

# **The Development of Negation in Early Childhood: A Study in Saudi Dialect**

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## List of Symbols <sup>1</sup>

AUX	Auxiliary
C'	Complimentizer
C°	Head position of the complimentizer
CP	Complement Phrase
DAT	Dative
EPM	Elicitation procedure method
f	feminine
I'	Inflection
I°	Head position of the inflection
INFv	Inflected verb
IMP	Imperfective verb
IMPF	Imperfective verb
IP	Inflection parameter
L	Leen (subject's name)
M	Mother
MOD	Modal
m	masculine
N	Noun
NEG	Negative
NegP	Negative phrase
Non-INFv	Non-inflected verb
NP	Noun phrase

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<sup>1</sup> Samples are listed alphabetically.

Obj	Object
PART	Participle
PERF	Perfect verb
pl	Plural
PRO	Pronoun
R	Researcher
S	Sentence/ Sara (Subject's name)
sg	singular
Spec	Specifier
SOV	Subject object verb word order
Sub	Subject
SVO	Subject verb object word order
T	Tense
V	Verb
VP	Verb phrase
VSO	Verb subject object word order
W	Waleed (Subject's name)
XP	Predicate phrase
1	First person
2	Second person
3	Third person
*	Incorrect usage

**Table for Saudi Consonant Phonemes:**

		<u>Bilabial</u>	<u>Labio-dental</u>	<u>Inter-dental</u>	<u>Dental (incl. alveolar)</u>		<u>Post-alveolar</u>	<u>Palatal</u>	<u>Velar</u>	<u>Uvular</u>	<u>Pharyngeal</u>	<u>Glottal</u>
					<b>plain</b>	<b>emphatic</b>						
<u><b>Plosive</b></u>	<b>voiceless</b>				ت t	ط T			ك k	ق q		ء ? ء
	<b>voiced</b>	ب b			د d	ض D	ج dʒ					
<u><b>Fricative</b></u>	<b>voiceless</b>		ف f	ث θ	س s	ص S	ش ʃ		خ x		ح ḥ	ه h
	<b>voiced</b>			ذ ḏ	ز z	ظ ṭ			غ ğ		ع ʿ	
<u><b>Nasal</b></u>		م m			ن n							
<u><b>Lateral</b></u>					ل l							
<u><b>Trill</b></u>					ر r							
<u><b>Approximant</b></u>		و w					ي j					

## **Introduction**

### **1.1 Introduction:**

The study investigates the emergence and usage of negators in Saudi child's speech. The data were collected from three monolingual Saudi-speaking children, from the age of one to three. Two analyses are conducted: firstly, the emergence of all negators in three children's speech was investigated in order to present an overall picture of the syntactic development of negation; secondly, all utterances containing negatives from the three subjects' speech samples were coded for six semantic functions of negation in order to understand the relationship between forms and functions of child negation.

### **1.2 Back ground:**

The development of negation has attracted a great deal of attention in the field of child language acquisition. One motivation for such attention stems from an interest in the acquisition process itself. Another motivation relates to understanding the process of child acquisition of negation as away of exploring and finding evidence of other broader issues such as the relationship between language acquisition and the child's cognitive ability, the nature of universal grammar, and the effect of input on child language development.

In the field of child language, there are different approaches to studying the development of negation; grammar-based approaches, function-based approaches, cognitive –based-approaches, and usage-based-approaches. Studies based on grammar (e.g. Klima & Bellugi 1966; Bellugi 1967; McNeill 1971; Clahsen 1988) have concentrated on the syntax of children's negation and neglected the semantic functions of negation. These studies argue that the stages children go through in acquiring the negative system of English run parallel to the stages of the derivation of negative sentences in transformational grammar. Function-based-approaches, on the other hand, were primarily semantic based focusing on the development of semantic function of negation. Studies based on this approach (e.g. Bloom 1970; McNeill and McNeill 1973; Vaidyanathan 1991) argue that it is possible to better understand the underlying motivation of the syntactic form if information about the semantic functions of child's negative utterances is considered.



Cognitive-based-approaches try to explain the children's negative development through their non-linguistic development. Studies using cognitive-based-approaches (e.g. Pea 1980; Choi 1988) argue that children's ability to negate verbally correlates very closely with their development of non-linguistic abilities (i.e. cognitive ability). However, not all aspects of child negation can be explained in terms of a child's cognitive ability (e.g. children's preference to use one form of negation over the other). Usage-based-approaches focus on the usage of negation not only in the child's utterances but also in the parent's speech. Studies based on usage-based-approaches (e.g. de Villiers & de Villiers 1979; Cameron-Faulkner et al 2007) argue that child's linguistic structure emerges from experience, and therefore, studies should pay attention to both child's input and the situational context to understand child's negative development.

The studies previously mentioned have been used as an example of specific approaches. However, it should be noted that this does not mean that each study used only one approach. There are studies which used more than one approach to investigate child's negation. Each approach presents insights in the development of negation but brings with it number of limitations. Therefore, using multiple approaches rather than one approach is more useful in understanding the development of negation.

Most of the studies that have been done on children's acquisition of negation are related to Indo-European languages and almost no systematic account has been attempted in the case of Arabian dialects. The variety in the structure of negation of natural languages is so great that information about child negation in Indo-European languages cannot be generalized to children negation in other languages. Arabic is a Semitic language, with a structure that is very different from Indo-European languages.

### **1.3 The current study:**

#### **1.3.1 The purpose of the study:**

In this thesis, an attempt is made to (1) trace the development of forms and functions of negation in three normal Saudi children, and (2) compare this development with the development of children's negation previously observed in other languages. The result of this study, therefore, will add information of Saudi negation development to the already existing corpus of children's negation in other languages. This result is particularly important because research in first language acquisition in Arabic is scarce.

#### **1.3.2 Outline of the study:**

This section will give a brief outline of the rest of the study. In chapter 2, an overview of the current literature that has been carried out in the field of children's acquisition of negation is presented. Section 2.2 relates to the syntactic aspects of children's negation. It summarizes some of the studies (from five languages English, German, Swedish, Japanese, and Egyptian) that investigate child's syntactic development of negation and identify the stages that children go through to acquire the negative forms. Section 2.3 relates to the semantic aspects of children's negation. This section summarizes some of the studies (from four languages English, Japanese, Korean, and Tamil) which investigate the semantic development of children's negation and identify the developmental sequence of the various meanings of negation. An attempt is also made at the end of each section to present the commonalities in children's acquisition of negation both on the syntactic level (section 2.2.6) and on the semantic level (section 2.3.5).

Chapter 3 describes the way of expressing negation in Saudi dialect. Since a child acquiring negation in any language must learn the semantic functions associated with negation as well as the syntactic structures used to convey those functions, both the syntactic and the semantic analyses of negation in this dialect are discussed in section 3.2 and 3.3 respectively.

The methodology used in this study is presented in Chapter 4. Section 4.2 presents a detailed description of the three subjects. The materials and the procedures of collecting the data are discussed in section 4.3 and 4.4. Section 4.5 deals with the

difficulties that were found in carrying out the proposed method. The criteria for the emergence of forms and functions of negation are discussed in section 4.7.

Chapter 5 is the main data chapter of this study. The first part (section 5.2) presents the results of the study and describes the syntax and the semantic development of negation of the three subjects. The second part (section 5.3) presents a discussion of the results in the light of the findings of previous studies.

Chapter 6 is the overall concluding chapter. Section 6.2 summarizes and highlights the important findings of the study. Section 6.3 links the results of this study with the findings of other studies from different languages. In section 6.4, suggestions are made as to further research needed in the field of child acquisition of negation, and specifically, the acquisition of Saudi negation.

## **Negation in Saudi Dialect**

### **3.1 Introduction:**

The way of expressing negation in this dialect of Arabic will be described, based on Holes's (1990:71-76) description of Gulf Arabic dialects, and on Brustad (1991:130-154) and Brustad's (2000:277-305) description of Kuwaiti dialect, but adapting their analysis and rules to Saudi dialect. The two dialects (i.e. Saudi and Kuwaiti) are quite similar in terms of the negation particles they use. In this chapter, I will only consider the facts which are relevant to the early stages of language acquisition. There are some types of negation which do not occur in early stages (e.g. /wala/ "neither"): these will not be discussed.

In some languages (e.g. Russian) the same particle is used no matter what the sentence type, and no matter what the form of predicate (Payne 1985:222). In Saudi, however, the choice of negative particle depends on the grammatical category of the predicate. With verbal predicates, the particle /ma/ is used in declaratives, and the particle /la/ is used in the imperative, while with non-verbal predicates (i.e. nominal, adjectival, adverbial, prepositional, and participle predicates) /mu/ is used. The particle /ma-/ can also be prefixed to personal pronouns to form a negative copula. In this chapter, the syntactic and the semantic distinctions between these three particles /ma/, /mu/, and /la/ and the negative copula will be described with examples.<sup>2</sup>

### **3.2 The Syntactic Analysis of Saudi Negation:**

Negation in Saudi can be divided into two basic categories, *verbal negation* and *predicate negation* (i.e. *non-verbal negation*), adopting the terms from Brustad (2000:281).<sup>3</sup> Under the former, we can list /ma/ for perfective and imperfective verbs, /la/ for imperatives, and /ma-/ which is prefixed to personal pronouns to form a negative copula. Under the latter, we can include the particle /mu/. In terms of position, these three particles come immediately before the element they are negating. /ma/ immediately precedes perfective and imperfective verbs, /la/ precedes imperative verbs, and /mu/ occurs immediately before the non-verbal element which it is

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<sup>2</sup> Unless citation is given, examples are mine.

<sup>3</sup> Holes (1990: 71) referred to *verbal negation* as *sentential negation*.

negating. Besides these negators, there is the general negator /laʔ/. It is worth mentioning that the general negator /laʔ/ which is used as *anaphoric negator* (i.e. negates the preceding proposition) is different from the non-*anaphoric negator* /la/ which negates the imperative verb. Examples (1-2) illustrate both negations.

(1) SPEAKER A: tabi                      ʃaiy?

Want-2ms      thing?

Do you want something?

SPEAKER B: laʔ, ʃukran lik

NEG, thank      2ms

No, thank you. (anaphoric negation)

(2) la    tugu:l                      ʃaiy

NEG 2-IMPsay-msg    thing

Don't say anything. (non-anaphoric negation)

In many languages, a negative sentence has a totally different construction from that of an affirmative sentence. For example, in Russian, changes take place in the case of nouns in the corresponding negative sentences, and in English, negation must involve an AUX as a supportive verb if there is no AUX in the corresponding positive sentence (Payne 1985:231). However, in Saudi, the only difference between an affirmative sentence and its corresponding negative sentence is the addition of a negative particle to the affirmative sentence. There is no change in the word order, no supporting verbs in negative sentences, and no changes in the case marker of the nouns in the corresponding negative sentences. This is illustrated in the following examples.

