there is no Arabic form)
š	voiceless palatal fricative	ش
x	voiceless velar fricative	خ
q	voiceless uvular stop	ق
t̤	voiceless alveolar stop (emphatic)	ط
s̤	voiceless alveolar fricative (emphatic)	ص
d̤	voiced dental fricative (emphatic)	ظ

Term	Definition
Auxiliary	A term use to refer to the set of verbs, subordinate to the main lexical verb, which help to make distinctin in MOOD, ASPECT, VOICE, etc. (Crystal, 1997, p:35).
Copula	Referring to a linking verb, i.e. a verb which has little independent meaning, and whose main function is to relate other elements of clause structure, especially subject and complement.... (Crystal, 1997, p:93).
Declarative	A term used in the grammatical classification of sentence types, and usually seen in contrast to imperative, interrogative, etc., moods. It refers to sentence types used in the expression of statement... (Crystal, 1997, p:104)..
Longitudinal	Follow individual subjects over time. (Gleason, 1997:30).

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* * *

نمو أدوات النفي في لغة الطفل الكويتي

خولة الجناعي

تبحث الدراسة نمو أدوات النفي في لغة الطفل الكويتي في مرحلة معينة ما بين سنتين وستين ونصف وكانت شريحة الدراسة لبنات واحدة وثلاثة أولاد حيث تم تسجيل اثنين منهم في دار الحضانة وأما توأم الأولاد فقد تم تسجيلهما في البيت. وتركزت الدراسة على مراحل نمو أدوات النفي الثلاث وهي: لا، ما ومو. أثبتت النتائج باكتساب الأطفال الأربعة لتلك الأدوات بنفس التسلسل والتدرج حيث ظهرت لا أو لا في لغة الأطفال ثم دخلت ما وأخيرا ظهرت أداة النفي مو.