(3) ʃarab                      ħali:b

PERFdrink-3msg    milk

He drank milk.

ma   ʃarab                      ħali:b

Neg PERFdrink-3msg    milk

He didn't drink milk.

(4) hija    ħilwa

3fsg pretty

She is pretty.

mahi ħilwa

NEG-3fsg pretty

She is not pretty.

(5) haði dzamiṣa

This university

This is university.

haði mu dzamiṣa

This NEG university

This isn't university.

In addition, none of the three Saudi negative particle forms are inflected for number, tense, or gender. In short, in Saudi dialect, there exist two different types of negation, *verbal* and *non-verbal predicate negation*. These two types of negation are presented below with examples. Section (2.1) will look at verbal negation particles, and section (2.2) will discuss the uses of the predicate negation particle /mu/.

### **3.2.1 Verbal Negation Particles:**

In Saudi, /ma/ is the verbal negation particle which is used to negate perfect and imperfect verbs and is placed immediately before the verb, as in the following examples:

(6) ma ʃarab ħali:b

NEG PERFdrink-3msg milk

He didn't drink milk. (Perfect verb).

(7) ma tiʃarab ħali:b

NEG IMPF2msg-drink milk

You don't drink milk. (Imperfect verb) (Holes 1990:72).

If the sentence consists of future modal verb /raħ/ and an imperfective verb, the particle /ma/ should be placed before the modal and not before the main verb, as in (8);

(8) ma raħ jʃrab ħali:b

NEG will IMP 3msg-drink milk

He won't drink milk. (Future imperfective).ala

In Saudi dialect, /ma/ also negates pseudo-verbs. Pseudo-verbs are grammatically prepositional phrases, but they are verb-like expressions, therefore, they have been reanalyzed as verbs with respect to negation, such as the possession particle /ʕind-/ “have/possess”, and the existential elements /fi-/ and /ʕala-/. Historically /fi-/ and /ʕala-/ mean “in” and “on” respectively but these prepositions do not have their literal meaning i.e. they have a quite idiosyntactic meaning. These pseudo-verbs are negated in the same manner as verbs in Saudi dialect, that is, the verbal particle /ma/ is placed immediately before the pseudo-verb. This is clear in the following examples:

(9) ma fiih da:ʕi

NEG in-it need

There is no need. (Holes 1990: 72).

(10) ma ʕaleik

NEG on-2sg

Don't worry about it. (Brustad 2000:288).

(11) ma ʕinda ʕahada

NEG have-3msg diploma

He doesn't have a diploma. (Brustad 1991:139).

In addition to the verbal particle /ma/, Saudi dialect has another verbal negation particle, which is /la/. This particle is used to negate imperative verb forms and placed immediately before the imperative form of the verb, as in the following examples:

(12) la tifrab ʕali:b

NEG 2- IMPdrink-msg milk

Don't drink milk. (Holes 1990:72).

(13) la tugu:l ʕaiy

Neg 2-IMPsay-msg thing

Don't say anything.

Morphologically, the imperative form of the verb in the negative sentence is different from its counterpart in the corresponding affirmative sentence. When the subject is

second person, the prefix /t-/ is attached to the imperative verb in the negative sentence, and when the subject is third person the prefix /j-/ is attached to the imperative verb in the negative sentence. This is illustrated in example (14).

(14) ifrab ħali:b

IMPdrink-msg milk

Drink milk.

la t-ifrab ħali:b

NEG 2-IMPdrink-msg milk

Don't drink milk.

la j-ifrab ħali:b

NEG 3-IMPdrink-msg milk

Don't (let him) drink milk.

Moreover, Saudi dialect also has a negative particle which Brustad (2000:296) calls for Kuwaiti the “*negative copula*”, adapting the term from Cowell (1964:387).<sup>4</sup>The *Negative copula* represents a special case within *verbal negation*. However, it is distinguished by its combination of verbal negation particles /ma/ with the independent personal pronoun. The following table lists the forms of the negative copula in Saudi dialect:

Table 2: *Negative copula in Saudi dialect:*

The Negative Copula	
1sg	mani
1pl	mahna
2msg	mant
2fsg	manti
2pl	mantu
3msg	mahu
3fsg	mahi
3pl	mahum

---

<sup>4</sup> Hoyt (2005:3) refers to the *negative copula* as “*the pronoun of negation*”.



The *negative copula* is used with non-verbal predicates including participles, adjectives, nouns, and prepositional phrases. This is illustrated in the following examples;

(15) mani    na:zil

NEG-1sg   descending

I am not going down. (Brustad 2000:297).

(16) mahi    ħilwa

NEG-3fsg   pretty

She is not pretty.

(17) manti    Sara

NEG-2fsg   Sara

You are not Sara.

(18) mahi    fi    il-dzamiŋa

NEG-3fsg   in   the-university

She isn't in the university.

The negative copula in the above examples is emphatically negating the applicability of the non-verbal predicate to the subject.

It is important to mention that when the negative particle /ma/ is attached to the first singular pronoun /ana/, forming the negative copula, the negative sentence employs a short form of the subject pronoun /ni/, while the affirmative sentence employs longer form /ana/. This is illustrated in (19);

(19) ana   dzouŋan

1sg    hungry

I am hungry.

mani    dzouŋan

NEG-1sg   hungry

I am not hungry.

All in all, the *verbal negation* particle /ma/ normally negates perfect and imperfect verbs as well as pseudo-verbs. The particle /ma-/ is also prefixed to personal pronouns to form the *negative copula*, in this case it is used to negate the applicability of the non-verbal predicate to the prefixed subject. The negation particle /la/ is also

considered a *verbal negation particle* when it is used as non-anaphoric negator. In this case it is used to negate imperative verb forms.

### 3.2.2 Non-verbal Predicate Negation Particle:<sup>5</sup>

/mu/ is the common particle of (non-verbal) *predicate negation* in Saudi which normally negates nouns, pronouns, adjectives, adverbs, prepositions, as well as participles. /mu/ occurs immediately before the non-verbal element which it is negating. This is illustrated in the following examples from Holes (1990:73);

(20) haði mu dʒamiʕa

This NEG university

This isn't university.

(21) ʕaTni haða mu ða:k

Give-msg-1sg this NEG that

Give me this, not that.

(22) huwa mu zein

3msg NEG good

He is not good

(23) mu bukra

NEG tomorrow

It isn't tomorrow.

(24) beitna mu mʒa:bi il-bank

House-1pl NEG opposite the-bank

Our house isn't opposite the bank.

(25) il-farraʕ mu ʕa:yil il-ʔwra:g

The-servant NEG PART-remove the-paper-pl

The servant hasn't removed the papers.

The predicate negation particle /mu/ can be an alternative method for negating sentences (15-16-17) above, in which the negative copula is used to form the negation. Thus, instead of saying:

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<sup>5</sup> In his discussion of Moroccan and Palestinian dialects, Hoyt (2005:6) refers to the *predicate negation* particle as “*the negative auxiliary*”.

(15) mani      na:zil

NEG-1sg descending

I am not going down. (Brustad 2000:297).

One can alternatively say:

(26) ana mu      na:zil

1sg NEG descending

I am not going down.

And instead of saying:

(16) mahi      ħilwa

NEG-3fsg pretty

She is not pretty.

One can alternatively say:

(27) hi      mu      ħilwa

3fsg NEG pretty

She is not pretty.

(19) manti      Sara

NEG-2fsg Sara

You are not Sara.

(28) anti mu      Sara

2fsg NEG Sara

You are not Sara.

In addition, Saudi dialect uses the *non-verbal predicate negation* particle /mu/ as a marked form of negation with verbs. In the following example, /mu/ is used to negate the verb /tilʕab/ “play” instead of the *verbal negation* particle /ma/;

(29) xal      ba:lik      ʕla Sara, mu      tilʕab      bil      muyah

IMPER-keep attention-1sg to Sara, NEG IMP3sg -play with water

Pay attention to Sara [it better not happen that] she plays with water.

In example (29) above, /mu/ may be translated “it is better that it not be the case that she plays with water”, reflecting the irrealis status of the verb /tilʕab/ “she plays”. The imperfect verb in this position has progressive aspect. This type of negation (i.e. *non-verbal predicate negation*) has the effect of giving the verb an irrealis meaning, which is useful because irrealis imperfective forms cannot be distinguished in Saudi dialect, since the irrealis modality is not distinguished by the verb.

The following two sentences show a clear syntactic and pragmatic contrast. On the left is the predicate negation particle with an irrealis imperfective verb carrying the

force of an imperative; on the right is a normal verbal negation, which simply negates a proposition:

(30) *mu tilʕab*

NEG IMP3sg -play

It better not happen that she plays.

(31) *ma tilʕab*

NEG IMP3sg -play

She is not playing.

To complete the presentation of the uses of the negative particle */mu/* in Saudi, it is important to point out the contrast between the possession element */ʕind-/* in example (11) above, and a homophonous element in the language with partly existential and partly possessive meaning. We will adopt Mohamed and Ouhalla's (1993: 76-77) analyses of these two elements with respect to negation in Palestinian dialect. In the following example;

(32) *mu ʕindina: aħmad*

NEG in/at-1pl Ahmad

Ahmad is not at/in (our house).

\* *ma ʕindina: aħmad*

The element in question is roughly equivalent to that of the French preposition *chez* (at/in X's place), and is negated by the predicate negation particle */mu/* rather than the verbal negation particle */ma/*. In this respect it behaves more like nominal predicates, in contrast to its counterpart illustrated in (11) above, which behaves like verbal categories with respect to the negation particle.<sup>6</sup> In short, *non-verbal predicate negation* particle */mu/* normally negates non-verbal predicate. However, this particle is also used to negate imperative verbs to give them an irrealis meaning.

### 3.3 The Semantic Analysis of Saudi Negation:

A child learning negation in any language must learn both the semantic functions associated with negation and the syntactic structures used to convey those functions. Therefore, to have a full understanding of negation in spoken Saudi, the semantic functions of Saudi negation will be discussed in this section. There are different semantic functions of negation in Saudi dialect. In this study, six semantic functions of negation will be analyzed, using a modified version of the coding taxonomy

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<sup>6</sup> Similar analyses have been given by Holes (2004: 244).

proposed by Choi (1988). The taxonomy adopted in the present paper uses six of Choi's original nine categories. These categories proposed by Choi (1988) have been adopted by recent studies (e.g. Cameron-Faulkner et. al. (2007))<sup>7</sup>.

In Japanese, as well as in Korean, a specific semantic function of negation tends to be expressed by a single lexical item (e.g. *iya* for rejection, *dame* for prohibition, and *nai* for non-existence), whereas in Saudi as well as in English, the same negator is used for different functions. In Korean and Japanese, the choice of the negator then depends greatly on semantic factors, whereas in Saudi the choice of the negator depends mainly on what is being used as predicate. In other words, the negator chosen for particular function of negation depends primarily on what word classes can be used to express the affirmative equivalent of the negative sentence. In this respect, possession, desire and ability are usually expressed by verbs, and therefore, the verbal predicate negator /*ma*/ is usually used to negate them. Existence, for example, can be either expressed by pseudo-verb /*fi*/ "in/exist", or by the participle /*mouju:d*/ *existing*. In this case, the negator chosen to indicate non-existence is normally predictable on the basis of whether pseudo-verb or participle is being used as the predicate. The verbal negator particle /*ma*/ is chosen to negate /*fi*/ "in/exist", whereas the predicate negator particle /*mu*/ is used to negate the participle /*mouju:d*/ "existing". It is only in the case of prohibition where the choice of the negator depends on semantic

In this thesis, I will only consider the semantic categories of negation which are relevant to the early stages of language acquisition and have been investigated in previous studies in child language. Six semantic categories of Saudi negation will be the focus of this thesis. These categories are presented below with examples.

(1) ***Non-existence:***

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<sup>7</sup> When trying to describe how the child interprets negation, researchers find themselves compelled to use terms like non-existence, rejection and denial. However, as Schiesinger (1988:150) notes that the researchers are the ones who conceptualize in these terms what goes on in the child's mind and it is not necessarily the case that the child, too, uses those categories.

In Saudi the negation of the presence of an entity is indicated by adding the verbal particle /ma/ to /fi/ “in/exist”, such as (33);

(33) ma fi kurah

NEG in ball

There is no ball.

It can also be indicated by adding the predicate particle /mu/ to the participle /moudʒu:d/ “existing”, as in (34);

(34) mu moudʒu:dah il-kurah

NEG PART-exist-fsg the-ball

The ball didn’t exist.

Or by adding /mu/ to the adverb /hinak/ “there” or /hina/ “here”, as in (35);

(35) il-kurah mu hinak/hina

The-ball NEG there/here

The ball is not there/here.

## (2) *Rejection:*

The form used by adult Saudi to negate an offer, future event, or state in which the speaker is to be involved is the verbal particle /ma/ with the verb /ʔbgha/ “want” as in (36);

(36) ma ʔbʒa ħali:b

NEG IMPF-1sg-want milk

I don’t want milk.

## (3) *Prohibition:*

[/la/+V] is the form primarily used to issue a negative directive, as in example (37);

(37) la tiʃrab ħali:b

NEG 2-IMPdrink-msg milk

Don’t drink milk. (Holes 1990: 72).

## (4) *Denial:*

Negation of the truth of a previous proposition where the proposition may or may not be explicit can be indicated by three different particles: the particle of *verbal negation*

[/ma/+V], the particle of *predicate negation* [/mu/+predicate], and *the negative copula* [/ma-/ +pronoun]. The negator chosen is predictable on the basis of whether verb, pronoun, noun, adjective, participle, or adverb is being used as the predicate. This is illustrated in the following examples;

(38) Verbal negation particle:

Speaker A: Sara ʔkalat            ɣada-ha

Sara    PERF-eat-3fsg   lunch-3fsg

Sara ate her lunch.

Speaker B: ma ʔkalat            ɣada-ha

Neg PERF-eat-3fsg   lunch-3fsg

She didn't eat her lunch. (The predicate is the verb /ʔkalat/)

(39) Non-verbal predicate negation particle:

Speaker A: haði      il-bent   ħilwa

This-3fsg the-girl   pretty

This girl is pretty.

Speaker B: hi      mu   ħilwa

3fsg NEG pretty-fsg

She is not pretty. (The predicate is the adjective /ħilwa/)

(40) The negative copula:

Speaker A: haði      il-bent   ħilwa

This-3fsg the-girl   pretty-fsg

This girl is pretty.

Speaker B: mahi      ħilwa

Neg-3fsg   pretty-fsg

She is not pretty. (The predicate is the adjective /ħilwa/)

(5) **Inability:**

The three negative particles also used to negate ability. The choice of the negator again depends on what is being used as the predicate, as in examples (41-43);

(41) Verbal negation particle:

Speaker A: Sara, fili            il-saħən

Sara, remove-3fsg the-plate

Sara, remove the plate.

Speaker B: ma ʔgdər ʔfilah

NEG IMPF-1sg-can IMP-remove-3msg

I cannot remove it. (The predicate is the verb can)

(42) Predicate negation particle:

Speaker B: mu gadrah afilah

NEG PART-able-fsg IMP1sg-remove-3msg

I couldn't remove it. (The predicate is the participle /gadrah/)

(43) The negative copula:

Speaker C: mahi gadrah tfilah

NEG-3fsg PART-able-fsg IMP 3fsg-remove-3msg

She couldn't remove it. (The predicate is the participle /gadrah/)

(6) *Epistemic negation:*

The three different particles are again used to negate the possession of knowledge. The negator chosen is also predictable on the basis of what word classes can be used to express the affirmative equivalent of the negative sentence. This is illustrated in the following examples;

(44) Verbal negation particle:

Speaker A: Sara, wi:n il-Saħən?

Sara, where the-plate

Sara, where is the plate?

Speaker B: Sara tadri/tʃarif

Sara IMP-3fsg-know

Sara knows.

The negative equivalent of the affirmative sentence:

Speaker B: Sara ma tadri/tʃarif

Sara NEG IMP-3fsg-know

Sara doesn't know. (The predicate is the verb knows)

(45) Predicate negation particle:



Speaker B: Sara darjah/ʕarfa

Sara PART-know-3fsg

Sara knows.

The negative equivalent of the affirmative sentence:

Speaker B: Sara mu darjah/ʕarfa

Sara NEG PART-know-3fsg

Sara doesn't know. (The predicate is the participle /darjah/).

(46) The negative copula:

Speaker B: hi darjah/ʕarfa

3fsg PART-know-3fsg

She knows.

The negative equivalent of the affirmative sentence:

Speaker B: mahi darjah/ʕarfa

NEG-3fsg PART-know-3fsg

She doesn't know. (The predicate is the participle /darjah/).

In sum, the choice of the negator in Saudi does not depend mainly on semantics, as is the case in Japanese negation, but on what word classes can be used to express the affirmative equivalent of the negative sentence. Therefore, the same semantic function (e.g. inability) can be expressed by different syntactic forms (i.e. [/ma/+V], [/mu/+PART], or [copula+PART]).

### 3.4 Conclusion:

Syntactically, negation in Saudi can be divided into two basic categories, *verbal negation* and *non-verbal predicate negation*. Under the former, we can list /ma/ for perfective and imperfective verbs, /la/ for imperatives, and /ma-/ which is prefixed to personal pronouns to form a negative copula. Under the latter, we can include the particle /mu/. Some types of negation are not discussed in this paper, because they do not normally occur in early stages of language development.

Semantically, six functions of negation which are normally acquired in early stages of child language development have been analyzed in this paper: rejection, non-existence, denial, prohibition, inability, and epistemic negation. In Saudi dialect, there

is no one-to-one correspondence between these semantic functions and individual negators. In other words, the same semantic function (e.g. denial) can be expressed by different syntactic forms. Syntactic as well as semantic analyses are required to have full understanding of negation in Saudi dialect. Both analyses will help us examine the development of forms and functions of negation in Saudi children.

## Results and Discussion

### 5.1 Introduction:

This chapter presents and discusses the results of this study. Two aspects of negation were studied in detail: (1) the syntactic development of negation, and (2) the relationships between forms and functions of negation for three Saudi children. The research question is: would Saudi-speaking children go through the same stages in the acquisition of forms and functions of negation as other children from different language backgrounds? We hypothesized that the data from the three Saudi subjects will show that Saudi-speaking children seem to go through the same stages in the acquisition of the six semantic function of negation (rejection, prohibition, denial, non-existence, inability, and epistemic negation) as other children from different language backgrounds observed in previous studies. However, we expect to find some differences in the acquisition of negative forms which may be ascribed to the syntactic characteristics of negation of Saudi. The results are consistent with both hypotheses.

### 5.2 Results:

In total, there were 24 tokens of verbal negation and 10 tokens of non-verbal negation from Sara, 35 tokens of negation from Waleed, and 31 tokens of negation from Leen. Table 4 shows the number of occurrence of negative utterances in each function in the speech of the three subjects.

Table 4: *Functional Distribution of the three subjects' negative utterances:*

	Rejection	Prohibition	Disappearance/ Non-existence	Denial	Inability	Epistemic
Sara	9 (4)	6 (3)	5 (1)	4	(2)	
Waleed	7	5	8	12	3	
Leen	10	4	3	8	4	4

*Note:* numbers in parentheses refer to the number of times non-verbal negation occurred in each function in Sara's data.

Based on the criteria discussed in chapter four, seven stages of acquisition of negation seem to emerge:<sup>8</sup>

### **First Stage:**

In the first stage and before Sara (1;1-1;2) used a recognizable negative word for expressing negation, she used a combination of actions: gesture, vocalization and eye contact to express negation. Different non-verbal gestures (e.g. pointing, shaking the index finger, pushing a proffered object, and opening the palm of the hand) were performed by Sara to express different functions of negation. The two functions that were expressed at this early stage were rejection and prohibition. As an example of rejection, Sara (1;1) pushed away a baby doll in response to the researcher's offer "Sara, take the doll". Pushing was accompanied by vocalization (the vowel /ʔah/ or /ʔaʔ/) and eye contact with the researcher. Pushing was also used to express prohibition. For example Sara (1;2) prohibited her brother from touching her toy by pushing his hand away from the toy and saying /ʔaʔ/.

Negating the presence of an entity was also expressed by a combination of verbal and non-verbal forms. For example, when Sara's mother asked her "where is the sweet?", Sara (1;4) looked at her mother and opened her hand showing that the palm of her hand was empty. Negating an ability was also expressed by a combination of gesture (pointing to an object out of reach) and vocalization (e.g. /ʔah/). For example, When Sara's mother asked Sara (1;3) to bring her jacket which was hanging on the wall, Sara pointed to her jacket while producing the sound /ʔah/ after several attempt to reach the jacket.<sup>9</sup> However, in Sara's data, inability and non-existence were expressed by gesture only after rejection and prohibition were coded verbally.

Some of the gestures used by Sara seem to be copied from her parent's practices. For example, Sara's mother shook her index finger when she said /laʔ/ "no" to warn Sara

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<sup>8</sup> These seven stages are based on three children representing different ages (Sara 1;1-1;8, Waleed 1;9-2;1, and Leen 2;8-2;9); therefore, we have not seen any of the three subjects going through all the seven stages. This study is only assuming that these age differences represent stages that one might go through when s/he acquiring Saudi negation. Therefore, the seven stages discussed in this chapter are in terms of progression of acquisition, and not in terms of ages.

<sup>9</sup> It might be argued though that in this early stage adult can never be absolutely certain about what children's pointing mean. It could be a request "*I want my jacket*", inability "*I cannot reach my jacket*", or a command "*Give me my jacket*".

against doing something forbidden. As a kind of imitation, Sara also shook her finger to prohibit someone from doing something. For example, in the second session Sara (1;2) shook her index finger to prohibit the researcher's daughter from jumping on the chair. Shaking the finger was accompanied by vocalization (the sound /ʔaʔ/) and eye contact with her mother and the researcher's daughter. In sum, the subject used /ʔah/ together with a gesture in this first stage of acquisition of negation.

### **Second Stage:**

The first negative form heard from the youngest subject was the free form /laʔ/.<sup>10</sup> Sara first used /laʔ/ around the age of 1;3. In this stage, Sara's /laʔ/ is anaphoric in meaning in that it only negates a previous utterance/action. /laʔ/ was first used to reject (mainly an offer) and to prohibit someone from doing something. Thus, at the second stage both functions of rejection and prohibition were expressed by the same negator. This is illustrated in (1) and (2):

(1) (Sara, aged 1;4)

(Sara's mother is holding a carton of eggs)

1. M tibghi:n?  
Do you want?
2. S Lah  
No.

(2) (Sara, aged 1;3)

(Sara's mother is holding a lemon in her hand. Her mother teases her saying it is hers)

1. S ħagi  
Mine.
2. M (holding the lemon up).
3. S Laʔ (stretching out her arm trying to reach the lemon).  
No.
4. S Lah..hah  
No..hah
5. S ħagi zib  
Mine give it back.
6. M ħagi: (holding the lemon up)

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<sup>10</sup> /lah/ and /la:h/ were sometimes used by Sara as variants of /laʔ/.

- Mine.
7. S Laʔ (looking at her mother to give it to her).  
No.
  8. M ʔagi  
Mine.
  9. S ʔagi ʔagi ʔagi (stretching out her arm to reach the lemon).  
Mine mine mine.

In (2) Sara said /laʔ/ (line 3) to prohibit her mother from holding the lemon up. Similarly, /laʔ/ (in line seven) is used to prohibit her mother from saying that the lemon is hers. In other words, /laʔ/ expresses prohibition (/laʔ tgu:li:n ʔagi:/ “Don’t say mine”) rather than denial (/mu ʔagi:k/ “It is not yours”). Sara has not acquired denial yet. Sara’s (1;3) inability to express judgment of the falsity of previous utterance in the same session as in (3) and in later session as in (4) provides support that denial negation has not yet emerged in Sara’s speech.

(3) (Sara, age 1;3):

1. R: haʔa kabusi:ʔ (Pointing to a banana)  
Is this a hat?
2. S: i:h (Smiling and pointing to the banana)  
Yes.

(4) (Sara, age 1;4):

(The researcher is holding a banana)

1. R haʔa Tomaʔ?  
Is this a tomato?
2. S (tries to take the banana).
3. R haʔa Tomaʔ?  
Is this a tomato?
4. S (looks at the banana and doesn’t answer).

The above examples show that Sara is cognitively unable to deny the truth of previous utterance. According to Hummer et al. (1993:609), the minimal requirement for children to master denials is to handle two mental models. These are models of a situation. For example, in (3) when the researcher asked “Is this a hat?” there was no cue in the immediate visual context for Sara to evoke the concept “hat”. To be able to deny, according to Hummer et al. (1993), Sara has to be capable of putting in her mind two mental models: first (i.e. model 1) what is true “this object is a banana” and second (i.e. model 2) what is described linguistically by the researcher i.e. the entity “a hat”. Perner (1991:51-67) argued that a child’s pretend play is an indication that

the child is capable of putting in his/her mind multiple models which allow him/her to present not just what is true “this object is a piece of cloth”, but also an alternative to this true description (i.e. the pretended situation) “ this object is my pillow”. According to Sara’s mother, Sara (1;4) had not yet been seen engaged in pretend play, which provides further support for the assumption that denial negation has not yet emerged in Sara’s speech.

Besides using negation in the second stage to show prohibition and rejection, Sara (1;4) started negating the presence of an entity. However, Sara does not yet have a negative word for disappearance/non-existence. Sara used a distinct form to express this function. This form is the non-negative word */baħ/* “gone” as in (5):<sup>11</sup>

(5) (Sara, age 1;4):

(Sara finished eating sweets from a glass container. The container is now empty.)

1. M    *wen il-ħalawah?*  
Where is the sweet?
2. S    *baħ* (holding the empty container).  
Gone.
3. R    *wen il-ħalawah?*  
Where is the sweet?
4. M    *wen il- ħalawah?*  
Where is the sweet?
5. S    (opened her hand showing that her palm is empty).

In (5), as well as in other similar instances in early stages, Sara indicated absence of an entity proximately in contexts where entities had disappeared immediately beforehand, rather than in contexts, where entities had not existed in her immediate surrounding. For example, when Sara’s mother asked Sara (1;4) (*/wien baba/* “where is daddy?”) while he is not at home, Sara neither negated his existence nor searched for him. Thus Sara’s */baħ/* “gone” at this stage is an expression of disappearance rather than non-existence.

### **Third Stage:**

In this stage, the earlier acquired negative form */laʔ/* is used in this stage to express a new negative function which is denial, as in example (6):

(6) (Sara, age 1;5):

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<sup>11</sup> The word */baħ/* was used by the youngest child Sara as an assimilated form of */raħ/* “gone”.

1. M haði TamaT? (Pointing to banana).  
Is this a tamato?
2. S La?  
No.
3. M we:n il-TamaT? (Holding banana and tomato)  
Where is the tomato?
4. S haði (pointing to the tomato).  
This.

In the third stage, Sara (1;5) was seen engaged spontaneously in pretend play. By way of example, Sara (1;5) pretended to feed the teddy bear from an empty plate. That is, Sara exhibited the minimal requirement that Hummer et al. (1993:609-11) assumed to be essential precondition for success with denial which is being able to put in mind two mental representations. In (6), for example, Sara is able to put in her mind two mental representations: 1) what is true “that the object is banana” and 2) what is described linguistically by her mother “tomato” and these two mental representations allowed her to negate the preposition.

#### **Fourth Stage:**

In the previous two stages (i.e. stage two and three), Sara (1;3-1;5) was only producing one-word negation. In the fourth stage, Sara (1;6) started to include the negator within a sentence. This negator is the verbal negative particle /ma/. Sara (1;6) appeared to have established the pattern of negating sentences of [/ma/+X], where X was mainly occupied by the verb /abɣəh/ “want”. This is illustrated in example (7):

(7) (Sara, age 1;6):

(Sara’s mother is holding a glass of water and forcing Sara to drink)

1. M xuði: moujəh  
Have some water.
2. S (turning her head refusing to drink).
3. M tibghein moujəh  
Do you want water?
4. S ma abghəh  
I don’t want.
5. M xuði:  
Take.
6. S ma abghəh  
I don’t want.



In this example, Sara expressed rejection by using the new form /ma/ to negate the verb /abɣəh/ “want”. Evidence that /ma abɣəh/ “don’t want” is not being used as unanalyzed “chunk” comes from the fact that the subject had already produced the corresponding affirmative form /abɣəh/ “I want”. The subject used this multi-word negation specifically for rejection and never used this complex form for prohibition. The earlier acquired form /laʔ/ (i.e. one-word negation) continues to be used for prohibition as in (8) and less often for rejection. Thus, contrary to the previous stage, in this stage the two functions rejection and prohibition were formally differentiated for the subject.

(8) (Sara, age 1;6):

1. M Sara, mama, wein jakeitək?  
Sara (darling) where is your jacket?
2. M yalla, ben ruH, ben ruH.  
Come on, we will go, we will go.
3. M hati: jakeitək ben ruH ʃaghəl seijarəh  
Bring your jacket. We will go to the car
4. S haði: (playing with a toy phone)  
This.
5. M yallah  
Come on.
6. M bai Sara, baru:H.  
Bye Sara, I’ll go.
7. S La:h  
No.

In (7), Sara prohibited her mother from leaving her by using the one word negation /laʔ/ instead of using multi-word negation [/laʔ/+IMP V] such as /laʔtruhi:n/ “Don’t go”. In this respect, we could suggest that the first negative function that is first expressed by more complex syntax (i.e. multi-word negation) is rejection. In addition, it is important to point out that the data show that there is no instance where the subject produced multi-word negatives in which the general negator /laʔ/ is over generalized to be used in negating the preceding sentences i.e. [/laʔ+S] (e.g. /laʔ abghəh/ “no want”). In this respect, the subject’s negative utterances correspond to adult Saudi from the beginning.

#### **Fifth Stage:**

In this stage, the data shows the youngest subject Sara (1;8) used the particle /*ma*/ to negate the pseudo verb /*fi*/ “in/exist” as in (9):

(9) (Sara, age 1;8):  
(Sara’s mother hides a small ball in her left hand)

1. M **wein il-kurəh**  
Where is the ball? (Showing her both hands to Sara while both of them were closed)
2. S (looking at the mother’s both hands).
3. M **weinha**  
Where is it?
4. S (points to the right hand).
5. M (opens her right hand).
6. S (looking at the empty palm) **ma fi.**  
Not in/exist
7. M **ma fi. weina?**  
Not in/exist. Where is it?
8. S (opens the left hand and finds the ball).
9. S **hina** (smile).  
Here

It is noticeable in this stage that for disappearance/non-existence, the two subjects (Sara 1;8 and Waleed 1;11) used both an old form and a new form. The old form was the non-negative form /*baħ*/ “gone” which was acquired during stage three, and the new form was the multi-word negation /*ma*/ + pseudo verb (i.e. /*ma fi*/ “not in/exist”). These two forms seemed to be used interchangeably. Evidence for using both forms interchangeably is found in the data from the older subject Waleed (1;11) as in (10) and (11):

(10) (Waleed, age 1;11):

1. M **wien baba**  
Where is daddy?
2. W **raħ**  
gone
3. M **wien ʔsi:l**  
Where is Aseel?
4. W **raħ landan**  
Go London

(11) (Waleed, age 1;11):

1. M wien Samaima  
Where is antie?

2. W ma fi  
Not in/exist

Contrary to previous stage, in the fifth stage, as shown by examples (10) and (11) above, the subject was able to negate the presence of an entity in a context where the entity had not existed in their immediate surrounding.

For the functions of denial and prohibition, Sara expressed them by the anaphoric negator /laʔ/. Therefore, no development seemed to occur in the fifth stage in the way these two functions were expressed in the youngest subject's speech.

### **Sixth Stage:**

Two developments characterized this stage. First, a new form was produced to express the previously acquired function of prohibition. This form is [/la/+IMP V]. Secondly, the previously acquired form [/ma/+V] was used to express the newly emerged function of inability. For prohibition, the older subject Waleed (1;9) shows evidence of having developed a pattern that the youngest subject Sara (1;8) did not have yet. This pattern is the complex form [/la/+IMP V] as in the following examples:

(12) (Waleed, age 1;9):

1. M aftaħa (Pointing to the door)  
Open it?

2. W laʔ (he is pushing the door)  
No

3. M yala bruħ (Waleed's mother is trying to open the door to go out)  
Come on I'll go

4. W laʔ laʔ  
No no.

5. M baftaħa ilbab. bruħ  
I'll open the door. I'll go.

6. W la iftaħa ilbab (he is still pushing the door trying to close it)  
Don't open the door

7. M abaTlaʕ  
I want to go.

8. W laʔ, ana.  
No, me

9. W (He opens the door and goes out side).

(13) (Waleed, age 1;10):

(The mother tells Waleed that she will go to grandma's house)

1. W la ruḥ dʒadəh  
Don't go to grandma
2. M baruḥ  
I'll go
3. W laʔ (Shaking his finger and looking at his mother)  
No
4. M ʔruḥ  
(Do you want me to) go?
5. M laʔ (Crying)  
No

In the above examples (12) and (13), Waleed (1;9 and 1;10) used the complex form [/la/+IMP V] as well as the anaphoric /laʔ/ to prohibit his mother from opening the door (12) and from going to grandma (13), though morphologically the two verbs /ruḥ/ "go" and /iftaḥ/ "open" were not inflected correctly for imperative.

For inability, Waleed (1;9-10) used the verbal particle /ma/ to express inability as in the following examples:

(14) (Waleed, age 1;9):

(Waleed's mother gives him a bottle of water to open it)

1. M iftaḥi  
Open it
2. W (Turning his head refusing to take the bottle) ma abyā  
I don't want
3. M abyā mai  
I want water
4. W (Agree to take the bottle)
5. W (Trying to open it)
6. W iftaḥ (Trying to give the bottle back to his mother)  
open
7. M anta iftaḥ. tigdər  
You open it. Can you?
8. M tʃrif  
Do you know?
9. W ma iftaḥa ana (gives the bottle to his mother).  
I (can) not open it.

(15) (Waleed, age 1;10):

(Waleed's mother gives him a bottle of water to open it)

1. M *tigdər tftaħa?*  
Can you open it?
2. M *agdər*  
I can.
3. W (Trying to open it) *ʔah ʔah*
4. M *iftaħi*  
Open it
5. W *mugafal*  
It is locked
6. M *mugafal*  
Locked!
7. M *ħawil bigouwa*  
Try strongly
8. W (Trying again to open the bottle)
9. M *bigouwa*  
Strongly
10. W *ma aftaħ, mugafal*  
I (can) not open, it's locked.

In examples (14) and (15), Waleed said */ma iftaħa/* “I not open” instead of */ma agdər aftaħa/* “I cannot open it”. It seemed from the data that the modal verb */agdər/* “can” is absent in Waleed's negative sentences and present in his positive declaratives. Therefore, the inability function emerged in the subject's speech before its specific form (*/ma ʔgdər/* “can't”).

It is important to mention that the data failed to show that Waleed had acquired other new forms or functions during the final three sessions (i.e. when Waleed was between the age of 1;11 and 2;1). In terms of function, Waleed acquired five of the six semantic functions of negation. These are rejection, prohibition, non-existence, denial and inability. Epistemic negation, on the other hand, was not heard in Waleed's speech even in the last session. In terms of forms, Waleed only used the simple form */laʔ/* for denial (similar to the youngest subject Sara). Complex forms such as *[/ma/+V]* were never used by Waleed for denial even in the final session (i.e. when Waleed's age was 2;1). For non-existence, Waleed continued to use the negative form */ma fi/* “not in/exist”, beside the non-negative word */rah/ gone*. More complex forms (i.e. the non-

verbal particle /*mu*/ and the copula) were not heard in Waleed's speech. In short, at stage six, the subject (2;1) acquired only the following negative forms: (1) the anaphoric negator /*laʔ*/; (2) the imperative form [*la*/+ IMP V]; and (3) the verbal particle [*ma*/+X] where X can be occupied by the verb /*abya*/ *want* and the pseudo verb /*fi*/ "in/exist".

### **Seventh Stage:**

The acquisition of the copula (i.e. /*ma*/-pronoun) and the non-verbal particle /*mu*/ is considered to be stage seven. The younger subjects (Sara 1;1-1;8 and Waleed 1;9-2;1) were not heard using these two forms of negation; these two negators were only heard in the speech of the oldest child Leen (2;8-2;9). In the following examples (16) and (17):

(16) (leen, age 2;8):

1. M    *haði: bagarəh* (pointing to a cat in flash card).  
Is this a cow?
2. L    *haði: mahi: bagarəh. haði: bisæh.*  
This is not a cow. This is a cat.

(17) (leen, age 2;8):

1. R    *haða bantalu:n?* (Pointing to Leen's dress)  
Are these trousers?
2. L    *haða mahu banTalu:n*  
These are not trousers.

We can see that Leen (2;8) can attach different pronouns (/hi/ 3fsg and /hu/ 3msg) to the particle /*ma*/ forming the negative copula, which indicates that the negative copula was used productively by Leen (2;8). In the following example,

(18) (leen, age 2;9):

(The researcher asked Leen to show her where Leen's shoes are)

1. R    *weinha? warini: ʔijaha.*  
Where is it? Show it to me.
2. L    *laʔ, mu ʔagatik.*  
No, it's not yours.
3. R    *adri: mu ʔagati:. bas warini: ʔijaha.*  
I know it is not mine. But show it to me.
4. L    *ma abyah.*  
I don't want.

in line 2, Leen (2;9) used the non-verbal particle /*mu*/ to deny the researcher's possession of the shoes by negating the pronoun /*hagatik*/ "yours". It is important to mention that this is the only instance where Leen used the particle /*mu*/, therefore, Leen's use of this particle did not satisfy the 2+ productivity criteria discussed in the methodology chapter. We will discuss Leen's use of /*mu*/ in more details in section 5.3

Besides using the copula and the non-verbal particle, the data showed that Leen used the verbal particle /*ma*/ productively i.e. to negate various types of verbs (such as /*abɣah*/ "want", /*ʔgdər*/ can, /*ʔʕrif*/ "know", /*rah*/ "will", /*tinɸak*/ "open", /*Deijʕ*/ "lose", and /*ʔxað*/ "take") and pseudo verbs (/*fi*/ "in/exist" and /*ʕind*/ "have"). On the other hand, the younger subjects Sara (1;1-1;8) only used this particle to negate the verb /*abɣa*/ "want" and the pseudo verb /*fi*/ "in/exist" and Wleed (1;9-;2;1) used it to negate the ability besides /*abɣa*/ and /*fi*/ . Examples from Leen's data are as follow:

(19) (leen, age 2;8):

(Leen is holding a picture-book)

1. R    *tiʕrafi:n ʔeij Haða?* (Pointing to an insect)  
Do you know what is this?
2. L    *ma ʔʕrif.*  
I don't know.
3. R    *tiʕrafi:n ʔeij Haða?* (Pointing to a car)

(20) (leen, age 2;8):

(Leen's mother gave Leen a can of Pepsi)

1. M    *iftaħ:ha.*  
Open it.
2. L    *ma ʔgdər aftaħha.*  
I cannot open it.
3. M    *iftaħ:ha mama, haouli:.*  
Open it darling, try.
4. L    *ma ʔgdər aftaħha.*  
I cannot open it.

(21) (leen, age 2;9):

(The researcher asked Leen to open a bottle of soft drink)

1. R    *tigdri:n iftaħiha?*  
Can you open it?
2. L    *ma ʔʕrif.*  
I don't know.

3. R ḥaouli:, ḥaouli: iftaḥ:ha  
Try, try to open it
4. L ma raḥ aḥaouil  
I won't try.

(22) (leen, age 2;8):

1. R tibyi:n tifrbi:n moujəh?  
Do you want water?
2. L laʔ, ma abyah.  
No, I don't want.

(23) (leen, age 2;9):

(The researcher asked Leen to open the hat of a toy)

1. R iftaHiha.  
Open it.
2. L ma tinfak.  
It doesn't open.

(24) (leen, age 2;9):

(leen is looking for her lost shoes)

1. R jimkin il-bisah ʔxaḏatha?  
May be the cat takes it?
2. L laʔ, il-bisah ma ʔxaḏatha  
No, the cat didn't take it

(25) (leen, age 2;8):

(The researcher hid the can of Pepsi and the mother asked Leen where she put it)

1. M inti, fi:n wadeiti:ha?  
You, where did you put it?
2. L ana ma Deijʔtəha.  
I didn't lose it.
3. M fi:n wadeiti:ha?  
Where did you put it?
4. L ana ma Deijʔtəha. (Shaking her head)  
I didn't lose it.

(26) (leen, age 2;9):

(The researcher and Leen are playing with toys. Leen is holding a dinosaur toy called Dorothy)

1. R wein il-ʔuʔfu:rə?  
Where is the bird?
2. R ʔindik il-ʔuʔfu:rə?  
Is the bird with you?
3. L ma ʔindik ʔuʔfu:rə. ʔindi Doroθy



I don't have bird. I have Dorothy.

(27) (leen, age 2;9):

(The researcher hides Leen's shoes)

1. R    **ħaTeitiha hina?** (The researcher is pointing to the place where Leen put her shoes)  
Did you put it here?
2. L    **ma fi.**  
Not in
3. R    **wein raħat?**  
Where did it go?
4. L    **ma adri:.**  
I don't know.

The above examples (19)-(27) indicate that the oldest subjects Leen (2;9) had mastered the verbal particle /*ma*/ since she used it to negate various types of verbs and pseudo verbs and no errors were found through out the data (i.e. Leen placed /*ma*/ correctly before verbs).

In terms of the relationship between form and function of negation, in this stage, a new negative form was produced by the older subject to express non-existence. This negative form is the copula (as in 28) which was not heard from the other younger subjects.

(28) (leen, age 2;8):

1. R    **Leen, wain baba?**  
Leen, where is dad?
2. L    **baba mahu foug**  
Dad is not upstairs.

In this example, Leen used the new form (the copula /*mahu*/) to negate the existence of her father upstairs.

For the function denial, contrary to the other youngest subjects who only used the negator /*laʔ*/ "no" to deny, Leen (2;8-1;9) used other negators (either the copula or the verbal particle /*ma*/) to deny a previous utterance. In example (29):

(29) (leen, age 2;8):

1. M    **ħaði: bagarəħ** (pointing to a cat in flash card).  
Is this a cow?
2. L    **ħaði: mahi: bagarəħ. ħaði: bisæħ.**  
This is not a cow. This is a cat.

Leen produced an elaborated denial by using negator (the copula */mahi/*) along with the incorrect object name (*/bagarəh/* “cow”) as well as correction (*/bisəh/* “cat”). This kind of elaborated denial was not heard in the speech of the two youngest subjects. Furthermore, using the verbal particle to deny was only found in Leen’s speech. Although the younger subjects were used this form [*ma/+V*] to reject, they were not heard using this form to deny a previous utterance. On the other hand, as we mentioned earlier, Leen used the particle */ma/* productively to negate various types of verbs (see (23)-(26) above). An example of Leen’s uses of the form [*ma/+V*] to denial is in (24) above. In (23) the researcher told Leen that the cat might be the one who took her shoes, Leen denied the researcher’s proposition by using the complex form (*/ma ʔxaðatha/* “didn’t take it”).

For inability, the correct negative form (*/ma ʔgdər/* “can’t”) was used by Leen as in (30):

(30) (leen, age 2;8):

(Leen’s mother gave Leen a can of Pepsi)

1. M iftaḥ:ha.  
Open it.
2. L ma ʔgdər aftaḥha.  
I cannot open it.
3. M iftaḥ:ha mama, ḥaouli:.  
Open it darling, try.
4. L ma ʔgdər aftaḥha.  
I cannot open it.

Though the function inability emerged in the speech of the younger subject Waleed (1;9), syntactically this function was not expressed correctly because the modal verb */agdər/* “can” was missing (see (14) and (15) above). The correct form was only found in the speech of the oldest subject Leen.

For epistemic negation, this function only occurred in the speech of Leen, as in (31):

(31) (leen, age 2;8):

1. M Leen, wain baklatik?  
Leen, where is your hair clip?
2. L ma ʔdri:  
I don’t know.
3. M wain baklatik?

Where is your hair clip?

4. L hinaka (Pointing with her finger).  
There.

In (31) Leen expressed correctly epistemic negation by using the form (/ma ʔdri:/ “don’t know”). Since this epistemic negation was never heard from the two youngest subjects, this function of negation is considered to have emerged relatively late in the development of negation.

In sum, based on data from the three Saudi subjects, seven stages of acquisition of Saudi negation seem to have emerged in this study. Evidence of the first five stages mainly came from the youngest subject Sara (1;1-1;8). Evidence of the sixth stage came from the speech samples of the male subject Waleed (1;9-2;1). The final stage was found in the speech of the oldest subject Leen (2;8-2;9). Table 5 summarizes the development of forms and functions of negation.

### 5.3 Discussion:

#### **First and Second Stage:**

In the first stage, earlier acquired functions were expressed by a combination of verbal and non-verbal forms. It has been found that the combination of vocalization and gesture are common in the transition period prior to speech as the children strive to make themselves understood (Bates et al. 1975; Martinsen and Smith 1989). The youngest subject (Sara) expressed prohibition and rejection through gesture early in the development, whereas the function of inability was found to be expressed through gesture only after prohibition and rejection were expressed verbally.

Previous studies by Pea (1980) and Vaidyanathan (1991) also found that their subjects expressed rejection in nonverbal behavior before they did so in speech. In the second stage, the first two functions (i.e. rejection and prohibition) that were expressed through gesture were also the first functions that were expressed verbally by Sara (1;3), whereas the other functions (e.g. denial and inability) which were expressed later through gestures (i.e. not in the first stage) emerged later in Sara’s speech.

Choi (1988:530) similarly found in her study (as we mentioned earlier in chapter two) that the functions (rejection, prohibition and non-existence) that were expressed early

in the pre-linguistic stage were also the first functions to emerge once the child had started to talk. On the other hands, the functions (denial, inability, and epistemic negation) that were not expressed non-verbally in pre-linguistic stage emerged later in the child's negative utterances. According to Choi (1988:530), it seems that children look for a linguistic form to convey early pre-linguistic concepts (such as rejection and prohibition).

Table 5: *The development of forms and functions of negation:*

	<b>Rejection</b>	<b>Prohibition</b>	<b>Disappearance /Nonexistence</b>	<b>Denial</b>	<b>Inability</b>	<b>Epistemic</b>
<i>Stage 1</i> <sup>12</sup>						
<i>Stage 2</i>	-/laʔ/ No	-/laʔ/ No	- /baḥ/ gone			
<i>Stage 3</i>	-/laʔ/ No	-/laʔ/ No	- /baḥ/ gone	-/laʔ/ No		
<i>Stage 4</i>	-/laʔ/ No  -/ma abɣa/ <i>don't want</i>	-/laʔ/ No	- /baḥ/ gone	-/laʔ/ No		
<i>Stage 5</i>	-/laʔ/ No  -/ma abɣa/ <i>don't want</i>	-/laʔ/ No	- /raḥ/ gone -/ma fi/ Not <i>in/exist</i>	-/laʔ/ No		
<i>Stage 6</i>	-/laʔ/ No  -/ma abɣa/ <i>don't want</i>	-/laʔ/ No  -[/la/+IMPV] <i>Don't+ V</i>	- /raḥ/ gone -/ma fi/ Not <i>in/exist</i>	-/laʔ/ No	-[/ma/+V] modal verb is missing	
<i>Stage 7</i>	-/laʔ/ No  -/ma abɣa/ <i>don't want</i>	-/laʔ/ No  -(/la/+IMPV) <i>Don't+ V</i>	-/ma fi/ <i>Not in/exist</i>  - Copula	-/laʔ/ No  - Copula -[/ma/+V] -[/mu/+non-V]	-/ma ʔgdər/ <i>can't</i>	-/ma ʔɣrif/  -/ma ʔdr:/ <i>don't know</i>

<sup>12</sup> As we mentioned earlier, in the first stage the subject did not use a recognizable negative form for expressing negation

Based on Choi's assumption, it may be that Sara (1;3) in stage two had already acquired the two functions of rejection and prohibition by expressing them in gestures in stage one, and would look (in stage two) for a linguistic form to express first these functions. In this respect, looking at the acquisition of negation in the period prior to speech helps to explain the development of negation in child's linguistic period of communication.

The negative element which Sara produced exclusively in this stage is the anaphoric negator /laʔ/ which was first used to express rejection and prohibition (see (1) and (2) above as examples). Previous studies from different languages (e.g. English: Pea 1980; German: Wode 1983; Egyptian: Omar 2007; French: Pierce; 1992) also found that their subjects acquired the anaphoric negator first. That is, children used *no* before *not* in English, /laʔ/ before /miʃ/ in Egyptian, *nein* before *nicht* in German, *non* before *pas* in French. According to Wode (1983:37) and Cameron-Faulker et al. (2007:327), children identified the anaphoric negator before the other non-anaphoric negate(s), because it occurs in isolation and also frequently occurs in the input.

Besides expressing rejection, Sara (1;4) started negating the presence of an entity mainly in contexts where it had disappeared immediately beforehand rather than in a situation where an entity had not existed in her immediate surroundings. Similar observations have been found in English data (Pea 1980) and Japanese data (Ito 1981). Ito (1981:108) found her Japanese subjects used *nai* in early stages to signify disappearance (i.e. recent absent) in expression meaning *all gone, no more* and not to report the state of non-existence (i.e. non-presence). This is partly because 'children seem to be cognitively incapable of speaking about something that is not visible in their immediate surrounding....and partly because of children's limited memory span' (Ito 1981:108). According to Perner (1991:48-49), the minimal requirement for children to be able to infer the location of an object that is not visible in their immediate surrounding is to handle multiple models. One model has to show how the world is now:

[Model 1 "present": e.g. daddy is not here]

An additional model is necessary to represent how the world used to be at previous points in time i.e. to preserve the record of the last position of an object:

[Model 2 “past”: e.g. daddy was in the car].

In this study, Sara (1;4) in stage two seemed to be unable to hold in her mind these two models when her mother asked her “where is daddy?” while he is not at home. Sara neither negated his existence nor searched for him. Sara’s limited memory span, as Ito (1981:108) suggested, prevented her from speaking about something that not existing in her immediate surroundings. This suggests that constraints in the cognitive representation delay the expression of non-existence negation for an absent entity (which has been absent for a long time). Therefore, Ito (1981:108) argued that a careful distinction should be made between disappearance (recent absent) and non-existence (non-presence). In this respect, Sara’s /baħ/ “gone” in the second stage should be considered disappearance rather than non-existence.

### **Third Stage:**

In this stage, /laʔ/ is no longer restricted to simply express prohibition and rejection.

In the third stage, /laʔ/ is also used to deny a previous utterance (see (6) above as an example). The relative late appearance of denial negation in the semantic development of negation has been pointed out in previous studies from different languages (e.g. English: Pea 1980; English, Korean, and French: Choi 1988; German: Hummer et al. 1993; Tamil: Vaidyanathan 1991).

Based on these studies, what accounts for this sequence of emergence (that is rejection and prohibition emerging before denial) are the child’s limited cognitive abilities and the representational requirement of the conception of the different meanings for negation. In other words, these studies claim that the development of the different meanings of negation seems to parallel the developmental progression of the child’s abstract representations. That is, rejection expresses the child’s emotional attitude towards something present in the context; therefore this type of negation requires no abstract internal representation of the rejected object or behavior since it is present in the context. In contrast, non-existence requires abstract cognitive representation of the absent object because unlike the object of rejection, the object of non-existence negation is no longer present in the context.

Denial, on the other hand, requires the elaboration of more complex cognitive representation. In rejection and disappearance, the child negates concrete objects (perceptually salient), whereas in denial the child negates an abstract propositions e.g. the addressee's comment (perceptually opaque) which requires internal representation of higher logical type than rejection and non-existence, and therefore, it is more complex cognitively. Thus, from the perspective of child's cognitive development, denial negation is not to be expressed by the child before the meaning of rejection (Pea 1980:166).

It is important to note that when Sara (1;5) began to express denial negation, she chose the form which had already for rejection (i.e. /laʔ/). Although this is correct in adult Saudi negation, in other languages such as Tamil, Japanese, and Korean, distinct negators are used by adults to express denial and rejection. However, children in these languages tend to use the negator that expresses rejection for denial (Choi 1988:527; Clancy 1985:398; Vaidyanathan 1991:61). On the other hand, unlike prohibition, rejection, and denial negation, disappearance/non-existence negation is not expressed by the single negator /laʔ/ in Saudi. Similarly, Sara did not over-generalize /laʔ/ to express disappearance/non-existence. Instead, Sara used a distinct form to express this function which is mainly the non-negative word /bah/ "gone" (as in example (4) above).

Previous studies from different languages (e.g. English: Pea 1980; Korean and French: Choi 1988; Tamil: Vaidyanathan 1991) also found their subjects used non-negative words for expressing disappearance/non-existence, rather than using the general anaphoric negator that was used to express the other early acquired functions (such as rejection and prohibition). Two factors are behind this phenomenon. Semantically, the three negative functions rejection, prohibition, and denial, are different from disappearance in that they reflect conflict between child and the addressee whereas disappearance/non-existence simply describes the state of an entity without the sense of conflict (Choi 1988:527). Pragmatically, the single negative word (e.g. /laʔ/ in Saudi, *no* in English) is not enough to express the non-existence of an entity, whereas /laʔ/ as single negator is sufficient to communicate a child's intent

when s/he rejects an offer, prohibits someone, or denies a previous utterance (Bloom 1970:219).

#### **Fourth and Fifth Stage:**

In the fourth stage the youngest subject Sara (1;6) began to produce multi word negation i.e. she used negation non-anaphorically. The subject passed through a period of anaphoric negation (i.e. /laʔ/) (in stage two and three) before moving to produce non-anaphoric negation construction (in stage four). Similar findings have been pointed out in other studies across different languages (e.g. English: Pea 1980; German: Wode 1983; Egyptian: Omar 2007). However, previous studies (e.g. English: Cameron-Faulker et al. 2007; German: Wode 1983; Egyptian: Omar 2007; Palestinian: Mohamed and Ouhalla 1995) found that children over-generalized the use of the general negator to express non-anaphoric negation. That is, children use *no* instead of *not* in English, /laʔ/ instead of /mi-/ or /ma-/ in Egyptian and Palestinian, and *nein* instead of *nicht* in German. Contrary to these studies, in this study the general negator /laʔ/ is never over-generalized to be used in non-anaphoric negation utterances. In other words, there is no instance where any of the three Saudi subjects produced multi-word negatives in which /laʔ/ was used for negating the preceding sentences (i.e. [/laʔ/+S]).

On the other hand, the present data support Pierce's study (1992). Pierce (1992:64) found no evidence in which the general negator *non* "no" is over-generalized by French children to negate a sentence. Instead, Pierce's subjects used *pas* "not" correctly in non-anaphoric negation utterances. In this respect, we could argue that the overgeneralization of the use of the anaphoric negator to negate non-anaphoric utterances is not universal. The differences between the findings could be ascribed to individual differences among children. The question that remains to be answered is what factors contribute to such individual differences?

In this study, Sara (1;6) used the verbal particle /ma/ correctly to form non-anaphoric negation. Sara's pattern of negating a sentence was from the beginning [/ma/+X] which corresponds to adult Saudi. This pattern is identical to Klima and Bellugi's (1966) first stage of negation development [NEG+S]. Similar to Saudi, Japanese



negation is syntactically simple. Japanese child's pattern is [X+NEG] also corresponds to the adult Japanese (McNeill and McNeill 1973:621). In this respect, according to McNeill and McNeill's analysis, the language does not require more from children than is already available in their general capacity. Thus, the child's development of negation poses no problem in Japanese as well as in Saudi.

The verbal particle /ma/ was first used to negate the verb /abghəh/ "want" i.e. to express rejection. A few months later (i.e. in stage five) it is used to negate the pseudo verb /fi/ "exist" i.e. to express disappearance/non-existence. Denial negation, which is considered to be cognitively more complex, is not yet expressed by the more complex pattern [/ma/+X]. Thus, there is a difference between the times of emergence of the complex syntactic structure for each function. This result provides support for previous studies. For example, Bloom (1970) found that the syntactic structure of sentences expressing rejection increased in complexity before denial was expressed in a complex way. In her study (1970:210), the child Gia (aged 2;1), for example, used multi-word negation that included verb to express rejection (e.g. she said "*no want that*"), whereas at the same age, almost all her denial utterances consisted of only the anaphoric negator *no*.

Al-Abdul Mohsen (unpublished paper) also found similar findings. Al-Abdul Mohsen sent a questionnaire to mothers of 39 Saudi speaking children aged 1;1 to 2;8 in Saudi Arabia concerning their child's age and the form(s) their children use to express two functions of negation: rejection and denial. The 39 children were selected to fit into three narrow age brackets with 10 children in the first age group (1;1-1;4), 14 children in the second age group (1;8-2;1), and 15 children in the third age group (2;4-2;8). Al-Abdul Mohsen found that all the 14 children in the second age group (1;8-1;11) used the complex form [/ma/+V] for rejection only. On the other hand, 11 of the 15 children in the third age group (2;4-2;8) used the complex form for both denial and rejection, whereas the remaining 4 children in the third group used the complex form for rejection only. A Chi-square test indicates that the difference between the time of emergence of the complex form [/ma/ +V] for rejection and denial is significant ( $X^2 = 13.573$ ;  $df = 1$ ;  $p = 0.001$ ; two tailed test)<sup>13</sup>. One

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<sup>13</sup> Yates' correction factor has been applied.

interpretation that can be placed on these findings is that the cognitively simpler negative meanings were first to be expressed by the more complex syntax.

### **Sixth stage:**

The previous acquired form (i.e. the verbal particle /*ma*/) was used in the sixth stage to express the newly emerged function inability. However, the modal verb /ʔgdər/ “can” is absent from the sentences expressing inability as in (13) and (14) above. Waleed said /*ma iftaħa*/ “I not open” instead of /*ma agdər aftaħa*/ “I cannot open it”. The absence of modal verbs (such as “want” and “can”) in children’s negative utterances in early stages of the development has been reported in relation to a number of languages (German Wode 1983; Palestinian: Mohamed and Ouhalla 1995; English Bloom 1970, Cameron-Faulkner al et. 2007). This is illustrated in the following examples;

(31) Child (2;0): nein schaff ich

No manage I. (Wode 1983)

(32) Child (2;3): miʃ aʃuf

Not see. (Mohamed and Ouhalla 1995)

(33) Child (2;3): no reach.

Child (2;6): not reach. (Cameron-Faulkner al et. 2007)

(34) Child (1;10): Kathryn not fix this. (K unable to snap blocks)

Child (2;1): I no reach it. (pointing to the window) (Bloom 1970)

In this respect, the present data and the data from the above studies do not support Choi’s claim (1988:528) that the inability function is expressed by its specific form from the beginning. Tsimpli (1992) and Mohamed and Ouhalla (1995) suggest that the absence of some modal verbs (e.g. “want” and “can”) in negative sentences and the presence of these modal verbs in the positive declaratives indicate a close connection between negation and modality. In other words, children use the negative elements in early stages to convey modality and that is what accounts for the absence of some modal verbs in children’s negative utterances. Another possible explanation is the child’s words limit. Children in two-word utterances stage seem to be unable to produce sentences that consist of more than two words e.g. “I can not reach it”. Thus, some words, such as modals, are dropped.

### **Seventh stage:**

Epistemic negation seems to be acquired last in the development because it was only heard from the oldest subject Leen (2;8). Choi (1988) also found her subjects (2 English, 5 French, and 4 Korean) acquired epistemic negation after rejection, prohibition, non-existence, and denial. However, Choi (1988:525) argues that inability and epistemic tended to emerge at around the same time for all children but the present data do not support Choi's argument because Waleed expresses inability at around the age 1;9, whereas epistemic negation was not heard in his speech even in the last session i.e. when he was 2;1.

In terms of the relationship between forms and functions of negation, denial negation is expressed in this stage through the complex form (i.e. the multi-word negation [/ma/+V]) in contrast to the earlier stages where only the simple form (i.e. the single negator /laʔ/) was used to express this function. Previous studies also found a clear age trend with respect to the complexity of denial negation. For example, Al-Abdul Mohsen (unpublished paper) found that for denial, all the negators of the 14 children (aged 1;8-1;11) were of the simplest negator type i.e. the bare anaphoric negator /laʔ/ "no", whereas 11 of the 15 children (aged 2;4-2;8) produced denial by using the complex form (i.e. the multi-word negation [/ma/+V]).

Similarly, Hummer et al. (1993) found in their German data that children (aged 2;4-2;7) produced an elaborate denial by using a negator along with the incorrect object name (i.e. *Nein, Keine X* "No, not X"). On the other hand, most of the negations of the younger children's denial (aged 1;8-1;11) were of the simpler negative type i.e. the bare *nein* "no". Bloom (1970) also found a clear age trend with respect to the complexity of the syntactic structure used to express denial in her three English-speaking subjects' speech. Denial is first expressed by the simplest negative type (i.e. *no*), subsequently, the syntactic structure of negation increased in complexity in the expression of this function. Interestingly, (as we mentioned above) previous studies as well as the present study found that the syntactic structure of sentences expressing rejection increased in complexity before denial.

To deny, the oldest subject Leen used the copula and the non-verbal particle /mu/ beside the verbal particle /ma/. Although the data show that the copula and /mu/ were

acquired after /ma/, the data fail to show which one of these later acquired negators was acquired first. As we mentioned earlier, Leen (2;9) used /mu/ only once whereas the copula was heard in her speech several times. The rarity of the particle /mu/ in Leen's data could be because /mu/ is acquired after the copula or could be due to Leen's preference to use the copula instead of the non-verbal particle /mu/, where either form could be used. This preference could be explained in terms of the influence of parental input. In other words, Leen's parent could also prefer to use the copula where /mu/ can also be used.

Previous studies (e.g. de Villiers & de Villiers 1979; Pea 1980; Cameron-Faulkner et al. 2007) have pointed out that parental input is an important factor that influences the relation between forms and functions of negation. For example, Pea (1980:176) (as we mentioned earlier in chapter two) found that the form that expresses a particular function in children's speech is derived from the parental form, and the frequency of a particular function in parent input accounts for the frequency of that form in their children's speech. For instance, one of Pea's (1980:176) subjects used *don't* to express prohibition as in "*Don't eat it*" for soap bars, whereas another subject used *mustn't* to express the same semantic function as in "*mustn't bite*" when playing with her sister. Pea (1980:176) argues that 'in each case, (child) uses of the specific lexical expression of the negative meaning are to be found in the child's previous language environment in similar situation'. However, it is difficult to provide evidence from the present data for such influence. Therefore, no argument can be made on this point. Further studies are needed to interpret with more certainty the influence of parental input on the child's preference of using one negator over the other.

#### **5.4 Conclusion:**

Overall, the analysis of the present data seems to show that the subjects go through a clear developmental sequence in the acquisition of the forms and functions of Saudi negation. In terms of functions, the functions of rejection, prohibition and disappearance/non-existence appeared in the earlier stages followed by denial, whereas the functions of inability and epistemic negation emerged during later stages. In terms of forms, the development of negators followed the trajectory */laʔ/* (anaphoric negator)-*/ma/* and */la/* (verbal particles) – the copula, and */mu/* (the non-verbal particle).

The analysis also indicates that the emergence of a form to express particular function was affected by the stage of development in which the function emerged. The early emerging functions (such as rejection), were first to be expressed by the more complex form (i.e. multi-word negation), whereas the functions that emerged later in the development (such as denial and inability) were expressed by the complex form later in the development.

## **Conclusion**

### **6.1 Introduction:**

The acquisition of negation can only be understood by looking at both semantic and syntactic aspects of negation. This study has looked at both the development of forms and functions of Saudi negation by three Saudi-speaking children. The data obtained in this study show that the order in which the three Saudi children acquired negation was similar in most respects to the acquisition of negation observed in other languages. However, although there are similarities, the data revealed some developmental features which are different to what has been found in children acquiring other languages. Some of these differences are ascribed to the structural differences that characterize these languages. Section 6.2 will summarize the findings of this study and section 6.3 will provide a comparative overview between the present study and previous studies by summarizing the differences and/or the similarities between them on the syntactic level, the morphological level, and the semantic level. In section 6.4, suggestions are made as to further research needed in the field of child acquisition of negation.

### **6.2 Review of findings in this study:**

The analysis of the present data seems to show that the subjects go through a clear developmental sequence in the acquisition of the forms and functions. In terms of forms, the emergence of negators follows the sequence of the general negator /*laʔ*/ first, the verbal particle /*ma*/ second, the imperative /*la*/ third, the copula and the non-verbal particle /*mu*/ last. In terms of functions, the functions of rejection, prohibition and disappearance/non-existence appeared in the earlier stages followed by denial, whereas the functions of inability and epistemic negation emerged during later stages.

### **6.3 Comparison with other studies:**

On the syntactic level, previous studies, discussed in detail in chapter two, found that children begin their syntactic development of negation by advancing from one-word negation utterances to utterances composed of two and three words. In one-word negation utterances, children used exclusively the general negator (i.e. the anaphoric negator). That is, children used *no* before *not* in English, /*laʔ*/ before /*mi*/ in

Egyptian, *nein* before *nicht* in German, *na* and *nej* before *inte* in Swedish. The present study provides further supports to these findings. The Saudi subject was also found using the general negator exclusively in one-word negation stage.

In multi-word negation utterances, previous studies found that children over-generalized the use of the general negator to express non-anaphoric negation. That is, children use *no* instead of *not* in English, /laʔ/ instead of /mi/ in Egyptian and Palestinian, and *nein* instead of *nicht* in German. However, one surprising finding from the detailed investigation of the three Saudi children is that the general negator /laʔ/ was never over-generalized to express non-anaphoric negation. The present data, on the other hand, support Pierce's study (1992) which found no evidence that the general negator *non* "no" is over-generalized by French children to negate a sentence. In this respect, the overgeneralization of the use of the general negator to negate non-anaphoric utterances is not universal.

Another difference found in the multi-word negation stages is in the child's placement of the negator in the sentence. Previous studies report that children sometimes placed the negator in the wrong position. Kilma and Bellugi (1966), for example, found that English-speaking children placed the negator either sentence finally or initially "e.g. *wear mitten no*" instead of placing it within the sentence. Clahsen (1988) noticed that the Swedish child studied placed *inte* in pre-verbal position (e.g. *Embla inte maken* "Embla not make") instead of placing it correctly after the verb. Clancy (1985) also reports that the Japanese children studied placed the negator *-nai* after the inflected verb rather than placed it immediately after the root of the verb. In the present data, the three Saudi subjects placed the negator sentence initially (e.g. /ma abʕa/ "I don't want") which corresponds to adult Saudi. Fewer syntactic complexities exist in adult Saudi negation and therefore, no obvious syntactic errors were observed as compared with languages like English, German, Swedish, and Japanese.

Morphologically, previous studies found that free negators were mastered after the bound negator. In Palestinian and Egyptian, the free negator /mi/ is acquired before the bound negator /ma-/ , *not* is acquired before *n't* in English, *veendaam* is acquired before *-aad-* in Tamil, and *nai* as free form is acquired before *na-i/ na-katta* in

Japanese. Morphological errors were attested in children's speech in the above languages. For example, in Palestinian, Mohamed and Ouhalla (1995:81-2) found that children used two patterns of the verbal negator /ma-/V-*la*/ either [*ma*-/V] or [V-*la*]. In Egyptian, Omar (2007:124) also mentioned that her subjects mastered the use of the non-verbal negator /mi<sup>la</sup>/ before the verbal negator /ma-/*la*/ due to its complexity.

In contrast, the verbal particle /ma/ was acquired before the non-verbal particle /mu/ in the Saudi data. These differences can be explained through Slobin's (1973) proposal that the order in which children acquire linguistic forms is jointly determined by two factors: (1) the order in which the relevant meanings are understood and (2) the relative formal linguistic complexity of the forms themselves. In this respect, producing verbal negation correctly in the Palestinian and Egyptian dialects is delayed because the formal mean of expression (i.e. the bound negator) is difficult. Furthermore, no morphological errors were found in the three Saudi subjects with respect to negation since both the non-verbal negator /mu/ and the verbal negator /ma/ are free morphemes and not inflected for tense, gender, or number.

On the semantic level, it seems that the rate and the order of the acquisition of the semantic functions of negation are fairly consistent across languages, regardless of the formal means of expression employed. Although in Japanese and Korean different negators are used for different types of negative meanings, the sequence of appearance of these meanings in Japanese and Korean children's speech is similar to the emergence of these meanings in English and in Saudi where single negator might be used for different types of negative meanings. The negative meanings that seem to be acquired early in the development are rejection, prohibition and non-existence, whereas denial, inability and epistemic negation seem to emerge later in the development. This study presented new evidence that such order of acquisition of negative meanings can be observed in the acquisition of Saudi. The cognitive complexity is one of the factors that have been thought to contribute to the emergence of certain negative meanings over others.<sup>14</sup>

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<sup>14</sup> There is evidence for other semantic domains in which the sequence of cognitive mastery plays an important role in the sequence of acquisition. For example, the order of cognitive development plays an important role in the sequence of acquisition of locative markers across children learning different languages (Johnston and Slobin 1979; Johnston 1985).



The present study also confirmed the findings of previous studies that the relative difficulty of meaning plays an important role in the time of acquisition of linguistic forms. For example, the negators which tend to emerge early in the development are the ones which express the cognitively less complex functions (such as the earlier acquired function of rejection). On the other hand, the negators which tend to be acquired later in the development are the ones which express the cognitively more complex functions (such as the later acquired functions of denial and inability). This supports Choi's (1988) suggestion that the emergence of a form to express a particular function is affected by the stage of the development in which the function emerges. This regularity in the relationship between specific function and specific form emphasizes the importance of considering both the syntactic and the semantic aspects of negation when trying to interpret child's development of negation.

#### **6.4 Suggestions for further research:**

The data obtained in this study revealed many facts about the way in which Saudi children acquired negation. However, due to the short research period, it was impossible to do a longitudinal case study for each of the three children, which precluded making comparison of individual development. Therefore, this study can be seen as a pilot study and more case studies would yield information regarding certain aspects of acquisition that were not obtained in this study. A few suggestions may be made as to further research needed in the field of child acquisition of negation and specifically, the acquisition of Saudi negation. More data are needed from younger children, specifically from the babbling stage to about one year, in order to understand negation in the pre-linguistic stage. Data are also needed from children in their first half of their third year (2;1-2;6) whose development have not been investigated in this study.

More case studies would yield further information regarding the interrelationship of development for various aspects of negation (e.g. syntax, morphology, semantic, pragmatic, effect of the input, etc.). More specifically information that was not obtained in this study, such as the acquisition of negative pronouns (e.g. /wala/ "neither"), the sequence of emergence of the latter acquired negators (the copula and the non-verbal particle), and the effect of input on the child's usage of negators is needed. Previous studies in English have shown that the child's input and

environment may have an effect on the nature and the rate of the development of negation. Therefore, the relation between the child's input and environment and their development of negation need to be more fully studied in this dialect and compared to the development of children in other environments.

To obtain a broader perspective in which to evaluate the data obtained, comparative studies should be made in Saudi dialect as well as other dialects of Arabic. In this study, there is an attempt to present some of the commonalities and the differences in the way children acquire negation regardless of their target language. However, more comparative materials are needed to draw a clear picture of what are universal vs. language-specific in child acquisition of negation.

Furthermore, the available literature in the field of child development of negation does not represent a systematic investigation on whether the proposed semantic categories of negation (e.g. rejection, denial, and inability) are universal or language specific, and does not address how children might come to acquire these categories. In other words, are these semantic categories learned or innate? Are they universal or language-specific?

In another field in child language acquisition, there has an attempt to investigate the nature of the semantic components of *space* and *time*. Clark (1973:28), for example, claimed that children would not have to learn the semantic components of *space* and *time* themselves since they are innate. Bierwisch (1970) also argues that the semantic features cannot be different from language to language, but rather part of the general human capacity for language. On the other hand, other researchers (e.g. Brown and Levinson 1993; Haviland 1993, cited in Foley 1997:115-118) found that different languages (e.g. Guugu-Yimidhirr in north-eastern Australia) have fundamentally different ways of describing *space*. These differences, according to those researchers, correspond systematically to differences in human cognitive behavior which suggest a correlation between linguistic patterns and habitual thought, posing a serious challenge to the claims about the universality of the semantic components of *space*.<sup>15</sup>

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<sup>15</sup> For example, Guugu-Yimidhirr lacks all spatial terms which are relative to body orientation, in particular there are no terms for location the position of an entity in space equivalent to *front*, *back*, *left*, *right*. Rather, this language employs four roots, corresponding to the four cardinal directions (i.e. North, East, West, and South). These spatial terms are fixed, according to the geography of the earth

However, in the field of negation, no attempts have been made so far to investigate the nature of the semantic categories of negation. Therefore, more studies are necessary to fill this gap by examining whether these proposed categories of negation are universal or language-specific, and whether they are innate, learned, or both.

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and not subject to variation according to the spatial orientation of the speaker (Brown and Levinson 1993; Haviland 1993, cited in Foley 1997:115-118).